Journal Homepage: -www.journalijar.com

INTERNATIONAL JOURNAL OF ADVANCED RESEARCH (IJAR)

Article DOI:10.21474/IJAR01/20290
DOI URL: http://dx.doi.org/10.21474/IJAR01/20290

RESEARCH ARTICLE

MALHOTRA'S ASHI-ANGEL CONCEPTFOR EFFECTIVE MANAGEMENT OF HEPATITIS B AND C

Parveen Malhotra, Vani Malhotra, Yogesh Sanwariya, Sunita Arora, Babita Rani, Manisha Kumari, Kamlesh Arora, Rajwanti, Sunita, Neha Kumari, Suman, Saroj, Santosh, Anamika, Reena, Neha Gill, Shivani Sharma, Sonal Kochar, Sikander, Naresh, Sandeep, Joginder, Sanjay Kumar, Satish, Deepika, Krishan, Sanjeev Saini and Krishna

Department of Medical Gastroenterology & Gynecology & Obstetrics, PGIMS, Rohtak, Haryana, India.

Manuscript Info

Manuscript History
Received: 24 November 2024
Final Accepted: 26 December 2024
Published: January 2025

Key words:-
Hepatitis B, Hepatitis C, Ashi, Angel, Malhotra Approach, Myths, Social Taboos

Abstract

Hepatitis B and C is prevalent in certain parts of India like Andhra Pradesh, North Eastern states, Punjab, Haryana, Uttarakhand and Uttar Pradesh. There are many challenges in these patients which start from identification of the disease, bringing them on treatment and getting it completed and later on problems faced in life even after successful completion of treatment. Our department is model treatment center under National Viral Hepatitis Control Program (NVHCP) and is high flow center and daily 70-80 patients of hepatitis B & C, including both new and old come for consultation and treatment.We have till date enrolled more than ten thousand patients of hepatitis B and treated 25,000 patients of hepatitis C in last fourteen years. Ashi in English means Smile, laughter, joy or blessing and Angel in English means messenger of God. Hepatitis B & C are transmissible diseases and not only general population but health care workers try to avoid these patients which leads to development of complex in these patients. We as a team were coming to know all this discrimination through patient and their relatives first hand version. Thus, it made us well versed with all kind of hurdles, challenges, myths, social taboos being faced by these patients and their family members.The health care workers should have empathy and not only sympathy towards patients. They should treat and help patients with human angle, thus giving joy & smile on their faces**(ASHI)** and, thus patients will accept them as messenger of God**(ANGEL)**which will lead to good compliance and successful outcome of treatment. This is **MALHOTRA'S ASHI-ANGEL CONCEPT** in interest of better patient care and it is already showing its positive results.

Introduction:-

Globally Viral hepatitis is now recognized as a major public health challenge as it caused 1.34 million deaths in 2015, a number comparable to deaths caused by tuberculosis and higher than those caused by HIV**(1)**. It is estimated that 325 million people worldwide are living with chronic HBV or HCV infection**(2).** Viral hepatitis is increasingly being recognized as a public health problem in India. Hepatitis B surface Antigen (HbsAg) positivity in the general population ranges from 1.1% to 12.2%, with an average prevalence of 3-4%. Anti-Hepatitis C virus (HCV) antibody

Corresponding Author:- Parveen Malhotra
Address**:-** Department of Medical Gastroenterology & Gynecology & Obstetrics, PGIMS, Rohtak, Haryana, India.

