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Contents

Misoprostol for Primary versus Secondary Prevention of Post-partum Haemorrhage in India: a Cluster-Randomized Non-Inferiority Community Trial

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ABSTRACT:
Treatment options for post-partum haemorrhage (PPH) are urgently needed for women who give birth at the community level. Programs that focus solely on universal prophylaxis with uterotonics fail to address this need, as it is not 100% effective. A new approach, secondary prevention, preemptively treats women with above-average postpartum bleeding. A cluster-randomized, non-inferiority trial was implemented at health sub-centres and home deliveries in Bijapur district, India in which auxiliary nurse midwives (ANMs) were randomized to secondary prevention (800 µg sublingual misoprostol administered only to women with postpartum blood loss ≥350 mL) or universal prophylaxis (600 µg oral misoprostol administered to all women during the third stage of labor). The primary endpoint was post-partum hemoglobin ≤7.8 g/dL. Secondary prevention would be considered non-inferior if the one-sided 95% confidence interval fell below the non-inferiority margin (7%). Analysis of the primary outcome included 1064 women enrolled by 18 ANMs allocated to primary prevention and 1937 women enrolled by 20 ANMs allocated to secondary prevention. Misoprostol was administered to 99.7% of women in primary prevention clusters. In secondary prevention clusters, 92 (4.7%) women had postpartum bleeding ≥350 mL; 90 (97.8%) received misoprostol. Post-partum hemoglobin ≤7.8 g/dL was documented in 5·9% and 8·8% of women in secondary and primary prevention clusters, respectively (difference = -2.9%, one-sided 95% CI <1.3%). Shivering was more common in primary prevention clusters (p=0.013). Secondary prevention of PPH is a good alternative to universal prophylaxis. It is less costly, medicates fewer women and is an acceptable and feasible strategy.

Characteristics of neonatal near miss in hospitals in Benin, Burkina Faso and Morocco

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ABSTRACT:
Neonatal near miss (NNM) are thought to be useful for assessing the quality of intrapartum and neonatal care, but little is known about their frequency or cause. We conducted a prospective study of the frequency and causes of NNM in 17 hospitals in Benin, Burkina Faso and Morocco in 2012-2013. NNM were defined based on organ dysfunction criteria adapted from South Africa (Pattinson et al 2011).

The prevalence of NNM ranged from 0.7 per 100 births in Moroccan hospitals to 6.5 per 100 in hospitals Burkina Faso. The prevalence of NNM was much higher among babies born by caesarean section (range 3.1 to 13.8 per 100) or those whose mother had experienced a maternal near miss (range 7.6 to 16.1 per 100). Respiratory dysfunction, cardio-pulmonary resuscitation and seizures or use of anticonvulsants were the most common criteria of NNM. Three quarters of NNM were among babies with a birth weight of 2500 grams or more.

The ratio of NNM to perinatal death ranged from 0.42:1 in Morocco to 0.72:1 in Burkina Faso. The combined burden of NNM and perinatal death was between 2.5 and 10.7 per 100 births in Morocco and Burkina Faso respectively, increasing substantially among babies born by caesarean section (range 6.9 to 25.0 per 100) or those whose mother had experienced a near miss (range 24.5 to 45.9 per 100).

NNM are common in African hospitals, and may be a useful adjunct to perinatal mortality as a marker of quality of obstetric and neonatal care.

Sympyhsiotomy for obstructed labour in developing countries: A systematic review and meta-analysis

