HEPATITIS C ELIMINATION IN KUWAIT

Recommendations

Final report of the EASL International Liver Foundation Expert Panel

11 December 2018

Kuwait

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INTERNATIONAL
LIVER
FOUNDATION

The EASL International Liver Foundation (EILF) was established by the European Association for the Study of the Liver (EASL), one of the worlds leading scientific societies in the field of hepatology. The foundation was created in 2016 and is currently led by Prof. Massimo Colombo (Chairman) and Prof. Jeffrey V. Lazarus (Vice-Chairman), with the mission *to increase the quality of life and reduce premature mortality for the greatest number of people by improving liver health.*

EILF activities are implemented across the world and are centred around four key pillars:

- Research and Development
- Education
- Awareness
- Interventions

As a not-for-profit organization committed to improving liver health, EILF not only fully supports the viral hepatitis elimination goals set by the World Health Organization but is committed to proactively taking a role in supporting countries to achieve viral hepatitis elimination by 2030.

For more information please visit our website www.easl-ilf.org or contact us at info@easl-ilf.org.

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FOREWARD

Globally, there are more than 70 million people living with chronic hepatitis C virus (HCV), which causes significant morbidity and mortality as it can lead to liver damage, liver cancer and liver failure. Within the World Health Organization (WHO) Eastern Mediterranean region alone, there is an estimated 15 million people living with HCV.[1]

In 2015, the United Nations General Assembly adopted the 2030 Agenda for Sustainable Development, which called for significant action to combat viral hepatitis – raising its profile as a public health issue. In 2016, the World Health Assembly adopted the first global health sector strategy on viral hepatitis, setting targets for the elimination of viral hepatitis as a public health threat by 2030. The strategy was endorsed by 194 countries, including Kuwait.

With approved screening and diagnostic tests as well as the advent of direct acting antivirals that can cure ≥95% of patients with HCV with easy to administer and highly tolerable treatment regimens, we have the biomedical tools to eliminate HCV. Despite this, only 12 of the 194 countries that endorsed the WHO global health sector strategy are on track to reach the WHO elimination targets.[2]

The EASL International Liver Foundation works with countries to support their progress towards viral hepatitis elimination. As such, the foundation convened key Kuwaiti experts and stakeholders in a half-day expert panel meeting with the main aim of identifying the successes, gaps, and barriers to HCV elimination in Kuwait and to determine unified recommendations to facilitate and expedite elimination in the country.

In support of the WHO global health sector strategy on viral hepatitis for 2016-2021 and the Eastern Mediterranean regional action plan for the implementation of global health sector strategy on viral hepatitis 2017-2021 and consistent with the United Nations' Sustainable Development Goals and the WHO universal health coverage framework, this report presents expert recommendations to empower Kuwait to fast-track HCV elimination.

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VIRAL HEPATITIS ELIMINATION BY 2030: A BRIEF OVERVIEW

HCV Burden

In 2015, it was estimated that 71 million people around the world were living with chronic hepatitis C virus (HCV), which causes significant morbidity and mortality as it can lead to liver damage, liver cancer and liver failure.[1] In 2015, HCV was estimated to be responsible for nearly 500,000 deaths.[3]

