



EXPLORING HOW COMMONLY DIAGNOSING SERVICES REFER NEWLY DIAGNOSED CHRONIC HEPATITIS B AND C PATIENTS TO SPECIALIST SECONDARY CARE: THE VIEWS OF HEPATOLOGISTS, GASTROENTEROLOGISTS AND INFECTIOUS DISEASES SPECIALISTS IN SIX EU COUNTRIES

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Introduction

In order to prevent a considerable part of the hepatitis-related burden of disease, it is important to improve case detection by screening groups at higher risk, including migrants from endemic countries, who have the largest burden of infection in most countries of the European Union (EU). In order for a screening programme to be successful, however, it is important that all patients found to be positive are referred to appropriate specialist care, so as to treat positive asymptomatic patients and prevent the developing of liver cirrhosis and cancer of the liver.

Objectives

The aim of the present study was to explore the frequency of referral of newly diagnosed chronic hepatitis B/C patients to secondary care from the health services most involved in screening in six countries of the EU: Germany, Hungary, Italy, the Netherlands, Spain and the UK.

Methods

A semi-qualitative online survey aimed at experts in hepatology, gastroenterology and to infectious diseases specialists based in the six selected EU countries was developed. Professionals who were invited to participate in the survey were contacted via published board membership of clinical and professional associations and leadership of hepatology treatment and research centres. The survey was translated into the national languages of the study countries, pilot tested and then uploaded into the open source online software Lime Survey™. It was conducted between July and September 2012. Among other questions regarding current practices in clinical management of chronic hepatitis B and C patients, experts were asked how often they receive newly diagnosed chronic hepatitis B/C patients from general practitioners (GPs), from centres testing injecting drug users (IDUs), from antenatal care (ANC) and from sexual health services (SHS), using a four-point ordinal scale: "very common", "variable or not routinely", "rarely or never", "unsure". Descriptive analyses of data were performed using IBM SPSS Statistics 21 software. The responses gathered where then compared to those obtained through three other surveys developed as part of the HEPscreen project; these included an antenatal care (ANC) survey aimed at national associations for midwives and leads of gynaecological associations, a general practitioner (GP) survey aimed at GPs and a sexual health service and/or genito-urinary medicine specialists (SHS) survey, addressing experts working in the field of sexual health. In the GP, ANC and SHS surveys to identify which patients are referred for treatment a three-point scale was used: "all patients", "a selection based on clinical indicators" (and if this was the selected option they were asked to specify which are the clinical indicators used among viral load, HBe antigen status or ALT; they could also select "unsure" or "other"), and "unsure".

Results part 1: The views of secondary care specialists

A total of 64 responses were received. In five of the six countries, Spain being the exception, the recruitment target of between 5-10 experts was achieved. More than 90% were seeing chronic hepatitis patients on a weekly basis and most were based in academic teaching hospitals (61%) or general hospitals (31%). The majority (77%) were specialists in gastroenterology or hepatology, 21% were specialists in infectious diseases and a small proportion was represented by community or practice nurses. This pattern was replicated in every country apart from Italy and the Netherlands: in Italy, nearly half (44%) were specialists in infectious diseases and in the Netherlands an even larger proportion (86%) were gastroenterology or hepatology specialists (Table 1).

Table 1 - Specialism of the professionals participating in the survey

	UK (n=10)	DE (n=9)	NL (n=22)	HU (n=10)	IT (n=9)	ES (n=4)	TOT (n=64)
Infectious Diseases Specialists	20%	0%	14%	30%	44%	25%	20%
Gastroenterologists/ Hepatologists	60%	78%	86%	70%	56%	75%	73%
Community or Practice Nurses	10%	0%	0%	0%	0%	0%	2%
Other	10%	22%	0%	0%	0%	0%	5%

The views of secondary care specialists: Referral from GPs was very common for 90% in the UK, most in Germany (78%), the Netherlands (68%), Hungary (60%), and around half in Italy (44%) and Spain (50%), although significant proportions in Italy (56%), Spain (50%), Hungary (40%) and the Netherlands (32%), indicated that it was variable (Table 2). Referral from ANC and IDU clinics was most common in the UK and Spain but not routine in the other study countries. Referral from SHS was reported to be 'very common' in the UK (60%) but 'rare' in the Netherlands (73%), Hungary (60%) and Germany (56%). Responses in Italy were often divergent with no majority opinion. In Germany, over half (56%) indicated rarely/never receiving patients from IDU clinics, SHS and ANC.

