

An overview of the Hepatitis C control plan in Qatar

Moutaz Derbala,¹ Elmoubasher Abd Farag,² Hamad Al-Romaihi,² Saad Al Kaabi,¹ Mohamed Al-Thani,² Elham El Sayed,³ Aliaa Amer¹ and Sayed Himatt²

¹Gastroenterology and Hepatology Department, Hamad Medical Corporation, Doha, Qatar. ²Public Health Department, Ministry of Public Health, Doha, Qatar. ³Pharmacy Department, Hamad Medical Corporation, Doha, Qatar. (Correspondence to: Sayed Himatt: sayedntp@yahoo.com, shimatt@moph.gov.qa).

Abstract

Since the development and approval of new direct-acting antiviral (DAA) drugs, chronic hepatitis C virus (HCV) infection is now considered a curable disease. However, the emphasis on DAA therapies might disregard other preventive measures, and limits the strategy for a clinical cure rather than comprehensive disease control. The Qatar National plan for HCV control was launched in December 2014 to prioritize and proactively manage HCV with the ultimate aim of eliminating viral hepatitis. The plan is based on four pillars: primary prevention, early detection, clinical management, and continuous monitoring. This report describes the activities undertaken in Qatar to prepare for the programme and the early results of its initial phase, given the fact that countries with comprehensive HCV plans are providing better access to care and prevention.

Keywords: Hepatitis C, hepatitis B, direct acting anti-viral; elimination, Qatar

Citation: Derbala M; Farag E; Al-Romaihi H; Al Kaabi S; Al-Thani M; El Sayed E et al. An overview of the Hepatitis C control plan in Qatar. *East Mediterr Health J.* 2019;25(5):363-365 <https://doi.org/10.26719/emhj.18.046>

Received: 20/11/17; accepted: 20/05/18

Copyright © World Health Organization (WHO) 2019. Some rights reserved. This work is available under the CC BY-NC-SA 3.0 IGO license (<https://creativecommons.org/licenses/by-nc-sa/3.0/igo>).

Background

Awareness of the importance of HCV has grown significantly in the last few years and countries perceive the present moment as a window of opportunity to set out more ambitious plans to tackle HCV. The position of the World Health Organization (WHO) in recognizing HCV as an international health problem is of vital importance for creating this awareness (1). Hepatitis C has a huge social and economic impact on patients and communities. Studies have concluded that HCV patients report financial insecurity, internalized shame and social rejection, regardless of the method of HCV acquisition or socioeconomic status (2). Individuals with hepatitis C and those at risk may be exposed to stigmatization, discrimination and social marginalization. This could impede their access to hepatitis services. Hepatitis interventions are most effective when they occur in appropriate social, legal, policy and institutional environments, which encourage and enable people to access and use services. Effective hepatitis programmes are dependent on the uninterrupted supply of quality-assured vaccines, medicines, diagnostics and other commodities (3). The Global Hepatitis Report 2017 stated that the prices of medicines and diagnostics are the key drivers that influence the economic analysis of viral hepatitis elimination plans (4).

Qatar is among countries characterized by low prevalence of HCV, but it continues to cause a public health challenge. This is mainly due to the serious complications of undiagnosed cases of Hepatitis C, namely hepatocellular carcinoma and liver cirrhosis. The State of Qatar is committed to implement internationally recognized resolutions and decisions in this area. This is not an easy task as the population of Qatar is rapidly

growing with an influx of expatriates from hepatitis high-burden countries.

The Qatar National plan for HCV control was launched in December 2014, elaborated by a group of stakeholders from the Qatar Ministry of Public Health (MoPH) and Hamad Medical Corporation (HMC), and approved and adopted by the Qatar government (MoH). In 2017, WHO took a step forward to support the development and implementation of national multisectoral policies and strategies for Hepatitis prevention and control in Qatar, based on the local epidemiological context. Since many countries are working on the action plan to address HCV, different methodologies, processes and ways to move forward have been identified. Therefore, the analysis and comparison of the Qatar plan may offer an opportunity to accelerate the development and implementation of new national plans.