Targeting Elimination

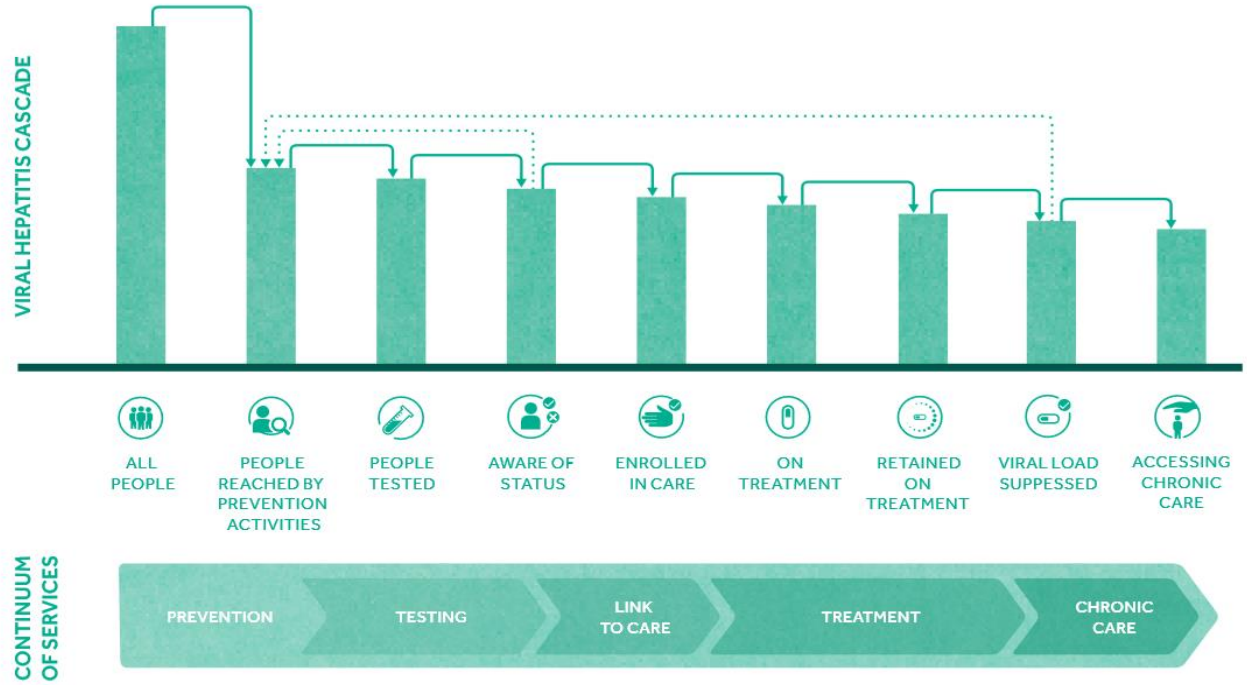
In 2016, at the World Health Assembly, all 194 countries, including Kuwait, adopted the first Global Health Sector Strategy on Viral Hepatitis, setting clear and ambitious targets for the elimination of viral hepatitis as a public health threat by 2030 (see Table 1).[4] The strategy was published by the World Health Organization (WHO) that same year.

Table 1: Global Health sector strategy on Viral Hepatitis Targets

Target Area	2020 Target	2030 Target
Impact Targets		
Incidence: New cases of chronic HCV	30% Reduction	80% Reduction
Mortality: HCV related deaths	10% Reduction	65% Reduction
Service Coverage Targets		
Blood Safety: Donations screened in a quality assured manner	95%	100%
Safe Injections: Percentage of injections administered with safety-engineered devices in and out of health facilities	50%	90%
Harm Reduction: Number of sterile needles and syringes provided per person who injects drugs per year	200	300
HCV diagnosis: Percent of people aware of their diagnosis	30%	90%
HCV treatment: Percent of people treated	-	80%

The strategy outlined a continuum of viral hepatitis services and retention cascade (Fig. 1) to provide an organisational framework for the implementation, monitoring and evaluation of effective viral hepatitis programming required to achieve the strategy's targets.

The strategy called for countries to contribute to the global elimination of viral hepatitis as a public health threat by developing national goals, targets and strategy for 2020 and beyond, suitable for their country's context.



Source: WHO Global Health Sector Strategy on Viral Hepatitis 2016-2021. Available at https://www.who.int/hepatitis/strategy2016-2021/ghss-hep/en/at

Fig. 1. The continuum of hepatitis services and the retention cascade

HCV ELIMINATION: KUWAIT

Expert Panel

An expert panel was convened by the EASL International Liver Foundation on 11 December 2018 in Kuwait. It was chaired by Prof. Jeffrey Lazarus and attended by local key opinion leaders and stakeholders (see acknowledgement section for a list of the participants). The expert panel aimed to:

- Understand the current state of HCV elimination in Kuwait;
- Review examples of HCV elimination in action from other countries;
- Identify the successes, gaps, and barriers to HCV elimination in Kuwait;
- Determine recommendations to empower HCV elimination in Kuwait.

Kuwait: Current State of HCV Elimination

The Eastern Mediterranean region has the highest estimated HCV prevalence rate (2.3%) globally, equating to approximately 15 million people chronically infected.[1] With the exceptions of Egypt and Pakistan, which carry the largest burden, the HCV prevalence in other countries in the region is relatively low (approximately 1%), which is comparable to most countries globally.[5] HCV prevalence in Kuwait is consistent with this figure, with an estimated prevalence of 0.8% in Kuwaiti nationals; however, the prevalence is estimated to be considerably higher in expatriates (5.4%),[6] who constitute a sizeable percentage of the population.

Kuwait does not currently have a National strategy or action plan for the prevention and control of HCV. Nonetheless, the expert panel were able to outline several successes already achieved in Kuwait, including:

- Free HCV treatment to all Kuwaiti citizens, individuals born to a Kuwaiti national, individuals married to a Kuwaiti national, and stateless individuals;
- High blood safety standards, with 100% of donations screened for HCV, HBV, and HIV since 1992, 1978, and 1987 respectively;
- Implementation of several HCV awareness and screening efforts at national and local levels.