prevalence in the general population is estimated to be between 0.09-15%. **(3).** Based on some regional level studies, it is estimated that in India, approximately 40 million people are chronically infected with Hepatitis B and 6-12 million people with Hepatitis C**(4).** India has about 3 million to 9 million persons with active HCV infections**(5).**Hepatitis B infection is caused by HBV DNA (deoxyribonucleic acid) virus which belongs to Hepadnaviridae family and predominantly infect hepatocytes in their respective hosts **(6).** HBV infection can be either acute or chronic and may range from asymptomatic infection or mild disease to severe or rarely fulminant hepatitis **(7).**Hepatitis B and C is prevalent in certain parts of India like Andhra Pradesh, North Eastern states, Punjab, Haryana, Uttarakhand and Uttar Pradesh. There are many challenges in these patients which start from identification of the disease, bringing them on treatment and getting it completed and later on problems faced in life even after successful completion of treatment. Our department is model treatment center under National Viral Hepatitis Control Program (NVHCP) and is high flow center and daily 70-80 patients of hepatitis B & C, including both new and old come for consultation and treatment. We have till date enrolled more than ten thousand patients of hepatitis B and treated 25,000 patients of hepatitis C in last fourteen years. Hepatitis B & C are transmissible diseases and not only general population but health care workers try to avoid these patients which leads to development of complex in these patients. We as a team were coming to know all this discrimination through patient and their relatives first hand version. Thus, it made us well versed with all kind of hurdles, challenges, myths, social taboos being faced by these patients and their family members. Here comes the need of **MALHOTRA'S ASHI-ANGLE CONCEPT**. The health care workers should have empathy and not only sympathy towards patients. They should treat and help patients with human angle, thus giving joy & smile on their faces**(ASHI)** and patients will accept them as messenger of God**(ANGEL)** which will lead to good compliance and successful outcome of treatment. In past the treating doctors and their team members were in fact were treated second to God only and in return health care team was giving genuine and required treatment without any personal gains. But with passage of time, deterioration has occurred from both sides which has led to development of lack of confidence between doctors and patient. The humanitarian attitude of treating team has changed into mechanical approach. It motivated us to develop a model or approach where the treating team was made to understand change in their behavior from sympathy to empathy and due to heavy load of patients, our whole team members are very well versed with all kind of hurdles, challenges, myths, social taboos being faced by these patients and their family members.

Discussion:-

Our department is Model treatment center under NVHCP, thus cater many patients of hepatitis B and C on daily basis and whole team sit under one roof where all the tests including endoscopy & Fibroscan, free medications and if required indoor admission facility are available**(8)**. Our nursing staff has been provided complete knowledge of hepatitis B & C, performing Fibroscan, assisting in endoscopy services and management of admitted patients. The pharmacist distributes the free drugs and explain about dosage,its timings, side effects and interactions. The computer data operator records and update data of patient and generate unique ID of each patient. The peer view support provides psychological counselling of patient and family. The OT technician help in assisting endoscopy and performing Fibroscan of male patients. The bearers and sweepers, along with other supporting staff, help in infection prevention and proper disposable of medical waste of these patients. The clerk helps in maintenance of all the communication related to the project, including regular supply of drugs. In total twenty-seven-member dedicated team is there looking after this project and every member is having knowledge of hepatitis B & C, thus help in repeated psychological counselling of patients, including their stay in hospital. The patients and their relatives are very apprehensive due to fears associated with these deadly diseases, thus ask same questions to different team members at different point of interaction. Thus, it becomes very important that all team members have same and correct reply to avoid confusion among patients and their family members. Here lies the main importance of **MALHOTRA'S ASHI-ANGEL CONCEPT**by which the treating team by their dedicated, humanitarian behavior and empathy relieves fears of patients and give smile and joy on faces of them **(ASHI)** and in turn are taken as agent of God **(ANGEL)** by undertreatment patients and their family members.

In last fourteen years' experience gained while interacting with hepatitis B and C patients during treatment at our center on daily basis, all the team members including doctors, nursing officers, pharmacist, peer view educator, computer data operator etc., have been able to gather information regarding apprehensions, fears and various kind of challenges they face in their journey during treatment. These can be before, during and after completion of treatment.

Before Start of Treatment

1.The majority of patients who are diagnosed to be having hepatitis B & C, as expected are asymptomatic and it is incidental detection during pre-anesthetic checkup before surgery, screening camps for hepatitis B & C, blood transfusion etc. As they are asymptomatic, it's very difficult for to believe to be having this virus in their body. In contrast, patients who are diagnosed due to family screening, in view of any family member already being proved of this disease, accept it more easily being exposed to same risk factors as the index patient.

Our team make patient understand that it is good for him that he is asymptomatic at time of diagnosis, thus proving that virus has still not damaged liver or other organs of body and treatment is being started at right time. This exudes lot of confidence in patient and helps in achieving good compliance.

2.The hepatitis B and C is more common in lower socio-economic group, majority of whom are uneducated, thus they are more susceptible to myths associated with these diseases. In society it is a common myth that hepatitis B and C are equivalent to Human immunodeficiency virus (HIV)and sexual transmission is the only route for its transmission which leads to character assassination of the sufferer which is very difficult to bear, especially for females. Many patients due to this fear never come forward for their treatment.

Our team makes such patient meet other patients who are already on treatment and even their family members interact with each other and this led to breakage of this myth to great extent.

