**O732**

**BARRIERS TO SAFE MOTHERHOOD: THE MORBIDITY PATTERN AMONGST PATIENTS PRESENTING WITH INCOMPLETE ABORTION AT KENYATTA NATIONAL HOSPITAL, NAIROBI, KENYA**

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**Objective:** To determine the morbidity pattern amongst patients presenting with incomplete abortion at Kenyatta National Hospital.

**Materials:** All patients admitted with a diagnosis of incomplete abortion between 1st February to 31st March were given information about the nature and purpose of the study and consent sought.

**Methods:** This was a Prospective descriptive study. Post abortion patients were examined to determine presence and nature of any complication. This information was entered into a questionnaire and analyzed. Two hundred and fifty patients with incomplete abortion were recruited for the study.

**Results:** During the study period (1st February to 31st March) there were a total of 893 acute gynecologic admissions of which 352 (41.8%) had incomplete abortions. A total of 250 (71%) were interviewed for this study. Majorly (57%) of the study population patients was below 24 years with a mean age of 20–24 years. Of the study population, 50.8% had attained primary school education while 35.2% had attained secondary school education. Over 50% were not employed and over 70% were in no gainful employment. In this study 6.4% of the patients were married while 23.3% had never been married.

Of the whole study population 171 (68.4%) patients had some complications. 107 (42.8%) were clinically pale among whom 57 (53.3%) were mildly anemic, 26 (24.3%) were moderately anemic, while 24 (22.4%) were severely anemic. Septic incomplete abortion was found in 26%, most of whom were aged 20–29 years and single. Those patients who admitted induction of abortion had more sepsis compared to those who said the abortion was spontaneous. The prevalence of post abortion sepsis increased as the gestation age increased. Genital injuries were found in 18.4% and these injuries ranged from cervical which was commonest (46.3%), vaginal laceration to uterine perforation and gut injury. These injuries were commonest amongst patients who had reported induced abortion (46.3%) although 18% of those who denied induction had injuries.

**Conclusions:** It was concluded that abortion still remains a major acute gynecology emergency at Kenyatta National Hospital, Kenya and that despite the restrictive abortion laws a significant number of them are still clandestinely performed resulting in risks of high morbidity.

**O733**

**OVEREXPRESSON OF THE INSULIN RECEPTOR A ISOFORM PROMOTES ENDOMETRIAL CARCINOMA CELL GROWTH**

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**Objectives:** Endometrial cancer is the third most common malignancy of the female genital tract reported in China. The incidence and mortality rate of endometrial carcinoma has increased in recent years. Expression of the insulin receptor isoform A (IR-A) has been predominantly detected in many kinds of cancers and IR-A has potent mitogenic and anti-apoptotic functions and plays a key role in cell proliferation.

**Materials:** We measured the expression of insulin receptor isoform A (IR-A) in endometrial cancer tissues and cell lines.

**Methods:** We use cell culture and experimental studies.

**Results:** We found that both insulin receptors isoforms (IR-A and IR-B) were expressed in 73.8% of endometrial carcinoma tissues, while in 40% of normal endometrial tissues. There were no significant differences in the expression of IR (P = 0.662) and IR-A (P = 0.780) mRNA and the ratio of IR-A to total IR mRNA (P = 0.501) between endometrial carcinoma and control endometrial tissues. However, IR-A expression in endometrial carcinomas of patients with T2DM was significantly higher than that in patients without T2DM (P = 0.043). IR-A mRNA was differentially expressed in four endometrial carcinoma cell lines (Ishikawa, KLE, RL95–2 and HEC-1-A). RL95–2 cells have a low endogenous IR-A expression, and these were used to construct a stable cell line overexpressing IR-A. We found that IR-A overexpression significantly increased cell proliferation, the proportion of cells in S phase, activation of the Akt pathway and tumorigenicity of xenografts in nude mice. In contrast, there was no significant difference in the percentage of apoptotic cells between cells overexpressing IR-A and control cells. Moreover, levels of phosphorylated ERK1/2 protein were significantly decreased lower in cells overexpressing IR-A relative to controls. The expression of IR-A in endometrial carcinoma patients with type 2 diabetes mellitus (DM) was significantly higher than that in patients without DM (P = 0.043).

**Conclusions:** IR-A is expressed in endometrial carcinoma and control endometrial tissues and IR-A overexpression may therefore promote endometrial carcinoma cell proliferation and tumorigenicity.

**O734**

**IMPACT 2: AN INNOVATIVE TOOL MEASURING THE IMPACT OF FAMILY PLANNING PROGRAMMES**

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**Objectives:** Meeting the unmet need for family planning (FP) plays a critical role in achieving all 8 MDGs. However, measuring the broader health, demographic, and economic impacts of FP programmes is difficult without expensive surveys and experimental studies. Therefore, Marie Stopes International (MSI) sought to create a user-friendly model that enables FP programme staff to harness complex datasets in order to estimate the impacts of past services and to plan for meeting MDG-related goals.

**Materials:** MSI's Impact 2 model, developed in partnership with health economists and demographers, allows organisations to estimate the contributions and impacts of their programmes in developing countries. It uses the most recent evidence-based data available and rigorous demographic methods.

**Methods:** The model estimates the number of women using a FP method from a programme by applying continuation and mortality rates to past long-acting and permanent methods (LAPM) clients. It then estimates the annual health, demographic, economic, and environmental impacts resulting from unintended births averted. This is a methodological improvement over measures based on the Couple-Year of Protection (CYP), which can only show impact over multiple future years. The model also estimates the impact of FP service provision towards reaching a national goal such as: increasing contraceptive prevalence, reducing maternal mortality, and reducing a county's ecological footprint. The model accounts for the fact that not all new programme users will contribute to these goals (because they may have already been using FP from another provider).

**Results:** Results from the model have assisted programmes to 1) explore progress towards meeting national goals, 2) develop high-impact future strategies with realistic objectives, 3) estimate wider health and socio-economic impacts, and 4) advocate for increased support.

The model has helped programmes to answer questions such as: How many maternal deaths and unsafe abortions have our services averted over the past 5 years? And, if we focused future provision on expanding access to LAPMs, how much greater impact could we have on CPR and MMR?

**Conclusions:** Impact 2 demonstrates that a user-friendly interactive model can allow FP programme staff to generate estimates and