Despite these positive steps, the advisory board identified considerable gaps and barriers impacting Kuwait's ability to achieve HCV elimination and formulated a set of recommendations to help Kuwait to take the practical steps needed to facilitate and expedite HCV elimination.

Recommendations

Governance

1. Kuwait Ministry of Health to publicly set a goal for the elimination of HCV in Kuwait and define targets and measurable indicators to monitor achievement.
   In consideration of the estimated prevalence of HCV, the existing infrastructure and treatment reimbursement policies in place, Kuwait is encouraged to aim to eliminate HCV as a public health threat by 2025. The targets and indicators should align with the WHO Global Health Sector Strategy on Viral Hepatitis, 2016-2021[4] and the WHO regional action plan[5] and be developed in conjunction with appropriate stakeholders (e.g., medical professionals, civil society and the private sector).

2. Develop and implement a national plan of action for HCV elimination in Kuwait and convene an oversight committee accountable for progress of the national HCV elimination programme.
   Elimination of HCV will require concerted action from multiple stakeholders. As such, it is recommended that a multistakeholder working group/committee, including governmental, medical, and civil society representatives be tasked to develop a plan of action to achieve the national elimination targets (Recommendation 1). The action plan should include a monitoring and evaluation framework for which the working group/committee is responsible and publicly reports on. It is advised that a focal person for HCV elimination is determined to strengthen accountability.

3. Ensure that an operational co-ordination mechanism is in place for HCV screening and linkage to care programmes.
   There are several HCV screening and linkage-to-care programmes currently being implemented in Kuwait; however, there is currently limited co-ordination and sharing of information between programmes and activities. In order to maximise efforts and resources and minimise duplication and burden, it is recommended that a co-ordination mechanism be put in place to provide operational oversight of all screening and linkage to care programmes to ensure concerted rather than siloed action in line with the national strategy/action plan (Recommendation 2). It would be expected that this operational co-ordinating committee:
   - Develop an inventory of existing and proposed (from the national strategy/action plan) screening and linkage to care programmes operating in Kuwait;
   - In the absence of a national registry, develop an inventory of available data to examine to the viral hepatitis care cascade (Fig. 1) to determine areas of drop out, unknowns and needed action across the different programmes/models;

- Hold preliminary workshop(s) to identify gaps, barriers, opportunities and solutions to consolidate action and share information to maximise impact and minimise burden on the healthcare system and patients;
- Based on the workshop(s), develop and implement an operational action plan, which should include standard operating procedures and a monitoring and evaluation framework;
- Conduct ongoing monitoring of operational performance across the viral hepatitis service continuum, addressing issues as appropriate; and
- Report to the national strategy/plan oversight committee.

Targeted Screening and Linkage to Care Programmes

5. Implement micro-elimination programmes as part of the national strategy/action plan to fast-track HCV elimination in high-risk populations.

   Micro-elimination refers to applying the national elimination goals and targets to sub-populations for which tailored prevention, screening and treatment can be delivered.[7] Strategic and operational guidance for implementing micro-elimination programmes within a national strategy/action plan can be found in a recent review led by EILF.[8] A micro-elimination approach enables "quick-wins" in a long-term national plan by eliminating the virus in high risk populations while contributing to the overall goal of national elimination as it enables tailored approaches to those at highest risk of acquiring and transmitting the virus and elimination in these groups can typically be achieved quicker than in the population at large. HCV micro-elimination programmes cover the full continuum of services (Fig. 1) and depend on multistakeholder planning. HCV micro-elimination programmes are recommended for the following populations:

   5.1 Hemodialysis patients

   Although transmission of HCV to hemodialysis patients may have declined over recent years due to improved blood screening and healthcare practices, the prevalence of HCV in patients on hemodialysis is typically higher than in the general population.[9,10] Furthermore, the implementation of a rigorous screening and linkage-to-care programme in this population would eliminate the virus in the hospital unit and thus limit the risk of new or re-acquired infection among the patients. In consideration of the "captured" nature of this high-risk population (i.e., in continuous contact with the healthcare system) and the significant clinical consequences of HCV within this population,[11-14] micro-elimination within this population should be a top priority and is thought to be achievable by the end of 2019 through collaboration between the nephrology and hepatology departments.

   5.2 Patients who had received a blood transfusion before 1992

   Due to unsafe blood safety practices, patients who had received a blood transfusion (or relevant procedure) prior to 1992 represent a high-risk population who, if positive, will have acquired the virus a considerable time ago and are therefore at higher risk of

presenting with late-stage liver disease. A micro-elimination programme should aim to quickly identify and treat this population and ensure linkage to chronic care as needed. This may require the involvement of general practitioners

5.3 Dormant identified patients

Identify patients who have previously received an HCV diagnosis but have not been followed up in order to provide linkage to care as required (i.e., treatment naïve and treatment failure).