3.The hepatitis B and C is more common in lower socio-economic group, majority of whom are uneducated, thus they are more susceptible to treatment from unqualified practitioners i.e. quacks who advise them for alternative medications, without being tested for liver function test, viral loads etc. and so many patients report after years for treatment when significant fibrosis or cirrhosis has already set in. These quacks are responsible for giving hepatitis B & C in society due to unsafe needle practices and later on they play a detrimental role in delaying timely treatment of the same. All this happens due to non- availability of proper health care services, especially in rural areas.

Under NVHCP, all medical colleges and district hospitals have been made nodal center for treatment and there is trained and dedicated specialist for treatment, thus providing proper care to the needy patients.

4.The National Viral Hepatitis Control Program (NVHCP) provides free treatment for hepatitis B & C all over India but still there is lack of awareness regarding the same, thus many newly diagnosed patients do not come forward to treatment due to financial issues or seek paid treatment from private practitioners, many of them are unable to complete treatment due to lack of money. Moreover, many private practitioners, even after knowing free treatment of these diseases do not tell these needy patients about the same, due to personal vested interest.

To tackle this problem awareness is being spread on large scale by help of pamphlets, hoardings, press releases, newspaper articles, you tube channels, advertisements on radio and television. Hepatitis B & C have been brought under notifiable diseases by gazette notification and even all private practitioners have to provide monthly data of hepatitis B & C patients treated by them.

5.Many patients of hepatitis B & C have wrong belief that it cannot be treated effectively and now their life span is limited and this becomes a hindrance in early & timely treatment which is warranted to prevent development of complications like cirrhosis and hepatocellular carcinoma (H.C.C).

Our team plays integral part in shelling of this myth by getting these patients interacted with more old patients who come for consultation in large numbers on daily basis. When they interact with these patients who are healthy after treatment, it exudes confidence in new patients who are being enrolled for treatment.

During Treatment

1.Once patient is started on treatment, the foremost apprehension is about successful outcome and side effects associated with it. The oral antiviral directly acting drugs (D.A.A) for HCV have become available in India in December,2015 and before that only available treatment was with Pegylated interferon and ribavirin which had many side effects and lower sustained virological response (SVR) as compared to DAA. Many of these patient family members or known one have been treated in past with Pegylated interferon and ribavirin in past and thus to avoid intolerable side effects want to come on board for treatment.

For overcoming this myth, interaction of new patients with patients already on treatment plays a vital role.

2.Family members of many patients have wrong belief that these diseases can be spread by food, water or by simple touching, thus they start keeping separate utensils, washing area, bathroom and toilet. It has strong detrimental effect on mental health of patients, as they start feeling isolated both in family and society. Many of them weep during consultation and ask have they done any crime having got this infection, despite being unaware about the source of infection in majority of cases.

Our team give repeated counselling for all the family members of patient and even to break this myth we touch patient and explain them it does not spread by touching. Even it is explained to them that our team members have been treating thousands of patients, including endoscopy for last fourteen years and everyone is healthy and no one has got infected by these viruses after taking proper precautions and same are explained to them like keeping of separate brush, nail cutter, razor, towel, knife etc. of the patient.

3.A very difficult situation arises in pregnant females who are diagnosed to be having hepatitis B and C, especially whose spouse are negative for the same. Many husband and family members label source of infection to be as sexual transmission only, thus thinking illicit relation has led to this pregnancy. They even disown the fetus, force for abortion and in some cases has even led to divorce.

This problem is tackled by interaction of them other pregnant patients who are already on treatment and a dedicated session of counselling by obstetrician in our team.

4.Many partners after coming to know about their spouse being infected with hepatitis B and C, due to fear of sexual transmission, avoid sexual relationship with their corresponding partners and even do not wish to complete their family for avoiding risk to get infected themselves as well as new born. It is even seen that many infertile patients of hepatitis B and C are denied Assisted reproductive techniques like invitro fertilization by treating obstetrician to avoid vertical transmission which is not as per scientific rationale.

The couple is clearly explained for using barrier contraceptive till HCV treatment of infected spouse is over or HBV vaccination three doses have been completed in non-infected spouse of HBV patient.

5.Due to lack of awareness about availability of measures of preventing vertical transmission, especially in Hepatitis B, many pregnant females think that abortion is mandatory. Even who complete pregnancy, they have myth that caesarean section for delivery is must and breast feeding is contraindicatedand this misconception is even made stronger by treating obstetrician who want to perform caesarean section for financial gains and lack of scientific knowledge about hepatitis B and C. Even these patients are heavily charged on pre text of these infections with reason that separate instruments have to be used for them. Many obstetricians avoid treating these pregnant patients due to fear of getting themselves infected during conduction of deliveries.

