double compared with 2015 and 2016; 19% of deaths occurred for those who lived far from hospital (>40 km).

Conclusion 2017 had fewer hospitalisation cases and is the year with the highest lethality rate. Gastrointestinal infection and malaria were the main causes of hospitalisation. The rate of lethality from diarrhoea and septicæmia has increased significantly and with worse outcome in those living far from Bissau.

PO 8573 RESEARCH, MENTORSHIP AND SUSTAINABLE DEVELOPMENT: IS RETIREMENT AGE A HURDLE TO RESEARCH SUSTAINABILITY IN AFRICA?

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Background Retirement age in most of sub-Saharan Africa is between 55 and 60 years, even in academic and research institutions. There is no mechanism to retain even the few most experienced and outstanding among them. There is evidence that institutions retaining experienced researchers access better large research grants.

Methods We conducted literature review and shared views and experiences among peer research scientists

Results Most African scientists obtain their first degrees aged 25–30 years. Economic needs compounded with work experience requirements for PhD studies delay their research career development such that most PhD graduates are 40–50 years of age. However, unlike in the developed world where the majority acquire their PhDs in their late 20's or early 30's, there is no mechanism to retain them longer at work to maximise their contributions to scientific developments. Instead, African scientists are forced to retire young at 60 years of age. On the contrary, developed countries scientists graduate earlier, work longer and have retention mechanisms even after retirement. African countries do not consider retaining even the few who have demonstrated outstanding performance. Consequently, outstanding research scientists retire at the time when they are needed most. They seek and get jobs abroad or in externally owned projects (brain drain). Their decade or so of work, generates more resources abroad, depriving Africa of resource generating capacity. Secondly, retiring at the height of their performance is economically counterproductive. Thirdly, this affects negatively the career development of young scientists for lack of experienced supervisors and mentors.

Conclusion Africa must rethink the retirement age of its research scientists and create incentives to retain outstanding research scientists who reach retirement age. This is urgently needed to stop brain drain, contribute to economic

development, and accelerate ongoing efforts to build sustainable research capacity and mentorship programmes in Africa.

PO 8574 LESSONS FROM ENGAGING AND TRAINING PRIVATE AND FAITH-BASED HEALTH FACILITIES FOR THE USE OF MALARIA RAPID DIAGNOSTIC TESTS IN CAMEROON

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Background Bespoke community engagement is critical for success of any intervention. Lessons learned from engaging and training private and faith-based health facility professionals (grouped as informal health professionals [IHPs]) in Cameroon could streamline training and community engagement activities of networks like ALERRT and PANDORA. With the aim of establishing a system for monitoring malaria RDT accuracy in Cameroon, and supported by a WHO/TDR Impact grant, we tested the hypothesis that training IHPs to use follow-up visits and telephone/online support will improve their ability to perform RDT by 80%. This will also improve access to accurate malaria diagnosis and treatment in the communities served by the IHPs.

Methods We conducted a baseline survey to map target informal health facilities (GPS location, staffing, training on RDT) and challenges through focus group discussions and group questionnaires. We then organised rotation classroom for a three-day enhanced training on early diagnosis and prompt, effective treatment of malaria.

Results We found that though informal health facilities constitute approximately 30% of the country's health system capacity, IHPs were seldom included in regional RDTs training by the National Malaria Control Programme. Also, some IHPs had limited training to deliver health care services and were not registered with the Ministry of Health. Started as common initiative groups, IHPs constitute major access points for health care within communities and could be major players for community engagement within Cameroon as a sizeable population relies on them for accessible care.

Conclusion Our method is a feasible and cost-effective health worker-based approach for training and community engagement, which can help ALERRT to anticipate community preparedness for outbreaks in Cameroon and beyond.

PO 8575 EVOLUTION OF MALARIA MORBIDITY IN TWO VILLAGES IN KOROGWE, TANZANIA

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Background The malaria burden has decreased significantly in recent years in sub-Saharan Africa due to targeted interventions aimed at parasites and vectors. However, studies have