Conclusion: This large population-based study has demonstrated low uptake of influenza vaccine in children with CLDs which limits our ability to generate precise vaccine effectiveness estimates. Strategies to improve influenza vaccine uptake and recording of influenza vaccination status may provide better estimates for vaccine effectiveness.

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A Sarawak experience on the use of IPC ID PEP regimen in patients bitten by laboratory confirmed rabies animals

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Background: On 1st July 2017, rabies outbreak was declared in the state of Sarawak, which is located in the Borneo Island following the deaths of 3 children due to human rabies infection. Rabies has the highest case fatality rate but is highly preventable through prompt and effective post-exposure prophylaxis (PEP).

Methods and materials: A retrospective review of patients bitten by laboratory confirmed rabies infected dogs or cats, who received Institute Pasteur of Cambodia (IPC) intradermal (ID) PEP regime in Sarawak General Hospital (SGH) animal bite clinic and have completed one year follow-up were performed.

Results: A total of 83 patients with complete data set were identified. Majority were adults and children aged <12 years old made up 13 (15.6%) of the cases. There were 40 and 43 cases of wound exposure category II and III respectively. Three of the patients had prior prophylaxis and only received 1 site ID rabies vaccine booster of 0.1 ml injected on days 0 and 3. For cases with wound exposure category II, majority (24 cases) were bitten on the lower limbs in contrast to those with wound exposure category III, whereby majority (20 cases) were bitten on the upper limbs. Only 3 cases had head and neck wound exposure. Twenty patients received injection rabies monoclonal antibodies and twenty two patients received rabies immunoglobulin (human or equine) which were injected at the site of the wound only. All patients except one were still well and alive at one year follow-up. A 5 year old child developed human rabies within 20 days post bite on his face and within 13 days of his PEP vaccine completion.

Conclusion: IPC ID PEP regimen is effective as illustrated in our case cohort, whereby all these patients were exposed to laboratory confirmed rabies animal. Based on the time interval of events, the cause of our human rabies case was unlikely related to vaccine failure but possibly direct neural inoculation of virus that was not amendable to PEP.

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Morbidity and trends of measles surveillance analysis of Gedeo zone, Southern Ethiopia, 2012–2017

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Background: Measles is a disease that causes 134,200 deaths globally, selected for case based surveillance and has been targeted for elimination in many areas of the world including Ethiopia. Case-based surveillance system had not been analyzed before in Gedeo zone, Southern Ethiopia. Therefore, in order to describe measles epidemiology in place, person, and time and characterize the disease burden measles case based data analysis is needed.

Methods and materials: Five years (2012–2017) suspected and confirmed measles case based data by World Health Organization standard definition were retrospectively reviewed and analysis using Microsoft Excel, to identify morbidity and mortality trends in Gedeo zone, Southern Ethiopia. We defined suspected measles as any person with generalized maculo-papular rash and fever plus cough or coryza or conjunctivitis. We checked completeness of data by excluding 13 cases and 2 deaths with incomplete information

Results: We identified a total of 695 measles cases and 15 deaths (Case Fatality Rate: 2.2%). Out of the total case, 195 (28%) were confirmed by laboratory and 445 (64%) by epidemiological-link. Among the cases, 430 (61.9%) were unvaccinated children whereas 59(8.5%) were having unknown vaccination status. Of which, the age group 1 to 4 years was the most affected population followed by 5–14 years by measles with an Incident Rate of 101.57 per 100,000 and 84.82 per 100,000 populations respectively. There was a trend of increment of cases in the month of January.

Conclusion: Most of the children were susceptible or at risk of getting the measles diseases. Enhancing improved routine and supplementary immunization activities measles targeting less than 15 years of age would prevent future risk of disease and further investigation is necessary to find out the possible reasons for increasing measles case.

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