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ABSTRACT:
Obstructed labour is a major cause of maternal mortality. Caesarean section is advocated to reduce mortality and morbidity associated with obstructed labour, but caesarean section in developing countries can be associated with many risks and it is not always readily available. Symphysiotomy can be an alternative treatment for obstructed labour; it requires fewer resources and does not require specialist surgical skills. Although some research has suggested it compares favourably to caesarean section in developing countries, there is much scepticism around this procedure. A systematic review was performed to compare the outcomes of symphysiotomy and caesarean section for obstructed labour in low to middle income countries. Meta-analysis of seven cohort studies (1266 women) demonstrated no significant difference in maternal mortality with symphysiotomy when compared to caesarean section (RR 0.48 95%CI 0.13, 1.76), and no significant difference in perinatal mortality when compared to caesarean section (RR 1.12 95%CI 0.64, 1.96), even though the number of events were very low. Incontinence and fistulae were both more likely with symphysiotomy than caesarean section, however haemorrhage and infection were less likely with symphysiotomy when compared to caesarean section. Scar pain was the only long term outcome where there was a difference between the two groups, and was more prevalent with caesarean section. It could be suggested that symphysiotomy could be a safe alternative to caesarean section in areas where resources are limited or greater risks are involved. Haemorrhage and infection are two leading causes of maternal mortality, both of which are reduced with symphysiotomy.

Early neurodevelopmental outcomes amongst survivors of neonatal encephalopathy in Uganda: a facility-based cohort study

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ABSTRACT:

Background: No large cohort studies have described outcomes from neonatal encephalopathy (NE) in sub-Saharan Africa. This study aimed to determine early outcomes after NE in urban Uganda.

Methods: At 12-15 months, Griffiths Mental Development Scales, a structured neurological examination and anthropometric measurements were performed amongst infants recruited to an unmatched case control study examining risk factors for NE in Uganda. Standard classifications of neurodevelopmental impairment according to developmental quotient (DQ) were used; mild (DQ70-85), moderate (DQ55-69) and severe (DQ<55). Poor early outcome was defined as death or moderate/severe impairment, and malnutrition as a weight-for-length z-score of <-2.

Results: In total, 126 NE survivors and 330 control infants were assessed. Neonatal case fatality in NE was high (33.7% (70/208)) but carried no excess risk of post-neonatal mortality (3.2% cases vs 2.1% controls, p=0.50).
Amongst NE survivors, the majority of impairment was severe (18.3% severe, 3.2% moderate and 7.1% mild). Spastic quadriplegia was the commonest pattern of physical disability seen (31.9% (9/23)). A small but significant difference between mean DQ was seen in overtly unimpaired case and control infants (104.2 vs 106.8, p=0.0044). Overall, 50.5% of cases vs. 2.7% controls had poor early outcome. Severe impairment was strongly associated with malnutrition (24.0% among impaired cases vs 5.3% in unimpaired, P=0.004) and smaller head circumference (56.5% vs. 3.3%, respectively with z-score<2, p<0.001).

Conclusion: In this Ugandan cohort, mortality and impairment in survivors was high, and was associated with malnutrition and microcephaly. Early intervention programmes with a focus on feeding and nutrition are warranted.

“Why not bath the baby today?”: Thermal care belief and practices in four African sites

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ABSTRACT:
Objectives: This paper examines beliefs and practices related to neonatal thermal care in four African sites.

Study Design: Data were collected in the same way in each site and included 16-20 newborn care narratives with recent mothers, 8 observations of neonatal bathing and in-depth interviews 12-16 mothers, 9-12 grandmothers, 8 health workers and 0-12 birth attendants in each site.

Results: Despite significant variation in contexts we found similarities across sites in relation to understanding the importance of warmth, a lack of opportunities for skin to skin care, beliefs about the importance of several baths per day and beliefs that the Vernix was related to poor maternal behaviors. There was variation between sites in beliefs and practices around wrapping and drying after delivery and the timing of the first bath with recent behavior change in some sites. Thermal care practices were suboptimal in most sites but of particular note were the near universal early bathing of babies in both Nigerian sites. This was linked to a deep-rooted belief about body odour. When asked about keeping the baby warm, respondents rarely mentioned recommended thermal care practices, suggesting that these are not salient.

Conclusion: More effort is needed to promote appropriate thermal care practices both in facilities and at home. Programmers should be aware that changing deep rooted practices, such as early bathing in Nigeria may take time and should utilize the current belief in the importance of neonatal warmth to facilitate behaviour change.

