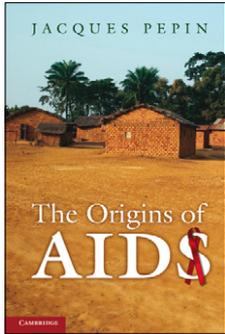


Book

A pandemic made less surprising



The Origins of AIDS
Jacques Pepin. Cambridge University Press, 2011. Pp 310. £17.99 (US\$28.99). ISBN 9780521186377

The “History of Africa” section is not where you’d expect to find a book about HIV/AIDS, but that’s exactly where Jacques Pepin’s compelling *The Origins of AIDS* was shelved in my local bookstore. Pepin draws on many indirect lines of evidence from primatology, viral genetics, and epidemiology, combined with a decade’s exploration of colonial archives, to make his case.

Some historians might grumble about a lack of deference to sources, but this book is an impressive feat of scientific scholarship, one to which Pepin’s background is well matched. Formal training and research in tropical infectious disease and epidemiology were preceded by years working in a Zairean bush hospital in the 1980s where, Pepin notes, “patients under my care were probably infected with HIV-1 during health care”. It’s an admission that few historians could make, and no medic would wish to, but illustrates Pepin’s humane yet objective outlook.

Pepin outlines current scientific understanding of where, when, and how HIV came to find itself in people. The global pandemic, caused by HIV-1 group M, results from just one of many cross-species transmissions of simian immunodeficiency viruses from African primates. The pandemic strain originated in chimpanzees from southern Cameroon and began its journey through humanity some time in the 19th century. In reviewing possible routes of transmission, Pepin finds plenty of reasons to reject the hypothesis that contaminated oral polio vaccine trials were responsible, which was the subject of Edward Hooper’s *The River*, an earlier investigation of HIV’s beginnings. Pepin concludes, as have others, that the most plausible route was the hunting and butchering of primates for food.

Although the primate origins of HIV are well established, the reasons for its transformation into an epidemic are

not. Why did HIV become established in the mid-20th century and not before, and why did it emerge from the riparian conurbation of Brazzaville/Léopoldville (Kinshasa) and not elsewhere? Pepin points to the coincidence of two factors: profound social changes in central Africa after colonisation, particularly with regard to sexual behaviour, and increased opportunities for syringe or injection-based transmission of HIV during public health campaigns.

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Although both factors have been discussed before, the degree to which Pepin analyses and supports them with archival data constitutes a real advance. His survey of sex work in central Africa before and after colonisation highlights the often-overlooked cultural diversity of the region, and reveals an epidemiologically important transition in the 1960s from low to high rates of partner turnover. Léopoldville’s population had grown rapidly in this period, had a strongly male-biased sex ratio, and had high rates of sexually transmitted diseases (STDs). Pepin is in little doubt that “a substantial part of the early amplification of HIV-1...occurred through the reuse of improperly sterilized syringes”. Indirect and comparative methods are again required, since HIV-1-associated mortality leaves few survivors of historical exposure to contaminated needles. Hepatitis C virus (HCV) provides useful leads: in Egypt, away from the source of HIV, rates of HCV infection closely track past exposure to injectable anti-schistosomiasis drugs. Similar HCV age profiles can be found in Cameroon, although the causal medical

interventions are harder to pin down and may well be manifold.

Pepin postulates that sex work and needle-based transmission came together at the Dispensaire Antivénérien in Léopoldville, which at its peak in 1953 undertook more than 150 000 intravenous injections against syphilis, many of which were probably unnecessary because the diagnostic test used couldn’t discriminate the STD from endemic yaws. It’s a convincing and thought-provoking argument. The idea that multiple factors jointly contributed to the emergence of HIV is messy but can readily explain why, of all the cross-species transmissions to human beings, only HIV-1 group M became a global pandemic. Other strains that caused regional epidemics, such as HIV-1 group O, may have picked half the numbers in the lottery of emergence, but only group M chanced upon the “perfect storm” of influences.

The book closes with HIV’s diaspora; it’s a more familiar story as much of it takes place after the identification of AIDS, although Pepin offers a new interpretation of HIV-1’s spread from Haiti to the USA. Anyone perplexed as to why the global pandemic took decades to unfold should remind themselves of the non-linear nature of epidemic growth, which is pronounced for STDs in heterogeneous populations. *The Origins of AIDS* is dense but absorbing throughout, interweaving quantitative data with historical narrative and lively biographies. I share Pepin’s “inborn love of numbers” but twice he gets carried away with probability calculations that lack statistical rigour: his reasoning fares perfectly well without them. It’s a heady brew that prompts reflection, on the unforeseen consequences of the best-intentioned actions, and on redemption.

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