Multiple chronic problems including poor concept of geriatric care interact adding ambiguity and complications, as a result geriatric clinical situations are almost always challenging requiring vast knowledge, judgment and good problem solving ability. It also brings about a clear need to educate and inculcate the need to provide early medical intervention especially to geriatric population who are often neglected especially so, as this population group is demographically expanding.

0890
Pregnancy outcome following emergency cervical cerclage
M. Srinivasan¹, S. Lindow², R. Krishnan², ¹Alexandra hospital, Redditch, UK, ²Royal Infirmary, Hull, UK

Objectives: Mid-trimester pregnancy loss may present as painless cervical dilation. Emergency cervical cerclage with membrane replacement has been proposed as a treatment. The aim of this study is to record the outcome of pregnancy following an emergency cerclage procedure for the patients with painless dilation of the cervix.

Materials and Methods: Retroactive analysis of the case records of patients who underwent an emergency cervical cerclage procedure between 1996–2005 at Hull and East Yorkshire Hospitals.

Results: 12 cases of emergency cervical cerclage were performed by replacement of the membranes with a Foley catheter and subsequent cerclage using mersilene tape by McDonalds procedure. Augmentin and indomethacin were used routinely. From the 12 procedures the mean gestation of suture placement was 22+6 weeks, mean prolongation in gestation was 22.6 days (range 1 to 91 days). The perinatal mortality was 580/1000. Sutures placed with advanced cervical dilation (>5 cms) were associated with an especially poor outcome. Treatment earlier in gestation had a favourable impact on perinatal outcome.

Conclusions: The placement of an emergency cervical suture for premature cervical dilation is a high risk procedure and in our hands which results in 42% survival.

0891
The perception of the legal, moral and religious status of induced abortion among individuals accessing abortion services in Ghana
E. Srojenyoh¹, J. Coleman², ¹Ghana Health Service, Ridge Regional Hospital, Greater Accra region, ²Korle-Bu Teaching, Department of Obstetrics and Gynaecology

Aim: The main aim of this study is to determine the perception of the legal, moral and religious status of induced abortion among individuals accessing abortion services in Ghana.

Specific objective: The specific objectives of this study is to measure the proportion of women accessing induced abortion service, who perceive abortion as right legally, morally and religiously.

Settings: Hospitals and clinics in the Kwaebibrim district of the Eastern Region of Ghana. The period of the study was from 1st May 2007 to 30th November 2007.

Methodology: This was a cross-sectional study of 202 women seeking abortion services. A pretested standardized structured interviewer-administered questionnaire was used to gather and record the data. The interviews were conducted face-to-face. Most of the questions were close-ended questions and targeted answers were provided in some instances to be ticked for clarity. This made the administration of the questionnaire simple. Relevant information obtained were on socio-demographic characteristics, contraceptive history, circumstances surrounding the current pregnancy, the desirability of the pregnancy, reasons for the induced abortion, knowledge about the abortion law in Ghana, and impressions about religious, moral and cultural status of abortion in Ghana.

Results: A total of 202 women with ages ranging from 13 to 48 years were interviewed. The ages were classified into teenagers (<19 years), (20–29 yr-olds) and (30–48 yr-olds). Teenagers constituted 73 (36.1%). About half (53.5%) of the respondents had only primary education. Petty trading was the most common occupation 79 (39%). Christians were in the majority 175 (85.6%). There were 6 primigravidae. A greater proportion 168 (83.6%) of those seeking abortion services had had previous abortions and 8 (10.9%) of the adolescent population were seeking their 3rd or 4th abortions. Of the 8 adolescents who were having their 3rd or 4th termination of pregnancy, the average age at the first termination was 16 years.

Of the number interviewed 59.7% thought that induced abortion was completely illegal, 11.4% thought it was completely legal, 27.4% believed it was legal under some conditions, and 1.5% does not have any idea about the legal status of abortion in Ghana. Of the five major conditions for legality specified in the Ghanaian Law, incest was indicated rightly as a condition for seeking abortion by 49.2% of respondents; this was followed by rape (48.3%), physical health risk (47.7%), mental health risk (46.7%), severe fetal abnormality (46.4%), delfiment (35%) in that order. About 36% thought that any health personnel can perform abortion and about 20% answered that abortion can be performed in any premises. In 99.5% of the 202 women interviewed induced abortion was against their religion. In 99% it was against their culture. For 68%, it was morally wrong at all times; whilst for 3.2% it was right at all times. For 28.7% it may be right under certain circumstances.