Diagnosis of the problem and action plan

One of the major challenges to achieving a comprehensive approach to hepatitis C control is the development of information systems; diagnosis of the problem remains the primary bottleneck in achieving the Global Health Sector Strategy. Two large-scale epidemiological studies were carried out in Qatar in 2013 (5,6), which included 13 704 participants. The aim of these studies was to determine the magnitude of the problem in collaboration with the Center for Disease Analysis (CDA), to quantify the disease burden of hepatitis C virus (HCV) infection, and develop strategies for control in Qatar (5). These studies showed a viremia prevalence of 2% among general populations and prevalence was highest in the oldest age

group in the study (55–65 years). Similar to many countries in the Region, the prevalence was higher in males than females, with predominant Genotype 1 followed by genotype 4 among Qataris, while genotype 4 is the predominant among the general population. These findings informed the screening and treatment policy and helped in adjusting planning accordingly. Liver transplant was performed for an average 13 cases/year.

To respond to the HCV situation, Qatar formulated a national hepatitis technical working group that comprises a group of experts from various institutes in Qatar contributing to HCV care and control. It represents the prime technical forum that develops the strategic directions for HCV control in Qatar aimed at HCV elimination.

The technical group analyzed disease burden and obtained an overview of hepatitis C in Qatar by implementing public screening campaigns using mobile laboratories in various categories and locations including: healthcare workers, unemployed individuals, unmarried individuals, police and army clinics, airline cabin crew, domestic labourers, primary healthcare centres, prisoners, oil and gas sector clinics. The technical group subsequently established guidelines that ensure continuity of care, self-management, training programmes, improve coordination between health professionals, facilitate access to treatment with improved adherence to treatment, assist clinical decision-making and education for patients and families.

Actions taken in Qatar include continuous upgrading of infrastructure, HMC guidelines, development of an information system for both surveillance and patient registry in MoPH, establishment of a website for patients' data, securing and tailoring therapy, organizing programme training courses for family physicians and other healthcare workers (HCW), and establishing a continuous monitoring system of positive cases to ensure treatment and re-treatment of relapses.

All confirmed positive cases are referred to a focal registry point in MoPH, which in turn should refer such cases to the HMC hepatology team. All cases should be tested for viremia and positive cases scheduled for treatment within a month from date of screening. All patients have their HCV DAA drugs free of charge. The Qatar Red Crescent has collaborated with HMC and MoPH in the provision of DAA free of charge for all expatriate HCV cases.

In the area of HCV prevention, the technical working group implemented a number of activities to raise awareness of the successful treatability of HCV and thus remove stigma. These include mass media campaigns, promotion of World Hepatitis day, awareness campaigns accompanying HCV screening in public areas, information for HCWs and awareness campaigns for charitable societies.

The political commitment was crucial for the success of the action plan, which was referred to and approved

by MoPH and supervised by WHO. The technical group, in conjunction with the Ministry of Labour and Social affairs, established a fund for hepatitis control and elimination in Qatar, financed by donors, charities, Qatar Red Crescent, and drug companies. The technical group also recognized the importance of establishment of measurable objectives in order to evaluate progress of the plan.

The main obstacles

The main challenge for HCV control in Qatar is how to address specific populations such as drug users, where social discrimination based on religious and other factors make it difficult to reach such groups. Similarly with prisoners, who are known to have a higher prevalence of HCV due to various factors such as risky sexual behaviour and drug use. One of the most important populations are expatriates; Qatar has a diverse, dynamic and rapidly growing population and this growth will continue to rise as the FIFA World Cup 2022 approaches. The majority of the expatriate population comes from high hepatitis C endemic countries. WHO indicated in its 2017 Global Hepatitis Report that individuals migrating from countries with a high prevalence of HBV or HCV infection to countries with a low prevalence play an important role in the epidemiology of the disease. Currently, the epidemiological data and hepatitis burden among expatriates in Qatar are not adequate and forms one of the main challenges facing the government. However, there is strong political commitment towards achieving universal access goals for hepatitis-related services, regardless of patient nationality and emphasizing health as a basic human right for all.

