

country programs. USAMC staff with necessary expertise and experience conducted the project. High-level SSAAMC assessments were carried out followed by the selection of two sites for two 10-day surgical care, teaching and capacity building pilots. In addition to utilizing standard data collection tools, the design of the assessment itself was a means to gather additional data relevant to assessing capacity building objectives. To collaboratively test surgical feasibility, USAMC faculty and trainees worked shoulder-to-shoulder with SSAAMC staff to triage patients, conduct surgeries, provide post-operative care, and establish treatment plans. Additionally, the USAMC team led didactic presentations and participated in surgical rounds. SSAAMC and USAMC leadership evaluated relative value of a partnership and subsequently developed long-term, shared program goals assuring program ownership by all parties.

**Outcomes & Evaluation:** During the project year, 45 SSAAMC faculty and trainees participated in capacity building activities, 42 surgical training cases were conducted, 10 USAMC health professionals gained global experiences, and a long-term institutional relationship was established.

**Going Forward:** Challenges include: faculty and trainees at SSAAMC and USAMC lack dedicated time to participate in program activities; alignment and coordination of several local and international stakeholders; supply chain and equipment needs unique to care of pediatric.

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### Stillbirth inequalities among American Indians and Alaska Natives, 2003-2012

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**Background:** Worldwide, 3.2 million stillbirths occur every year, nearly equaling the yearly total of early neonatal deaths (3.0 million) and more than the annual number of deaths from HIV/AIDS (1.8 million). While the vast majority of stillbirths occur in low- and middle-income countries, indigenous populations in high-income countries also are disproportionately burdened. The rate of stillbirth among American Indians and Alaskan Natives is 6 per 1,000 births—similar to rates observed in less developed nations such as Columbia, Uzbekistan, and Brunei Darussalam—but little is known about stillbirth among this indigenous population. We sought to investigate inequalities in the timing of stillbirth between American Indians / Alaska Natives and non-Hispanic whites in the U.S.

**Methods:** Data on live births and fetal deaths were obtained from United States vital statistics records (2003-2012). Analyses were restricted to those who self-identified as non-Hispanic white (n=22,555,342) or American Indian/ Alaskan Native (n=469,337). Stillbirth was defined as an in-utero death of a fetus at  $\geq 20$  weeks of gestation. Gestational age was based on best obstetric estimate. Logistic regression was used to estimate gestational age-specific inequalities in stillbirth by race/ethnicity (20-27, 28-36,  $\geq 37$  weeks). Risk ratios with 95% confidence intervals (CI) were calculated for American Indians / Alaska Natives versus non-Hispanic whites. Denominators were based on ongoing pregnancies at each gestational age.

**Findings:** The overall stillbirth rate was 5.9 per 1,000 live births (2760/469,337) among American Indians / Alaska Natives and 4.8

per 1,000 (109,115 / 22,555,342) among non-Hispanic whites, a risk ratio of 1.22 (95% CI: 1.17, 1.26). Stillbirths tended to occur later among American Indians/ Alaskan Natives (49% at 20–27 weeks; 31% at 28–36 weeks; 20% at  $\geq 37$  weeks) compared with non-Hispanic whites (54%, 29%, and 17%, respectively;  $p < 0.0001$ ). Risk ratios (95% CI) for stillbirth at 20–27, 28–36, and  $\geq 37$  weeks for American Indians/ Alaskan Natives versus non-Hispanic whites were 1.11 (1.05, 1.17), 1.29 (1.21, 1.39), and 1.42 (1.31, 1.55), respectively.

**Interpretation:** American Indians and Alaskan Natives were at higher risk of stillbirth compared with non-Hispanic whites. The racial/ethnic inequality in stillbirth widened with increasing gestational age, and was greatest at term gestation. The racial/ethnic inequality was wider for stillbirth at  $\geq 28$  weeks than 20–27 weeks, with a marked difference at term gestation. These results are important because stillbirths occurring at  $\geq 28$  weeks are more amenable to intervention than those occurring earlier in gestation. Future studies should investigate differences in the quality of obstetric care among American Indians / Alaska Natives and other indigenous groups as a possible avenue for reducing global health disparities and improving health equity.

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### Surgeons OverSeas Assessment of Surgical Need (SOSAS) Methodology Update and mobile-assisted data dissemination system (mADDS) Platform for Scale in Larger Low- and Middle-income Countries

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**Background:** The first step in improving surgical care in low- and middle-income countries (LMICs) is quantifying the prevalence of surgical disease. The Surgeons OverSeas Assessment of Surgical Need (SOSAS) survey has been previously implemented in 3 smaller LMICs with great success. We implemented the SOSAS survey in Uganda, a medium-size country with comparatively more language and ethnic group diversity. We assessed performance of data collection by a large team of resident enumerator, smart phone platform to demonstrate potential global reach of SOSAS.

**Methods:** To implement SOSAS Uganda, the investigators partnered with the Performance Monitoring and Accountability 2020 (PMA2020) Uganda project, hiring 114 data collection staff. Ninety nine research assistants were trained and deployed to sample 2,520 households in 105 randomly selected enumeration areas. Due to the larger size and ethnic and language diversity in Uganda, SOSAS' methodology was updated in three significant dimensions (1) technology, (2) management, and (3) questionnaire adaptations.

**Findings:** The SOSAS survey was successfully implemented in a medium-sized low-income country. Of the target 2,520 households, 2,402 households were eligible and data was obtained for 2,315 households (response rate of 96.4%). There were 4,248 individual respondents out of 4,374 individuals possible (97.1%). Benchmark measures were used to evaluate data quality. The female-to-male ratio was 51.1% to 48.9%. Age distribution of respondents was consistent with official statistics with