

Liver cirrhosis in sub-Saharan Africa: neglected, yet important



Clinical efforts and research on liver diseases have been scarce in sub-Saharan Africa. The first Conference on Liver Disease in Africa (Nairobi, Sept 13–15, 2018), gathering all stakeholders from the continent, is a welcome step towards greater attention to the problem, and the important issue of liver cirrhosis.

Cirrhosis-related deaths doubled in sub-Saharan Africa between 1980 and 2010, and the Central African Republic, Gabon, Malawi, Uganda, and Cote d'Ivoire were among the highest 10% of countries for these deaths in 2010.¹ Most cases of cirrhosis were attributed to hepatitis B virus (HBV), alcohol misuse, and hepatitis C virus (HCV), but around 30% were unrelated to these causes.¹ The understudied non-alcoholic fatty liver disease probably has a role in these latter cases, considering the increase in obesity in sub-Saharan Africa, and traditional herbal medicine could also contribute, because its use is associated with a substantial increase in liver fibrosis.^{2,3}

Treatment of liver cirrhosis is inaccessible in most parts of sub-Saharan Africa, given the huge shortage of hepatologists and gastroenterologists, interventional radiologists, hepatobiliary surgeons, and pathologists. Liver transplants are uncommon and done only in South Africa, and the costs are prohibitive for the governments of almost all sub-Saharan countries.

How should we tackle the high burden of cirrhosis in sub-Saharan Africa, where more than 50% of patients are admitted to hospital with end-stage disease (due to poverty, limited confidence in Western medicine, trust in traditional medicine, or distance from suitable hospitals) and mortality is high at initial hospitalisation?⁴

Public awareness and high-level government commitment are needed. Preventive measures must involve reliable screening of transfused blood for viral hepatitis; improved hygiene in health facilities; training or retraining of health-care workers on safe injection practices; vaccination of relatives, cohabitants, and long-term sexual partners of HBV carriers; and health promotion and education programmes to reduce alcohol consumption, excessive weight, and diabetes. Appropriate lifestyle messages should be spread by local opinion leaders, through radio programmes and at meetings of community and faith-based organisations. Nurses in rural and underserved area clinics could also

play an important role. Diagnostic services must be decentralised to the provinces of countries and include use of point-of-care rapid diagnostic tests, including nucleic acid tests,⁵ the prices of which will probably decrease with extended use.

Earlier diagnosis of liver fibrosis is essential. Transient elastography should be made available in referral hospitals, and screening campaigns should be organised in areas where the prevalence of HBV or HCV infection is high.⁶ Treatment of chronic liver disease must be improved and extended. Oral antiviral drugs for hepatitis B are easier to administer, and tenofovir and entecavir have excellent resistance profiles. However, treatment is lifelong and, therefore, costly, so generic formulations should be made available at low prices. Mass treatment for HBV infection with generic entecavir could be achieved at a low cost.⁷ Although progress has been made in lowering the prices and increasing the availability of oral, direct-acting antivirals for chronic hepatitis C, much remains to be done for the HCV epidemic to be tackled in sub-Saharan Africa.⁸ The availability of affordable point-of-care diagnostics and oral drugs could also facilitate shifting of treatment to the primary care level.

African governments must invest in hepatology services. The main referral hospitals in each country should have efficient liver units and clinics, possibly established with help from private institutions; proper equipment and instrument maintenance should be ensured. The high fatality rate of complications, such as oesophageal variceal bleeding, must be reduced by solving problems in resuscitation and blood supply, increasing the availability of Sengstaken-Blakemore tubes, and facilitating referrals and access to therapeutic endoscopy.⁹ Liver biopsy should be done more often in referral hospitals, in which well equipped pathology departments are essential to improvement of diagnostics for autoimmune liver diseases, Wilson's disease, and haemochromatosis, for example. Governments should find the resources to guarantee free treatment for poor patients. Medical schools in sub-Saharan Africa should train more hepatologists and gastroenterologists, interventional radiologists, hepatobiliary surgeons, and pathologists. Salaries should be sufficiently attractive in referral hospitals to retain these specialists and not lose them to private

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hospitals and clinics. When decompensated cirrhosis (end-stage liver disease) develops, palliative care services are needed, but they are present almost exclusively in South Africa and should be made more available.

Prevention, early diagnosis, and treatment of liver cirrhosis deserve serious attention from the governments of sub-Saharan African countries and civil society, as well as by the medical and nursing communities. It is a growing issue that must be properly confronted to reduce considerable morbidity and mortality.

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