Outcomes of the Qatar plan

Implementation of this plan resulted in improvement of HCV information systems, epidemiological surveillance and patient Registration. A follow-up screening campaign was conducted in 2016, which included 7665 participants, of which 21% were Qataris. The prevalence showed a decrease from 2% in previous studies to 0.82% among the total population, and reduced prevalence among Qataris from 0.8% to 0.2%.

An important outcome is the implementation of awareness raising and screening campaigns targeting population groups at risk, primarily among intravenous drug users and prisoners, which are potentially high-risk and vulnerable populations in Qatar. During May 2017, a total of 533 prisoners were screened. The prevalence was found to be 2.06% and all positive cases received DAA medication. This prevalence was higher than the prevalence among the general population. Moreover, the most affected age group among the prisoners was 20–30 years, which showed a prevalence of 6.7%; this is at variance with the general population where older age groups were affected. The higher prevalence levels

among prisoners may reflect risky sexual behaviour and/or drug use. Without the mass screening programme of prisoners in Qatar, a large number of infected patients would remain undetected or diagnosed late. In accordance with Jovanovic et al. (6), we found that developing a targeted programme for detection and treatment of HCV among the prisoner population should be integrated in any efficient national programme.

Qatar has achieved very high rates of treatment outcomes. 278 patients were treated with Peg-IFN based therapies in 2014 with a response rate of 55%, and defiant follow-up monitoring. 1959 positive cases were detected through screening, 88% of which received treatment under DAA with a response rate of 95.5%. Through more efficient monitoring systems, it was detected that 12% lost follow-up, of which 10% had died or exited the country. The remaining cases were contacted by coordinators and re-scheduled for treatment.

Qatar is small country in terms of geographical area. This feature gives the country the opportunity to centralize all confirmatory testing and HCV treatment within HMC hepatology department, and allows greater

control over the quality of treatment and monitoring of HCV patients. The other distinct feature is the availability of HCV testing and free treatment for all patients in Qatar including expatriates, and made possible by Qatar Red Crescent. Data on hepatitis C presented at the World Hepatitis Summit (WHS) in Sao Paulo, Brazil, in November 2017, showed that Qatar is one of nine countries successfully on course to eliminate hepatitis C by 2030.

Conclusion

Qatar's national plan for the elimination of hepatitis is demonstrating greater effectiveness in the control of the disease. However, there are still a diversity of approaches currently taken to address the burden of disease according to local demands. Optimal treatment strategies should be accompanied by a prevention plan and epidemiological surveillance and research. In the absence of HCV vaccine, all countries should strengthen organized prevention and harm reduction programmes to maximize the reduction of infection rates through social awareness campaigns.

Acknowledgements

Rafael Bengoa, Qatar Red Crescent, Sally Emara, Gulf team of AbbVie Inc., coordination team in MoPH; Mohamed Sallam, Jalilah Barodi Moksir, HMC coordination team, Maysa Kamel, Marry Paul and Fatma Sali Mariawa.

Funding: None.

Competing interests: None declared.

