Demand for Services at a Previously Marginalized County Referral Hospital Following Devolved Governance in Kenya: an Interrupted Time Series Analysis and the Case for Further Subnational Devolution of Resources

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Introduction: Since independence in 1963, Kenya had until 2013, managed healthcare centrally. Devolution, a policy shift, provided resources to the newly created 47 counties allowing them to innovatively implement health services based on local priorities, while policy aspects were left to the national government, providing the opportunity for a before-and-after comparative analysis. Turkana, a semi-arid county in Kenya marginalised before devolution, had very poor access to services. Following devolution, this analysis undertook to understand whether demand for services at the county referral hospital changed. Methods: We extracted monthly data from the Kenya Health Information System (KHIS), a national repository of health data for 6 years, totalling 71 monthly data points. We estimated the demand index by dividing total monthly hospital admissions by corresponding monthly cesarean section rate (CSR). We then analysed 45 demand indices before and 26 (25 being the minimum required for such an analysis) after 2013. Using interrupted time series, a quasi-experimental study design most ideal for policy analyses, we did analysis using R version 3.5.1 looking at both level drop and trend. Findings: There was an insignificant immediate level drop by 8.64312 (p = 0.58335) but a significant increase in trend by 2.46535 (p = 0.00797) suggesting that demand for services increased tremendously following devolution. Discussion: By using demand for services as a proxy, we observed improved access. This could be attributed to using the devolved resources to invest in health building blocks such as improved infrastructure at the county referral hospital, and recruitment of more than double the health workforce pre-devolution. The insignificant immediate level drop can be explained by the fact that implementation happened over time, and not abruptly. It is suggested that future analyses looking at access should consider quality of care and referrals from the county to other counties. Conclusions: To achieve universal health coverage equitably, devolved governance, especially of health systems could improve access for marginalised populations, as opposed to a centralised healthcare system. This could be attributed to more financial resources closer to the population, as well as improved supervision of health services. We argue that further intra-county devolution of resources could improve access to health services further.