Asian Biomedicine Vol. 9 No. 3 June 2015;269- 270 DOI: 10.5372/1905-7415.0903.394

Editorial

HBV/HIV and HCV/HIV coinfection: a time for concerted effort

Hepatitis B virus (HBV) and hepatitis C virus (HCV) coinfections among human immunodeficiency virus (HIV) infected individuals are increasing globally [1, 2]. This is because of similar risky behaviors (mainly sexual activity and/or intravenous injection drug use), similar route of transmission, a lack of effective vaccines for certain viruses, the need long-term treatment beyond the reach of poor people, and chronicity of complications and deaths. The prevalence of coinfections vary across geographical areas, social classes, poverty levels, and various risk behaviors. The prevalence of HIV, HBV, and HCV prevalence range from more than 20% in high prevalence areas in Asia and Africa to less than 5% in developed areas of North America, Western Europe and Japan [1, 2]. Akekawatchai A et al. reported that in an urban part of Thailand the coinfection of HBV and HCV in HIV-infected patients were 11.4% and 7.6% respectively [3].

HIV/HCV and HIV/HBV-coinfected patients have high rate of interactions with antiviral therapy [4], an increase rates of fibrosis progression, portal hypertension, hepatic decompensation, and end stage liver failure compared with patients with HCV or HBV alone [5]. They also have a more rapid progression to AIDS [6].

There is no 'cure' at this time for hepatitis B, the main goal of treating HBV/HIV-coinfection is to stop or slow down HBV viral activity as much as possible and for as long as possible [7]. Several direct-acting antivirals have now entered clinical practice for treatment of hepatitis C, aimed at improving the rates of sustained virologic response, shortened durations of treatment, and compatibility with HIV antiretroviral therapies [8]. Liver transplantation is also an option for HIV patients in some settings [9]. All these possibilities are associated with increased burden on the health care system of any society that has to make difficult choices for effective disease control options. Slowing down HBV viral activities and treatment of HCV is expensive and beyond the reach of most poor people in developing countries where most HBV/HIV and HCV/HCV coinfections prevail. Therefore, prevention strategies aimed at dealing with common risky sexual behaviors and promoting healthy intravenous (IV) drug use behaviors (e.g., needle exchange programs) are important [10]. Thus, patients during routine clinical visits should be assess for sexual risks, particularly those men who have sex with men (MSM). All patients seeking care for sexually transmitted diseases should have HIV counseling and testing and HBV immunization. Campaign for the use of barrier methods such as male and female condoms should be encouraged to reduce transmission of HIV, HBV, HCV, chlamydia, gonorrhoea, herpes simplex virus, and HPV. Male circumcision can reduce HIV transmission. Postexposure prophylaxis and pre-exposure prophylaxis with antiretroviral agents can prevent HIV infection in high-risk individuals [10].

Prevention strategies aimed at common risky behaviors and promotion of healthy IV drug use behaviors are complex and usually require concerted efforts among actors within and between organizations. It is important that these actors refuse to adopt simplistic and myopic solutions for challenges confronting complex systems that are required for control of risky sexual behaviors and promotion of healthy IV drug use. This does not mean that key actors do not work to make processes as simple as possible. It does mean that actors are encouraged to recognize the range of things that might be involved to be successful. Each actor should be mindful of the diversity of other organizations and must be ready to seek support to maximize the experiences of all to understand the complex nature of risky sexual behavior, prevention measures for HIV/HBC, HIV/HBV co-infections, and promotion of healthy IV drug injection. We can then be able to continually refine decision making to reap the greatest benefits from effective interventions and slow down the rate of HBV/HIV and HCV/HIV coinfection that can drain significant resources for disease control. More important is the loss of valuable human resources who can contribute to the development of the society. Alignment, integration, and innovation of efforts within and between public, private, and civil society organizations will be essential.

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