Determinants of unplanned pregnancy in Mchinji District, Malawi

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ABSTRACT:

Background

Unplanned pregnancies are potentially preventable yet remain common in most settings, despite their adverse effects. Identifying women at risk of unplanned pregnancy can help with targeting interventions and developing preventative policies. Using the Chichewa London Measure of Unplanned Pregnancy (LMUP) we explored the determinants of unplanned pregnancies in Mchinji District, Malawi.

Methods

4244 pregnant women were interviewed at home about their pregnancy intention, socio-demographics and obstetric history. Univariate relationships were assessed with the Kruskall-Wallis or Kendall's tau tests and a multivariate hierarchical model developed (Figure 1).

Results

Univariate analyses showed that pregnancy intention was associated with mother and father's age and education, marital status, number of live children, intergestational period, socioeconomic status, and previous depression at $p<0.001$. Using our conceptual hierarchy we found that increasing socio-economic status is associated with increasing pregnancy intention, but its effect was mediated through other factors in the model. The socio-demographic factors of importance were martial status, partner's age and mother's education level, however the effect of mother's education level was mediated by maternal reproductive characteristics. Previous depression was consistently associated with lower pregnancy intention. Younger age, increasing children and short birth intervals were all associated with lower pregnancy intention having controlled for all other factors in the model.

Conclusion

These data suggest that in Mchinji women who have recently given birth, who have completed their desired family size, have a history of depression, or who are young and/or unmarried are at greatest risk of unplanned pregnancies and should be targeted by interventions.

Task Shifting Post-abortion Care Services: Integration of Sublingual Misoprostol as First-line Treatment across Atfeeh District, Egypt

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ABSTRACT:
Where abortion is restricted, postabortion care aims to mitigate the impact of unsafe abortion. In Egypt, like many other settings, PAC services remain highly centralized, often stigmatized, and costly. Treatment is often only available at the district hospital using dilation and curettage under general anesthesia. Misoprostol, a safe and effective first-line alternative to D&C, is cheap, widely available, and easy to offer. To understand the potential of misoprostol in reducing reliance on D&C, a district-wide demonstration project to integrate the drug as first-line treatment was implemented in Atfeeh, Egypt. Providers from all levels of care were trained to offer 400 mcg sublingual misoprostol for treatment of incomplete abortion in lieu of referring women for D&C. Between April 2012–June 2013, women presenting for PAC were screened for eligibility for misoprostol treatment and if ineligible, were referred to the district hospital for D&C. Abortion outcomes, side effects, and women's satisfaction were evaluated 7 days after misoprostol treatment. Among 315 women who presented for PAC at district sites, 90% were eligible for misoprostol treatment. Of those treated (n=246), 95% had successful evacuation with misoprostol alone. Side effects were easily tolerable, with 98% of women receiving misoprostol treatment reporting being satisfied. This demonstration project shows that decentralization of PAC, including simple outpatient treatment with misoprostol, is a feasible way to avert 85% of referrals for D&C. An evaluation of services one year later highlighted a sustained reduction in D&C utilization and ongoing acceptability of the decentralized treatment model among both women and providers.

Reaching Every Woman, Every Newborn: Inpatient Care for Small and Sick Newborns

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ABSTRACT:

Background

Many of the estimated 2.8 million annual newborn deaths are of small and sick newborns that require timely, high-quality, newborn specific inpatient care to survive. Such care includes treatment of underlying conditions and prevention of further complications, including warmth, feeding support, safe oxygen therapy and effective phototherapy provided through appropriate infrastructure by health workers with specialist training and skills.

Methods

Data was collected using a structured tool designed to synthesize and grade "bottlenecks" and solutions across seven health system building blocks from 12 country level workshops. We include data on the bottlenecks and solutions combined with literature review and programmatic learning to discuss evidence-based solutions and propose priority actions needed to save more small and sick newborns lives.

