Health strategy on HCV in the Netherlands

J. van Hattum

Dept. Gastroenterology & Hepatology, and Eijkman-Winkler Institute for Microbiology, Infectious Diseases and Inflammation University Medical Centre Utrecht, The Netherlands.

Abstract

The current basis for the health care policy on hepatitis C in The Netherlands is an advisory report of the national Health Council, published in 1997.

The Council confirmed that : Chronic hepatitis C (HC) is to be considered as a serious disease ; the hepatitis C virus (HCV) can be detected easily and accurately ; transmission of HCV occurs mainly via blood ; the prevalence of HC is low in The Netherlands and comparable to or somewhat lower than other countries in Northern Europe ; treatment is possible and worthwhile ; patients have the right to be provided spontaneously with relevant information ; the general population lacks adequate knowledge about the essentials of HCV infection, preventing them from taking adequate measures for their own health.

The Council recommended that : general tracing and testing of all people who received blood products in the past would be inefficient ; hospitals should keep precise records of the origin and use of blood products ; as practically all active drug users in The Netherlands are involved in medical care in connection with their addiction, they will be tested for HCV and qualify for treatment of HC ; information should be provided to the general population ; medical doctors are stimulated to participate in training courses on HC ; medical and non-medical professionals involved in increased risk of HCV transmission must be informed on hygiene. Epidemiological research of HCV infection in the various population groups of The Netherlands is stimulated.

Currently, an active approach to the health care policy on hepatitis C is supported by the Ministry of Health, Welfare and Sport, including awareness programs in risk groups and training courses for professionals. Such programs are typically aiming at supporting and stimulating the own initiatives in the society, based on responsibilities of professional and patient's organisations and individuals at risk. Treatment of HC, given in accordance with the current consensus, including long term combination therapy with interferon and ribavirin, is available and refundable for all Dutch citizens. A special program for HC screening and treatment of drug addicts is being started up, using the special infrastructure for drug user control programs in The Netherlands. (Acta gastroenterol. belg., **2002**, 65, **115-117**).

Key words : hepatitis C, delivery of health care, quality of health care, health care economics and organizations, health planning, health priorities, health services research, national health programs, state health plans.

Introduction

The prevalence of hepatitis C virus infection is relatively low in The Netherlands. Various observations independently point to a general prevalence of about 0.1 to 0.4% (1).

A large sample of the general Dutch population with a low risk profile (Pienter study) showed an HCV prevalence of 0.1% (2). However, although meant to be aselect, this study was biased by an under-representation of persons at risk for HCV infection. Extrapolation of these data gives a prevalence of < 0.4% in the general population.

HCV markers are currently found in only 0.04% of new blood donors. Because healthy blood donors are a selected group, it is estimated that the prevalence in the general population is 5 – 10 times higher, being up to 0.4%. In the period from 1984-1990, the observed HCV prevalence among blood donors was lower than 0.2% (3).

Another approach to estimate the prevalence is the construction of a sum of known prevalences in subgroups of the population. The prevalence in recipients of blood products is : 81% of haemophiliacs (4) : 1,150 subjects ; 2.7% of haemodialysis patients (5) : 110 subjects ; former blood transfusions (1) : 13,500 subjects ; in total, this is about 0.1% of the general population (16 million). The prevalence in other groups is : 75% of intravenous drug users (6) : 12,000 subjects ; 1 - 2.5% of the allochtonous (1,7) : < 25,000 ; in total, this is about 0.2% of the general population. Including a small prevalence related to possible hospital infections, needle stick accidents, transplantation, dentistry, household contacts, perinatal infections, sexual transmission and tattoo/piercing, these categories will add up to > 0.3% of the general population.

Combining all available data, an overall hepatitis C prevalence of 0.3 – 0.4% in the Netherlands seems reasonable.

Basic keynotes

On request of the Dutch Minister of Health, Welfare and Sport, the Health Council of the Netherlands made an advisory report (1), which is currently the basis for the health care policy on hepatitis C in The Netherlands.

The Health Council concluded and confirmed that

- Chronic hepatitis C (HC) is a serious disease, initially producing few symptoms, but up to 20 years after infection leading to liver cirrhosis with liver failure and liver cancer.
- The hepatitis C virus (HCV) can be detected with great accuracy.

Dept. Gastroenterology & Hepatology, and Eijkman-Winkler Institute for Microbiology, Infectious Diseases and Inflammation University Medical Centre Utrecht, P.O. Box 85500, 3508GA Utrecht, The Netherlands
Reprints : Prof. Dr. J. van Hattum, hepatologist, University Medical Centre Utrecht, P.O. Box 85500, 3508GA Utrecht, The Netherlands.
Hepatitis C Belgian Day, 26 November 2001.

- The HCV is transmitted almost exclusively via blood or blood products.
- The clinical course of HC is accelerated by coinfection with hepatitis B, human immunodeficiency virus or alcohol.
- Treatment of HC may result in elimination of the HCV and cure. Improvement of the success rate is anticipated.
- The prevalence of HC in The Netherlands is not exactly known, except for some special risk groups. The overall prevalence is considered to be comparable to or even somewhat lower than other countries in Northern Europe. The most prevalent risk group consists of people who have used intravenous drugs.
- General or focused screening programs to detect sporadic HC patients seem inefficient. It is conceived that in The Netherlands practically all active drug users are involved in medical care in connection with their addiction. They will be tested for HCV and qualify for treatment of HC.
- It is the patients' right that physicians provide them spontaneously with relevant information. This is clearly a problem in symptom-free individuals. However, where there is a greater likelihood of HCV infection, the obligation to provide the patient with relevant information remains effective for many years, in view of the severity of HC.
- The general population lacks adequate knowledge about HCV, the transmission routes, the disease and possible treatment. The same lack of knowledge is prevalent in special risk groups for HC, including those who had blood transfusions, tissue transplants, tattoo or are immigrant. This prevents them from taking responsibility for their own health. The awareness and knowledge about HC in the drug users is higher.
- The adherence to hygienic measures among non-regular practitioners (tattoo, piercing, acupuncture, ritual) is unclear.