The patient and family members are clearly explained in detail about successful role of antiviral treatment, hepatitis B immunoglobulin and HBV vaccination in HBV pregnant patient and all these maneuvers are applied stringently which has led to achievement of almost zero percent vertical transmission of HBV. The HCV vertical transmission is 5-7% only and apprehensions regarding same are shelved in the patient of HCV and her family members. The awareness is increased for the same in other obstetricians also and data for same is collected from both government and private obstetricians from all over the state.

6.When these hepatitis B and C patients take consultation for other ailments or undergo any surgical intervention for various reasons, many times they are denied treatment on one pretext or another and even are excessively charged on basis of these cross infectivity of these infections. The surgeons frequently tell patients that they cannot be operated till HBV and HCV test become negative. Even sometimes treating surgeon make them understand that they are risking their lives for them, as they are at most risk for getting infected during treatment.

For this repeated awareness sessions, continued medical education, seminars are held for increasing awareness among health professionals at various levels.

7.In Chronic Kidney Disease (CKD) patient who require dialysis are denied treatment at many centers for want of separate set of dialysis machines to be used for HBV, HCV and HIV patients. At these centers, testing for above three viruses is mandatory before putting on dialysis and presence of any of the above viruses leads to denial of dialysis.

For resolving this issue, separate dialysis machines have been installed for HBV, HCV and HIV patients and benefit of same is being extended to the needy patients.

8.Hepatitis B and C being thought to be equivalent to HIV, has become a strong social stigma, thus many influential and rich patient do not come forward to government set up for free treatment and wish to seek treatment from private centers for avoiding revelation of their identity. Even if they report in government set up, then they will request for consultation in separate room or office and not in presence of others.

The counselling of patient and family members are done for the same and they are made to meet other patients belonging to their strata. Sh. Amitabh Bachchan is brand ambassador of NVHCP and himself is suffering from hepatitis B. The hoardings of same are displayed in outdoor and indoor patient department which infuses confidence in other patients and their tendency to hide disease from others is decreased to great extent.

9.It is normal belief in society that in any kind of liver disease, oily & spicy foods, yellow colored food & clothes are to be avoided and only boiled food is allowed. There is strong belief that sugar cane juice is beneficial in recovery from jaundice. Majority of these patients go for alternative medications which even include use of steroids. Hepatitis B and C being related to liver;thus, all above myths apply to this group of patients also.

Many times, such patient are even admitted for few days under observation where they are given normal vegetarian food and they also see other patient getting same food without any restrictions. After eating such normal food without restrictions and recovery being already set in, it helps in breaking this myth and majority of them practice at home after discharge also.

10. One of the important challenges is with chronic hepatitis B patients who are inactive carrier and do not merit treatment. We know that around 70% of pool of hepatitis B belong to this inactive carrier group. They will force the treating specialist for treatment in view of presence of hepatitis B virus in their body. The situation become more difficult when either from their family or known one has been started on antiviral treatment, as per scientific rationale. Thus, some patient due to lack of knowledge, feel that they have been wrongly denied the treatment.

Our biggest strength is large pool of ten thousand patients of hepatitis B who regularly come for follow up. At any point of time, every patient has opportunity of interacting with many other patients of hepatitis B. Thus, when they see other inactive carrier patients healthy for years together that too without any treatment, it allays their fear and apprehension.

After Completion of Treatment

1.The most common challenge in HCV patient after successful completion of treatment and even after attainment of SVR is persistence of anti HCV antibody which is frequently interpreted as treatment failure or relapse by patient or medical specialist of various fraternity whom patient come in touch for other ailments.

Thus, these patients at point of achieving SVR are clearly explained about persistence of anti HCV antibody test for long time, even life long and HCV RNA report which is negative, is given to patient, so that he can show to other medical specialist during consultation for other ailments.

2.Many patients after achieving SVR for HCV treatment think now, they will not develop any illness in future and for any complaint post treatment like fever, myalgia, pain abdomen, itching etc., relate it to be as recurrence of HCV and request for repeat HCV RNA testing for re-conforming the success of treatment. This problem of retesting is further aggravated by advice of repeat HCV RNA testing, from medical specialist of various fraternity whom patient come in touch for other ailments.

For counteracting this wrong belief, patient at time of achieving SVR is made to understand that he or she has been cured of HCV by oral antiviral treatment but this is not insurance for future life and they may develop other ailments which have no connection with HCV or it's treatment.