Aperçu du plan de lutte contre l'hépatite C au Qatar

Résumé

Depuis la mise au point et l'approbation de nouveaux médicaments antiviraux à action directe, l'infection chronique par le virus de l'hépatite C (VHC) est maintenant considérée comme une maladie guérissable. Cependant, l'accent mis sur les thérapies à base d'antiviraux à action directe pourrait mener à l'absence de prise en compte d'autres mesures préventives et limiter la stratégie à la recherche de la guérison clinique plutôt qu'au programme complet de prise en charge de la maladie. Le plan national de lutte contre le VHC du Qatar a été lancé en décembre 2014 pour donner la priorité aux programmes concernant le VHC et gérer ces programmes de façon proactive dans le but ultime d'éliminer l'hépatite virale. Le plan repose sur quatre piliers : la prévention primaire, la détection précoce, la prise en charge clinique et la surveillance continue. Le présent article décrit les activités entreprises au Qatar dans les préparatifs du programme et les premiers résultats de sa phase initiale, les pays dotés de plans complets de lutte contre le VHC offrant un meilleur accès aux soins et à la prévention.

نظرة عامة على خطة مكافحة التهاب الكبد C في قطر

معتز درباله، المبشر عبده فراج، حمد الرميحي، سعد الكعبي، محمد آل ثاني، إلهام السيد، علياء عمرو، سيد همت

الخلاصة

منذ تطوير الأدوية المضادة للفيروسات ذات المفعول المباشر الجديدة واعتمادها، تعد العدوى المزمنة لفيروس التهاب الكبد C مرضاً قابلاً للعلاج. ومع ذلك، قد يؤدي التركيز على الأدوية المضادة للفيروسات ذات المفعول المباشر إلى إغفال التدابير الوقائية الأخرى، ويجعل الاستراتيجية تقتصر على العلاج السريري بدلاً من المكافحة الشاملة للمرض. وأطلقت الخطة الوطنية لمكافحة فيروس التهاب الكبد C في قطر في ديسمبر/ كانون الأول ٢٠١٤ بهدف ترتيب الأولويات والعلاج الاستباقي للفيروس، مع الوضع في الاعتبار الهدف الأسمى الذي يتمثل في القضاء على التهاب الكبد الفيروسي. واستندت هذه الخطة إلى أربعة ركائز: الوقاية الأولية، والكشف المبكر، والعلاج السريري، والرصد المستمر. ويصف هذا التقرير الأنشطة التي جرى تنفيذها في قطر للإعداد للبرنامج، والنتائج المبكرة للمرحلة الأولى، مع الأخذ في الاعتبار حقيقة أن البلدان التي لديها خطط شاملة لمكافحة فيروس التهاب الكبد C توفر رعاية ووقاية أفضل.

References

1. World Health Organization. Guidelines on Hepatitis B and C Testing. Geneva: World Health Organization; 2017 (<http://apps.who.int/iris/bitstream/-9789241549981/1/254621/10665eng.pdf?ua=1>).
2. Zacks S, Beavers K, Theodore D, Dougherty K, Batey B, Shumaker J, et al. Social stigmatization and hepatitis C virus infection. *J Clin Gastroenterol*. 4–220;(3)40;2006. <http://dx.doi.org/00009-200603000-00004836/10.1097>
3. World Health Organization. Global health sector strategy on viral hepatitis, 2021–2016: towards ending viral hepatitis. Geneva: World Health Organization; 2016. (<http://apps.who.int/iris/bitstream/1/246177/10665/WHO-HIV-2016.06-eng.pdf>).
4. Global Hepatitis Report 2017. Geneva: World Health Organization; 2017. (<http://apps.who.int/iris/bitstream/-9789241565455/1/255016/10665eng.pdf?ua=1>).
5. Liakina V, Hamid S, Tanaka J, Olafsson S, Sharara AI, Alavian SM et al. Historical epidemiology of hepatitis C virus (HCV) in select countries. *J Viral Hepat*. 2015 Dec;22 Suppl 20-4:4. <http://dx.doi.org/10.1111/jvh.12475>.
6. Jovanovic MR, Miljatovic A, Puskas L, Kapor S, Puskas DL. Does the Strategy of Risk Group Testing for Hepatitis C Hit the Target? *Front Pharmacol*. 2017 Jun 8;437;30. <http://dx.doi.org/10.3389/fphar.2017.00437>