Recommendations for health strategies on hepatitis C

The Health Council recommended the following

- A general lookback, i.e. tracing and testing all people who received blood products in the past, must not be set as an objective as it would be inefficient. Besides, because the prevalence of HC is low, it would result in a great deal of unnecessary alarm.
- In terms of Quality of Health Care, hospitals should keep precise records of the origin and use of blood products.
- Information should be provided to the general population, about the disease, the transmission and the possibility to treat. Especially people in risk groups should be informed in such a way that they are able to decide to seek medical care and, if necessary, should receive treatment. Immigrants should be informed through their own channels ; intermediaries should be trained for that purpose.
- Tracing and, where indicated, treating patients with chronic HC should form part of the medical treatment of patients with conditions that go along with increased likelihood of HCV infection : haemophiliacs, dialysis patients, polytransfusees, patients with organ transplants or puncture wounds.
- Patients with a known HC must be advised to stop alcohol consumption.
- Medical doctors of various disciplines must be encouraged to take part in training and refresher courses on diagnostics and advising patients in HC risk groups. Other professionals involved in increased risk of HCV transmission (like hairdressers, chiropodists) must be informed on hygiene.
- Epidemiological research is required to underpin insight into the prevalence of HCV infection in the various population groups.

Current strategies

In accordance to the advice of the Health Council, the Dutch Ministry of Health, Welfare and Sport practices an active approach to the health care policy on hepatitis C. Especially active awareness programs are currently being performed in risk groups and training courses are being given to professionals involved, in cooperation with the various professional societies. Such courses are cut to the special aspects concerning each professional group. The courses for general practitioners and medical specialists, for example, are guided by the National Institute for Medical Health Care Research (ZonMw), the National Hepatitis Centre and the Dutch Society for General Practitioners cq the Dutch Society of Hepatology. Credit points are given for participation in these trainings. The necessary treatment for HC is usually given in accordance with the current consensus (8, 9), including long term combination therapy with interferon and ribavirin, and is available and refundable for all Dutch citizens. A special program for HC screening and treatment of drug addicts is being started up. All over The Netherlands, a special infrastructure for drug user control programs is available. The clients cq patients are used to visiting special clinics with dedicated medical doctors and paramedic personnel. Earlier pilot studies have proven that complex treatment schedules for hepatitis C can be applied with high accuracy and patient compliance in this setting (10).

Conclusion

The prevalence of hepatitis C is low in the Netherlands, but the disease is considered as a serious disease by the Dutch health authorities. Therefore, evidence based keynotes and indications for a program of health care measures were formulated by a committee of the

Dutch Health Council and integrated in the governmental policies on infectious diseases. Currently, several aspects of these policies are being realised.

References

1. HEALTH COUNCIL OF THE NETHERLANDS : Committee on Hepatitis C. Detection and treatment of people with hepatitis C. Rijswijk : Health Council of The Netherlands, 1997 ; publication no. 1997/19.
2. VELDHUIJZEN I.K., CONIJN-VAN SPAENDONCK M.A.E., DORIGO-ZETSMAB J.W. Seroprevalentie van hepatitis B en C in de Nederlandse bevolking. *Inf. Ziekten Bull*., 2001, **10** : 182-184.
3. HEALTH COUNCIL OF THE NETHERLANDS. Prevention of Non-A, Non-B post transfusion hepatitis ; application of surrogate tests. Rijswijk : Health Council of The Netherlands, 1989 ; publication no. 1989/15.
4. MAUSER-BUNSCHOTEN E.P., BRESTERS D., VAN DRIMMELEN A.A.J., ROOSENDAAL G., CUYPERS H.T., REESINK H.N., VAN DER POEL C.L., VAN DEN BERG H.M., LELIE P.N. Hepatitis C infection and viremia in Dutch hemophilia patients. *J. Med. Virology*, 1995, **45** : 241-246.
5. VAN DOORN L.J., SCHNEEBERGER P.N., KEUR I. *et al.* Hepatitis C virus infecties bij chronische dialysepatiënten in Nederland. Bussum : Nierstichting Nederland, 1996 ; (proj nr C941416).
6. VAN DEN HOEK J.A.R., VAN HAASTRECHT H.J.A., GOUDSMIT J., DE WOLF F., COUTINHO R.A. Prevalence, incidence and risk factors of hepatitis C virus infection among drug users in Amsterdam. *J. Infect. Dis*., 1990, **162** : 823-826.
7. BEUTELS M., VAN DAMME P., VRANCKX R. Prevalentie van hepatitis A, B en C in de Vlaamse bevolking. Wilrijk : Universitaire Instelling Antwerpen. Epidemiologie en Sociale Geneeskunde, 1995.
8. EASL International Consensus Conference on Hepatitis C, Paris, February 1999. Consensus Statement. *J. Hepatol*., 1999, **30** : 956-961.
9. Consensus statements on the prevention and management of hepatitis B and hepatitis C in the Asia-Pacific region. *J. Gastroenterol. Hepatol*., 2000, **15** : 825-841.
10. RASCH M.C., ALDERLIEFSTE G., VAN BERLO M., BOERBOOM S., JONGERHUIS M., POL H., WIND H., VAN HATTUM J. HCV treatment in drug-users : feasibility using a special infrastructure. *Hepatology*, 1997, **26** : 466.