Conclusion: There was a high perception among women accessing abortion service that abortion was illegal. There was even a higher perception among them that abortion was, religiously, culturally, and morally wrong. This high negative perception of induced abortion explained the clandestine attitude most clients adopt towards the service and also explains why majority of abortions performed in Ghana are done in the informal sector under unsafe conditions. It also explains why individuals suffering from the complications of induced abortion will not disclose their problem early enough until it is too late, if they will disclose at all.

Programmes designed to improve acceptability of abortion in most African countries must not be limited to legal reforms only but they must also deal with the social perceptions, cultural and religious beliefs, moral values and the stigma attached, in an innovative manner if maternal mortality from abortions is to be reduced.

0892
Prenatal exposure to medicines and the risk of childhood brain tumor
K. Stalberg¹, B. Haglund², H. Kieler³, ¹Department of Women's and Children's Health, Uppsala University, Sweden, ²Center for Epidemiology, National board of Health and Welfare, Stockholm, Sweden, ³Centre for Pharmacoepidemiology, Karolinska Institutet, Stockholm, Sweden

Background: Childhood brain tumors are associated with high mortality and morbidity and little is known about its causes. A majority of women use medicines when pregnant and some of the drugs commonly used might be carcinogenic.

Objectives: The aim with this population based case control study was to analyze the association between specific groups of drugs taken during pregnancy and the risk of brain tumor in the offspring.

Methods: All children, up to 15 years of age, born in Sweden between 1975 and 1984 were eligible for the study. Cases (n = 512) were children, diagnosed with brain tumor and included in the Swedish Cancer Register, and controls (n = 524) were randomly selected from the Medical Birth Register (MBR). Exposure data on drugs was extracted blindly from antenatal medical records and grouped according to Anatomical Therapeutic Chemical (ATC) code. Information on maternal reproductive history was received from
the MBR. We used logistic regression to assess risks of childhood brain tumor and the results were adjusted for potential obstetric confounding factors.

**Results:** The use of anti-hypertensive drugs (ATC group C02 and C07) during pregnancy was associated with an increased risk of brain tumor in the child (OR 2.7, 95% CI 1.1–6.7); this was most evident for b-blocking agents (OR 5.3, 95% CI 1.2–24.8). No significant changes in risk was noted after exposure to iron or vitamin supplementation, anti-emetics, analgesics, antibiotics or any other main ATC group.

**Conclusions:** In this case control study, an increased risk of brain tumor was seen in children whose mothers used anti-hypertensive drugs during pregnancy; however, the interpretation of this finding should be made with caution until it is confirmed in other studies.

**O893**

**K-ras oncogene expression and viral DNA status in HPV-associated human cervical neoplasia**

A. Stanescu, C. Goia, E. Popa, I. Huică, E. Nistor, G. Anton, A. Plesa, R. Chiriac. 1St. John Hospital, Bucur Maternity. 2Stefan S. Nicolau Institute of Virology

**Objectives:** Different human papillomavirus (HPV) types have been associated with different oncogenic potential. Several high-risk HPV types might lead to CIN and invasive carcinoma. The reason for this phenomenon seems to be related to physical state of viral DNA, tumor suppressor genes inactivation and immortalization factors activation. HPV DNA type 16 is present in the majority of preneoplastic and cancerous lesions of uterine cervix. In this context, we tried to establish a relationship between HPV 16 infection and expression pattern of the k-ras oncogene correlated with E4HPV16 expression.

**Material and Methods:** Biopsies obtained from 85 infected women (CIN 1–3 confirmed) were subjected to DNA (Roche) and RNA isolation (Qiagen). HPV DNA presence and genotyping was done in PCR using specific primers for HPV16 type. Southern blot hybridisation analysis for confirming the PCR specificity. In order to discriminate between integrated and episomal viral status, E2-E6 HPV16 ratio was established in Real Time PCR. E4 HPV16 and k-ras genes expression was estimated in RT-PCR.

**Results:** HPV16 integration status was confirmed in 52.9% of CIN lesions. k-ras oncogenes expression levels were quantified in 41.17% HPV16 infected women, especially CIN2+/CIN3. Expression of E4 HPV16 was high in 12% of CIN 1 cases but lack in 38% of cases (correlated with the integration status). Absent integration of HPV 16 DNA in some CIN 2/3 suggested that integration is not always required for progression towards early dysplastic lesions.

**Conclusions:** We presumed the possible role of k-ras signaling interaction with “high-risk” HPV and multiple HPV infection in cervical cancer development.