3.In Chronic Kidney Disease (CKD) patient on dialysis who even after attainment of SVR for HCV treatment are forced to be dialyzed on separate machines meant for HBV, HCV and HIV patients. It can lead to reinfection from above viruses. Ideally, after attainment of SVR, they can undergo dialysis on same machines which are used for normal population.

The treating dialyzing team is made to understand with HCV RNA negative report that now there is no need of putting these patients on separate dialysis machine, after achievement of SVR. The SVR achieved patients are subjected to repeat HCV RNA, if there is unexpected rise of transaminases levels for ruling out reinfection or recurrence of HCV.

4.In contrast to HCV which requires 12-24 weeks treatment and SVR testing after 12 weeks of treatment, making it maximum to nine months of contact with treating specialist, HBV requires lifelong follow up in majority of cases. This leads to anxiety and frustration in patient at many occasions which has to be pacified judiciously by the treating team.

The patients of HBV who require treatment are given 6 months therapy at one point of time and inactive carrier patient are also called six monthly for tests. They are made to understand that a six-monthly visit can save their life. We daily do clinic thus there is no need of prior appointment and patient can come on any working day. It helps to a great extent for regular follow up and good compliance of patient who are on drugs.

Conclusion:-

It is not only important to diagnose and treat patient of HBV and HCV to take care of physical health but safeguarding mental health is also important aspect in these patients. For achieving it awareness at various level is required which include patient, their family members, health professionals, society, policy makers, non-governmental organization etc. The availability of a dedicated team which includes gastroenterologist, obstetrician, pharmacist, computer data operator, peer view support, nursing staff and took **MALHOTRA'S ASHI-ANGEL CONCEPT** while treatment of these patients under one roof has been a milestone in achieving exceptional compliance and success under NVHCP for hepatitis B and C.

Conflictof Interest-

The authors have no conflicts of interest to declare.

Role Of Various Team Members-

1. **Parveen Malhotra, Vani Malhotra, Yogesh Sanwariya**- Specialist Doctors treating hepatitis B & C patients
2. **Sunita Arora, Babita Rani**- Senior Nursing Officers involved in management of Project and patients
3. **Manisha Kumari, Kamlesh Arora**- Nursing officers involved in management of hepatitis B & C patients, including assessment, performing Fibroscan and assisting in Endoscopy & Colonoscopy procedures
4. **Rajwanti, Sunita, Neha Kumari, Suman, Saroj, Santosh, Anamika, Reena, Neha Gill**- Nursing Officers involved in management of hepatitis B & C admitted patients
5. **Shivani Sharma-** Pharmacist involved in drug distribution and Counselling of hepatitis B & C Patients and family members
6. **Sonal Kochar-** Computer data operator involved in maintenance of data and also performing counselling
7. **Sikander -**Peer view support dedicatedly involved in counselling
8. **Naresh, Sandeep**- Endoscopic technician and performed Fibroscan of male patients
9. **Joginder, Sanjay kumar, Satish, Deepika, Krishan**- Bearers who helped in management of admitted patients and in applying infection prevention strategies
10. **Sanjeev Saini**- Clerical staff helped in maintaining all official communication related to project, including regular supply of drugs
11. **Krishna-** Sweeper involved in management of admitted patients and in applying infection prevention strategies

References:-

1. Guidelines for the prevention, care and treatment of persons with chronic hepatitis B infection. WHO 2015
2. Consolidated guidelines on the use of antiretroviral drugs for treating and preventing HIV infection: recommendations for a public health approach – 2nd ed. WHO, 2016
3. Guidelines for the screening care and treatment of persons with chronic hepatitis C infection. Updated version, April 2016, WHO
4. WHO Global Disease estimates 2016; WHO 2016
5. Central Bureau of Health Intelligence, Ministry of Health and Family Welfare. National Health Profile. New Delhi: s.n., 2016.
6. R. J. Lamontagne, S. Bagga, and M. J. Bouchard, "Hepatitis B virus molecular biology and pathogenesis," Hepatoma Research, vol. 2, no. 7, p. 163, 2016.
7. D. Lavanchy, "Hepatitis B virus epidemiology, disease burden, treatment, arid current and emerging prevention and control measures," Journal of Viral Hepatitis, vol. 11, no. 2, pp. 97–107, 2004.
8. Treatment Under One Roof- A Successful Concept. Malhotra P, Malhotra V, Sanwariya Y, Anamika, Sharma S, Sikander, Kochar S, Rani B, Kumari M, Arora K, Arora S, Kumar N, Kumar S J Gastro Hepato. 2024; V10(7): 1-4.