Table 2 - Frequency of referral from the diagnosing services, according to specialists

	UK (n=10)	DE (n=9)	NL (n=22)	HU (n=10)	IT (n=9)	ES (n=4)
FROM GPs						
Very common	90%	78%	68%	60%	44%	50%
Variable or not routinely	0%	11%	32%	40%	56%	50%
Rarely or never	0%	11%	0%	0%	0%	0%
Unsure	10%	0%	0%	0%	0%	0%
FROM IDU CLINICS/SERVICES						
Very common	60%	33%	32%	0%	33%	75%
Variable or not routinely	30%	11%	41%	60%	33%	25%
Rarely or never	0%	56%	27%	20%	33%	0%
Unsure	10%	0%	0%	20%	0%	0%
FROM MIDWIVES/ANTENATAL CARE PROVIDERS						
Very common	70%	0%	23%	10%	22%	50%
Variable or not routinely	20%	44%	59%	30%	33%	0%
Rarely or never	0%	56%	14%	50%	44%	50%
Unsure	10%	0%	5%	10%	0%	0%
FROM SEXUAL HEALTH SERVICES / GENITO-URINARY MEDICINE						
Very common	60%	11%	9%	0%	22%	25%
Variable or not routinely	30%	33%	14%	20%	33%	50%
Rarely or never	0%	56%	73%	60%	44%	25%
Unsure	10%	0%	5%	20%	0%	0%

Results part 2: The views of the diagnosing services

The views of the General Practitioners: All patients are referred by the majority of GPs in Italy (10/14; 71%), the UK (6/10; 60%) and Hungary (1/1; 100%). Responses in the other three countries are more or less evenly divided between those who indicated that all patients and those who indicated that a selection based on clinical indicators are referred. If clinical indicators are used by GPs to define a selection of patients for referral to secondary care, in the UK these are viral load, HBeAg status and ALT, although one indicated the relative stability of intra-venous drug use, while in Italy viral load was the most reported, but also HBeAg status, ALT, life expectancy, age and comorbidities were mentioned.

In Germany, GPs that use clinical indicators to select the subgroup to refer selected viral load, HBe antigen status and ALT, the latter being least common. By contrast with the other countries, only 20% from the Netherlands (1/5) identified viral load: the most used clinical indicators to define a selection of patients for referral are HBeAg status and ALT. In Spain it is unclear if all or a selection of patients are referred from GPs to secondary care due to a division of opinion between the two respondents: one indicated all, one indicated referral based on viral load, HBe antigen status and ALT.

The views of Antenatal Care Providers: All or nearly all ANC experts in the UK (7/8; 88%) and Hungary (4/4; 100%) and the majority in Spain (6/8; 63%) indicated that all hepatitis B positive women are referred to specialist secondary services for care for chronic viral hepatitis, without the use of clinical indicators. Around 1/3 in Italy (9/25; 36%), in the Netherlands (2/6; 33%) and around 1/5 in Germany (8/36; 22%) stated that a subgroup of HBV positive women are referred: viral load and HBeAg are used by ANC professionals in Germany; HBeAg and occasionally viral load in the Netherlands; mainly ALT and HBeAg, but also viral load in Italy.

The views of Sexual Health Services: All respondents in Hungary (n=3) and Italy (n=1) and 60% (6/10) in the UK reported that all positive patients are referred by SHS to specialist care, without the use of clinical indicators. Clinical indicators are generally not used in the Netherlands either. In Spain, while one of the two respondents stated that all patients are referred to secondary care, the other reported that referral is based on viral load.

Conclusions

Despite some clear common practices, we observed significant disagreement within countries on how frequently patients are referred to specialist secondary care from those services most involved in screening for viral hepatitis.

Specialists in some countries reported rarely/never receiving patients from antenatal care, from sexual health services / genito-urinary medicine or from centres testing injecting drug users.

Our findings suggest complex or ineffective referral practices, that not all patients reach secondary care and/or that services most able to offer screening miss opportunities to screen risk groups. Nonetheless, the observed discrepancies could be partially explained by health system context i.e. regional/local referral mechanisms or differences in the role of SHS or IDU clinics. However the increased scope for secondary prevention of viral hepatitis can only be achieved with effective screening programmes that successfully link patients to specialist care.

For more information visit www.hepscreen.eu or contact Irene Veldhuijzen (ik.veldhuijzen@Rotterdam.nl)