

greater impact seen among the elderly, with a decrease of 3707 ($p < 0.001$) mean hospitalizations per year and 642 mean hospitalizations among persons ages 40–59 years ($p < 0.01$).

Conclusion: Significant reductions in influenza-associated mortality and hospitalization rates were seen following vaccine introduction, especially among the elderly. Reductions among those ages 40–59 years may be due to indirect effects and/or may be related to overall improvements to the health system following the implementation of the Unified Health System.

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Age disparate sex among South African young females: National HIV Survey, 2008 - preliminary findings

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Background: In 2012, over six million people were living with HIV in South Africa of whom 14% were females aged 15–24. Young women are at an increased risk of HIV infection through sexual relationships with older men. In this paper we estimate the prevalence of age disparate sex (ADS) among young women in South Africa and factors associated with ADS.

Methods & Materials: A multi-stage stratified random sample of individuals living in households and hostels was conducted in 2008 in South Africa. A detailed questionnaire was used to obtain information from participants and blood specimens were taken to be tested for HIV. Age disparate sex was defined as having a sexual partner who is five years or older. Secondary data analysis was performed using STATA 12.

Results: In total, 10856 households were interviewed in which 20826 individuals agreed to participate and further 64.3% were tested for HIV. Of the respondents interviewed 11.8% ($n = 2465$) were females aged 15–24 years. Fifty-five percent (1368/2465) admitted to ever engaging in sexual intercourse; with 35.5% ($n = 485$) admitting to engaging in ADS. Of those, 58.1% (282/485) engaged in ADS at sexual debut and 76.9% (373/485) engaged in ADS in the past 12 months. The median age difference between partners was 6 years [Inter-quartile range: 5–8]. Factors associated with ADS included being unemployed (OR = 1.3 95%CI: 1.01–1.6), living in a formal urban settlement (OR = 0.8, 95%CI: 0.6–0.95) and

having attended school education (OR = 0.68 95%CI: 0.48–0.98). Those engaging in ADS were less likely to use condoms (OR = 0.58, 95% CI: 0.44–0.76), and were more likely to be HIV infected (OR = 2.06, 95% CI: 1.5–2.8). Females who engaged in ADS at sexual debut were more likely to have engaged in ADS in the past 12 months (OR = 10.09, 95% CI: 7.06–14.54).

Conclusion: A high prevalence of ADS was found among young women in South Africa and the risk of HIV infection is considerably higher among them. Early engagement in ADS was a risk factor for engaging in ADS later in life. Considerably low percentage of women in ADS relationships uses condoms. Efforts should be made to educate young women about risks involved in engaging ADS.

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Food borne outbreak of salmonellosis at a church gathering, Rwanda, 2012

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Background: Foodborne illnesses are caused by eating food or drinking beverages contaminated with bacteria, parasites, or viruses. On 27th May, 2012, Kigeme hospital received an increased number of persons complaining of symptoms of gastrointestinal illness. All the cases attended a church annual function and ate food served.

Methods & Materials: We conducted a descriptive study. We interviewed key informants, reviewed medical records and developed a line list. A suspected case was defined as any person who attended the Adventist annual festival on May 26th 2012 from Gasaka sector and presenting with abdominal pain, vomit, diarrhea, fever and nausea. Stool and blood specimens were collected for laboratory testing.

Results: An estimated 200 people attended the church function. The index case was adult female cook who reported to Kigeme Health Centre on 26th May. A total of 129 cases reported illness (attack rate: 65%), 71 (55%) hospitalized and no death. All the cases reported to have attended same church function on May 26 where food prepared the previous day was served cold. The earliest time of onset of illness was 6 pm (26/05/2012) and majority 63.6% of cases reported onset of illness within a 24 hour period. The common clinical symptoms were diarrhea, vomiting and abdominal pain. One stool specimen was positive for *Salmonella typhimurium* for that index case.

Conclusion: An outbreak of salmonellosis foodborne illness occurred at a church festival. Clustering of illness onset within 2 days, high attack rate and a severe clinical picture as manifested by high hospitalization rate indicate that this was severe disease. We recommended regulation of the religious practices that can

