Creating a Digital Map to Monitor the Care of People Living with HIV/Aids in Porto Alegre, Brazil: An Experience Report

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Abstract : Introduction: As a result of increased globalization and changing migration trends, it is expected that a significant portion of People Living with HIV/AIDS (PLWHA) will change their place of residence over time. In order to provide better health care, monitor the HIV epidemic and plan urban public health care and policies, there is a growing need to formulate a strategy for monitoring PLWHA care, location and migration patterns. The Porto Alegre District is characterized by a high prevalence of PLWHA and is considered one of the epicenters of HIV epidemic in Latin America. Objectives: The aim of this study is to create a digital and easily editable map in order to create a visual representation of the location of PLWHA and to monitor their migration within the city and the country in an effort to promote longitudinal care. Methods: This Experience Report used Google Maps Map Creator to generate an active digital map showing the location and changes in residence of 165 PLWHA who received care at two Primary Health Care (PHC) clinics, which attended an estimated population of five thousand patients, in downtown Porto Alegre over the last four years. Their current addresses were discovered in the unified Brazilian health care system digital records (e-SUS) and updated on the map. Results: A digital map with PLWHA current residence location was created. It was possible to demonstrate visually areas with a large concentration of PLWHA and the migration of the population within the city as wells as other cities, regions and states. Conclusions: An easily reproducible and free map could aid in PLWHA monitoring, urban public health planning, target interventions and situational diagnosis. Moreover, a visual representation of PLWHA location and migration could help bring more attention and investments to areas with geographic inequities or higher prevalence of PLWHA. It also enables notification of local PHC units of monitored patients inside their area, which are in clinical risk or with treatment abandonment through active case findings, improving the care of PLWHA.

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