5.4 People who inject drugs (PWID)

PWID represent one of the highest-risk populations for HCV. Contrary to prevailing perceptions, substantial research has shown that PWID both adhere to treatment and achieve sustained virologic response rates (cure rates) equivalent to non-injection drug use populations. A micro-elimination programme targeting PWID should adhere to the specific recommendations detailed by international organisations such as the European Association for the Study of the Liver, the International Network for Hepatitis in Substance Users, and the World Health Organization and should specifically include:

- Access to sterile drug injecting equipment as part of a large-scale harm reduction programme. Note that the provision of sterile needles and syringes per PWID/per year is a target set by the WHO global health sector strategy (see Table 1).
- Voluntary routine testing on a regular timeframe (e.g., 12 months) and following a reported high-risk injection episode.

Furthermore, micro-elimination programmes targeting PWID should be inclusive of the many PWID sub-populations, which may benefit from a variety of prevention, screening and linkage to care models and pathways. These include those currently engaging in drug use treatment, current PWID who are out of care (who are not in a care/assistance pathway, who use a care path in a chaotic way, those who have dropped out or those never engaged), as well as those who have previously completed their care pathway and former users.

To ensure concerted and systematic programming, it will be vital to include all stakeholders involved in the care and support of the PWID population in programme planning and implementation.

5.5 Individuals excluded from blood bank donation

When individuals attend the blood bank to provide donations, they must first complete a self-reported questionnaire (in line with international standards), which enables the blood bank service to determine if the individuals participate in high-risk behaviours such as injection drug use and unsafe sex. Those reporting high-risk behaviours are not eligible for blood donation. Approximately 90% of people offering donations are excluded from blood donation each year; however, those excluded for reporting risky behaviours represent a high-risk group for HCV (and other infectious diseases such as HIV). Implementing a screening and linkage-to-care programme at the blood bank at

the point of exclusion represents a significant opportunity to test and treat many persons at heightened risk of HCV.

5.6 Migrants

There is already an existing programme that screens individuals seeking residency and/or work visas for infectious diseases, including HCV, upon first entry. Although this is a vital first step to screen a high-risk population, there was considerable agreement that the programme could be strengthened, which is highly important considering the higher prevalence rates among this population. The expert panel suggests that a working group of relevant stakeholders be tasked to conduct a review of the existing programme in terms of standard operating procedures and the viral hepatitis cascade of care (Fig. 1), paying close attention to re-infection. Such analysis will enable a systematic and comprehensive expansion of the programme within a micro-elimination framework.

5.7 Existing Healthcare Programmes

The expert panel also discussed the possibility of incorporating HCV screening and linkage to care within pre-existing healthcare programmes such as:

- the national colonoscopy programme for adults aged 45 years and older;
- diabetology clinics;
- antenatal care clinics;
- health insurance coverage (AFYA);
- pre-operative patients.

It is recommended that the utility and feasibility of such programmes be assessed to ensure significant levels of impact and efficient use of resources.

6. Consider the need to expand the prescriber base to aid elimination efforts.

In Kuwait, only gastroenterologists and hepatologists can prescribe HCV treatment. In many countries this has been a barrier to achieving elimination. The expert panel recommends that expanding the prescriber base to enhance screening and linkage to care programming be considered and implemented if appropriate.

Awareness and Education

7. Design and implement accredited HCV training and education courses.

Accredited training and educational courses should be developed and systematically implemented for relevant healthcare workers involved in the continuum of viral hepatitis services (Fig. 1) including but not limited to: general practitioners, nurses, drug use treatment workers, and relevant secondary care specialists as well as those specifically implicated in the micro-elimination programmes. Education and training programmes should be created in formats (e.g. online and in person workshops) to aide widespread uptake and be implemented in a co-ordinated manner to ensure appropriate impact and resource utilisation.

8. Awareness campaigns should be implemented targeting high-risk populations and settings.

Awareness campaigns should be implemented specifically targeting high-risk populations and settings. The expert panel suggest the following for consideration: the aforementioned micro-

elimination target populations, people who attending barber shops, beauticians, tattooists, and fitness centres (the latter due to injection steroid use). Relevant civil society groups should be engaged in the planning and implementation.

Data

7. Develop and implement a national HCV registry.
   The development of a national HCV registry, incorporating relevant indicators in line with the WHO strategy, is vital. It will enable monitoring of progress towards the national and international goals, provide the information to make strategic action plan adjustments as well as provide evidence of elimination.

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