**O894**

**Combined use of Bakri balloon and uterine compression sutures (“uterine sandwich”) in postpartum haemorrhage:** A case series of five patients

A. Stavroulis, M. Aref-Adib, M. Menttsa, A. Fakokunde, W. Yoong

**Objectives:** To evaluate the effectiveness of combined uterine compression sutures and Bakri balloon uterine tamponade in management of postpartum haemorrhage (PPH).

**Materials and Methods:** A case series of 5 patients who had therapeutic intrateraure Bakri balloon (BB) and uterine compression sutures (“uterine sandwich”) inserted for intractable PPH. All 5 patients had uterine atony resistant to oxytocics and in addition, 3 of them also had placenta praevia. Hayman’s compression suture was performed in 3 cases while 2 women had B-Lynch brace suture done.

**Results:** Four patients (80%) had Caesarean section and one (20%) had vaginal delivery. The “uterine sandwich” was successful in all 5 patients (100%). The BB was in place for a median of 22 hours (range: 17–27). The median volume infused into the BB was 300 mls (range: 200–350). The median measured blood loss was 1000 mls (range: 700–2700 mls), while the median units of blood transfused was 0 (range: 0–8). The median nadir haemoglobin (g/dl) was 8.8 (range: 5.4–10.7).

No complications were observed in any of the 5 patients although there is a theoretical risk of uterine ischaemia.

**Conclusions:** Uterine tamponade with BB in conjunction with uterine compression sutures is simple measure was successful in treating intractable PPH. There is also a place for its prophylactic use when PPH is anticipated and this can reduce likelihood of blood transfusion.

**O895**

**Management of postpartum haemorrhage with Bakri balloon tamponade**

A. Stavroulis, M. Menttsa, M. Aref-Adib, A. Fakokunde, W. Yoong. Department of Obstetrics and Gynaecology, North Middlesex University Hospital, London, UK

**Objectives:** To evaluate the use of Bakri balloon (BB) tamponade in the management of postpartum haemorrhage (PPH).

**Materials and Methods:** Retrospective study where data were collected from 30 patients who had Bakri balloons inserted. Therapeutic BB was inserted in 25 patients with intractable PPH: five patients with placenta praevia, 18 with atony resistant to oxytocics, one with both praevia and atony and one during the repair of uterine rupture. BB was inserted prophylactically in five patients (four with placenta praevia and one with atony) in anticipation of potential PPH.

**Results:** In the therapeutic BB group, nine patients (36%) had vaginal delivery and sixteen (64%) had CS. The BB was successful in 23/25 patients (92%) and failed in two patients in whom caesarean hysterectomies were undertaken. The BB was in place for a median of 22 hours (range: 15–28). The median volume infused into the BB was 300 mls (range: 100–450). In five patients uterine compression sutures were inserted in addition to the BB (“uterine sandwich”) for persistent uterine atony. The median measured blood loss was 1800 mls (range: 700–4000 mls), while the median units of blood transfused was 2 (range: 0–8). The median nadir haemoglobin (g/dl) was 8.5 (range: 5.4–12.3). In the prophylactic BB group, all five patients had CS. Their median measured blood loss was 1400 mls (range 900–1500 mls) while the median blood units transfused was 0 (range: 0–2). The median nadir haemoglobin was 9.2 (range: 7.7–9.8). No complications were observed.

**Conclusions:** Uterine tamponade with BB is a simple measure which was successful in >90% of intractable PPH. There is also a place for its use when PPH is anticipated and this can reduce likelihood of blood transfusion.

**O896**

**Radical trachelectomy in treatment of early stages of cervical cancer**

A. Stefanovic, K. Jeremic, S. Petkovic, S. Kadija, M. Mitrovic, I. Likic, J. Stojnic. Institute of GYN/OB, Clinical Centre of Serbia

**Objective:** The aim of the study was to determine if radical trachelectomy with pelvic lymphadenectomy could be a way for treatment of early cervical invasion to preserve fertility.

**Materials and Methods:** We analyzed 13 patients who were operatively treated from 1996, to 2008. Zear. Diagnostic method for cervical cancer was histologic examination, direct punch biopsy or cone biopsy. Hystological codition was planocellular carcinoma well differented and adenocarcinoma in just one case.

**Results:** In our study 2 of the patients had Ia1 stage, 8 had Ia2 and 3 of them had Ib1. We performed abdominal radical trachelectomy with pelvic lymphadenectomy. Resectional edges were patohystologically analyzed ex tempre, as well as lymphonodi,