CONCLUSIONS: The relevant prevalence data were extracted and compiled. RESULTS: The maternal mortality rate (MMR) is maternal death per 100,000 live births in one year. WHO estimates show that out of the 529,000 maternal deaths globally each year, 136,000(25.7%) are contributed by India. According to registrar general of India data for the year 2000, MMR for India was 407/100,000 live births. This trend has not changed significantly in the last 5 years. In the Armed Forces the scenario is very encouraging with a MMR of 36 per 100,000 live births. In 1980, India reported about 677 maternal deaths per 1,00,000 live births but in 2008, this was down to 254 deaths. MMR has reduced by 4% a year since 1990. High MMR was reported in Hindu (573) than Muslims (184) and in illiterate people (574) (1994). India has climbed from bottom to 127th place in the MMR ratings, above Pakistan and just below Nepal. Hemorrhage (25.6-38%) ranks first as the cause of maternal death, followed by anemia (14-24%) sepsis (13-16%), toxemia of pregnancy (11.9%), abortions (8-9%) and obstructed labor (6.2-10%) while other causes together total 35.3%. Tamil Nadu has taken initiatives to improve maternal health services leading to reduction in maternal mortality from 380 in 1993 to 90 in 2007 due to increased rate of institutional deliveries from 28% in 1993 to 67% in 2007. A consistent decline in the maternal mortality rate has been observed in India but it attributes to a few aspects. Initiatives need to be taken by government in regard to proper facility in hospitals, efficient supply of blood, and iron containing medicines.

AN ESTIMATE OF COSTS AND BENEFITS OF ALTERNATIVE METHODS OF DELIVERY: AN EMPIRICAL ANALYSIS IN AN ITALIAN HOSPITAL
Imperial College London, London, UK
OBJECTIVES: The recent large increase in caesarean sections (CS) in Europe seems not to be completely justified. CS is practiced independently of epidemiological evidence. This work analyses costs and benefits effectively involved in the different methods of delivery- vaginal delivery (VD), with and without epidural analgesia, and planned caesarean. METHODS: The empirical analysis has been conducted in an Italian University hospital, through direct collection of data, questionnaires and interviews of patients and staff. A logistic regression was used to evaluated the probability of the event “delivery with planned caesarean section” occurring as a function of a set of clinical and socio-economic characteristics of the women. A micro-costing analysis has been used to assess the direct health costs, following an activity-based costing approach. From a societal perspective we consider also the indirect and the intangible costs of each method. Patients’ wellbeing is measured through a battery anonymous instruments—the State- Trait Anxiety Inventory, the Italian Questionnaire of Pain and the Childbirth Perception Questionnaire—to measure the changes in clinical and psychological dimensions due to the delivery experience. RESULTS: The results confirm the hypothesis that CS is not performed for non-medical reasons (Osborn, 1995). The analysis shows that CS is, on average, more expensive than VD, but the difference is marginal if we take into account the opportunity-cost of labour time. CONCLUSIONS: Since CS is generally reimbursed more than VD to cover the supposed higher costs of surgery, differences between the real costs and the DRC tariffs may induce opportunistic behaviour in terms of clinical practice. We show that, in general, VD with analgesia provides better results both in terms of costs and, but the final effect of its introduction is not clear: it may reduce the frequency of inappropriate caesarean sections, but it may also increase the costs due to complications. E

EVALUATING THE PERCEPTION OF HOSPITAL PHARMACIST TOWARD THEIR CURRENT CLINICAL ROLE IN HEALTH CARE SYSTEM OF PAKISTAN
Azhar S1, Hassali A2, Izham M1
Universiti Sains Malaysia, Penang, Malaysia; Discipline of Social & Administrative Pharmacy, Universiti Sains Malaysia, Penang, Malaysia
OBJECTIVES: To investigate hospital pharmacists’ perception towards their current clinical role in Pakistan’s health care system. METHODS: The study population consisted of hospital pharmacists from three cities of Punjab, Pakistan; Islamabad, Faisalabad and Lahore. A sample of 116 hospital pharmacists was selected from government hospitals from these three cities. RESULTS: At least 77.6% of the hospital pharmacists involved in patient counseling in Pakistan. Although they are willing to take personal responsibility to resolving any drug related problem but pharmacist (n = 98, 84.5%) conveyed that their current role is more focusing towards the record keeping of hospital pharmacy. Only (n = 67, 57.8%) of the hospital pharmacists expressed that they are involved in making and designing of hospital formulary. In this case significant difference was noted with respect to age (p = 0.020) and gender (p = 0.036).As far as experience with other health care profession is concern, only (n = 60, 51.7%) of the respondents were agreed of having collaborative relationship with other health care professional. Moreover only (n = 65, 50.6%) of the hospital pharmacist agreed regarding their suggestion taken into consideration by physician. CONCLUSIONS: The findings suggest that the hospital pharmacists in Pakistan do have concerns about their present professional role but they are facing significant barriers in terms of increasing clinical services. Moreover, pharmacists need to be proactive in collaboration with other health care professionals. This paves the way for the concept of pharmaceutical care in health care system of Pakistan.

MATERIAL MORTALITY RATE IN INDIA: A COMPREHENSIVE LITERATURE REVIEW
Gautam Kumar J, Saini P, Ghosal D
JDS ePharma Health Pvt Ltd, Delhi, India
OBJECTIVES: Maternal mortality rate in India: a comprehensive literature review. METHODS: Information was retrieved from websites of World Health Organization, Pubmed and grey literature retrieved using key words like maternal mortality, MMR, etc. The prevalence data were extracted and compiled. RESULTS: The maternal mortality rate (MMR) is maternal death per 100,000 live births in one year. WHO estimates show that out of the 529,000 maternal deaths globally each year, 136,000(25.7%) are contributed by India.