

LETTER TO THE EDITOR

Hepatitis B infection and its prevention among healthcare workers in Ghana: More action required

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Hepatitis B virus (HBV) infection is one of the major global public health problems and it is said to be the 10th leading cause of death globally. At the global level, estimates are available to show that more than 2 billion people have evidence of past or current HBV infection and there are more than 350 million people who have the chronic form of HBV infection (1).

HBV is one of the many blood-borne infectious agents that is transmissible in healthcare settings. HBV is particularly important because it is the most efficiently transmissible infectious agent following percutaneous exposure to contaminated blood and body fluids compared to Human Immunodeficiency Virus (HIV) and hepatitis C virus (2). Based on this attribute, HBV infection is considered an important occupational risk to Health Care Workers (HCWs) who by nature of their work are in close proximity with patients and their blood and body fluids. Therefore, the prevention and control of HBV among HCWs have been prioritized by many local health authorities and international bodies.

For example, the World Health Organization (WHO) recognized the danger of HBV to HCWs and therefore in its infection prevention strategy emphasized the protection of HCWs as a priority for countries in the quest to eliminate the HBV infection (3).

The occupational health and safety policy of the Ghana Health Service also reiterated the risk of HBV to HCWs and provided guidelines for its prevention and control among Ghanaian HCWs (4). The National Policy on Viral Hepatitis for Ghana proposed free HBV vaccination for HCWs as a strategy in reducing occupational transmission of the infection (5). Protection from HBV infection among HCWs is essential because evidence is available to support the fact that 37% of HBV infections among HCWs are caused by occupational exposures to blood and body fluids (6).

Prevention of HBV infection among Ghanaian HCWs needs to be reconsidered and prioritized. This is principally because a systematic review and meta-analysis of studies conducted in Ghana from 1995 to 2015 estimated

a HBV prevalence of 12.3%. A recent estimate of studies conducted from 2015 to 2019 also revealed a prevalence of 14.3%, suggesting a slight increase in HBV prevalence (7, 8). Irrespective of the period under analysis, these prevalence rates are high enough to maintain Ghana in the high endemic zone according to WHO classification of endemicity (9). The high prevalence is an indication of increasing risk of HBV to HCWs who provide care to the general Ghanaian population. This is because it has been observed that the prevalence of HBV infection among HCWs mirrors closely the prevalence of HBV among the general population that they serve. It is much more serious when we consider the fact that research evidence elsewhere shows that HBV prevalence could be two to four times higher among HCWs compared to the general population (10). Amidst the high HBV population prevalence, vaccination against HBV which is the most cost-effective strategy for preventing occupational acquisition of HBV is low in Ghana. For example, in a referral hospital in the capital, only 53.4% of HCWs received at least one dose of HBV vaccine (11).

This scientific evidence calls for HCWs in Ghana just like their counterparts in other developed countries to be periodically assessed for the presence of HBV infection and level of protection, and for prevention measures to be made readily available to them irrespective of their cadre, level of education, facility type, and geographical location in order to reduce the morbidity and mortality associated with occupational acquisition of HBV.

Even though the HBV vaccine is effective in preventing occupational transmission of HBV, access to the vaccine has been a major barrier to preventive efforts. In a recent systematic review of studies conducted elsewhere in Africa, it was observed that vaccination coverage was as low as 13.4%, and the authors called for all African governments to establish and implement hepatitis B vaccination policies for HCWs (12). This call needs to produce an action now. The occupational health and safety policy of Ghana has been in existence for a decade

and over. It is time to evaluate the policy strategies with respect to HBV prevention and control. The viral hepatitis policy for Ghana outlined free vaccination for HCWs in Ghana as one of its strategies. A wake-up call is going out to the policy makers to implement the policy with commitment, knowing that the prevalence of HBV infection among the general Ghanaian population is high and that the HCWs who serve this population are at increasing risk of occupationally acquiring the virus.

Conclusion

Significant reduction in HBV prevalence has been achieved among HCW populations elsewhere with higher HBV vaccination coverage and effective adherence to standard precaution practices. Ghana can equally achieve significant HCW protection from HBV. Commitment is therefore needed on the part of government and policy makers. The free HBV vaccination program for HCWs as outlined in the National Policy on Viral Hepatitis for Ghana is yet to be fully implemented. It is time for policy makers and stakeholders in all related fields to identify the policy implementation gaps in the HCW protection against HBV prevention efforts. All determination must be made to reach all susceptible HCWs with the life saving HBV vaccine irrespective of their cadre, level of education, and geographical location.

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Ethical Approval

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