Results

Care of small and sick newborns is categorized by all country workshop participants as a major challenge to health systems. Health system building blocks with the highest graded bottlenecks were health workforce, health financing and community ownership and partnership. Priority actions include strategies to incentivize the training and retention of health workers with neonatal skills, especially neonatal nurses; increasing and sustaining funding and insurance schemes; and creating demand for accessible, high-quality inpatient care.

Conclusions

Effective solutions for many of the bottlenecks to quality care for small and sick newborns exist. Currently there is commitment to improve this care as part of the Every Newborn Action Plan. Using the knowledge of what works in different contexts, we must build on this momentum so that every small and sick newborn has access to timely, quality, family-centered inpatient care.

Overcoming low implementation levels for essential maternal and newborn health interventions: Results from the EQUIP project using systemic quality improvement in Tanzania and Uganda

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ABSTRACT:
Background Quality improvement has the potential to overcome low implementation levels by assisting facility and community teams to implement their own solutions using a problem-solving approach.
Methods In Uganda and Tanzania, the Expanded Quality Management Using Information Power (EQUIP) intervention was implemented from 2011-2014 in one intervention district and evaluated using a plausibility design including one comparison district in each country. We used the improvement collaborative model, in which groups of quality improvement teams tested self-identified implementation strategies (change ideas) and followed progress with locally generated data. Evaluation included indicators of process, coverage, and implementation practice using an interrupted time-series approach based on data from continuous household and health facility surveys.

Results An increase in the number of livebirths where mothers received uterotonics within one minute after birth was observed in intervention compared to comparison districts in both countries (26 percentage point increase [95% CI 25%–28%] in Tanzania and 8% [95% CI 6%–9%] in Uganda). There was some evidence of an increase in preparation of clean birth kits for home deliveries in Tanzania, with the difference adjusted for baseline at 31% (95% CI 2%–60%). In Tanzania our analysis also indicated weak evidence of improved availability of key items for infection prevention (21% difference, 95% CI -4%–46%) which was not seen in Uganda.

Discussion The study indicated that our systemic quality improvement approach was feasible and increased implementation levels of selected essential intervention, particularly in Tanzania where district-own non-earmarked funds were used to support improvement work.

The Cost of free: Women's perceptions of Benin's free c-section policy

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ABSTRACT:
In 2009, a free caesarean section policy was launched in publicly funded hospitals in Benin. This policy is one of many similar policies addressing user fees in maternal health in the region, as part of efforts to reach the Millennium Development Goals by increasing facility based deliveries and alleviating the financial burdens of care on delivering women. As part of the FEMHealth project's multi-disciplinary evaluation of the effects of this policy, a qualitative study was undertaken in 2013 to understand women's experiences of care in the maternity wards and the nature of any delays that remained in giving care now that a large financial barrier was officially removed.

Semi-structured interviews with 30 women who had delivered via c-section from five hospitals were carried out. Two of these hospitals became case study sites where a triangulation package was undertaken that consisted of one month of participant observation in each of the maternity wards, and a further 62 interviews with women who had complicated, vaginal and c-section deliveries. Observation was carried out during the day and at night, and included informal discussions with health workers, companions and patients who were included in the sample of interviews.

This paper examines five themes that emerged in relation to how c-sections are experienced in light of the removal of their fees. Women continue to pay for care, both in the form of under the table payments to health workers and prescribed payments for services not covered by the policy and for neonatal care, though they consider the costs reasonable compared to what the charges were before. Lifting the hospital fees and instituting c-section kits has facilitated conditions for midwives to alert doctors that the procedure might be needed. Partly because c-sections are still feared by most women, in one hospital this led to some women perceiving them as a threat if they delivered more slowly. Practices of obtaining consent for the procedure have become blurred as the time and explanation that their payment required is no longer part of the process. The discussion explores the differences in the results between the hospitals and suggests that the contexts in which the policy is implemented plays a role in influencing how actors - both health workers and women - perceive, respond and in turn shape the implementation of the policy and c-section quality of care.

Clean Birth Kit Study – The Gambia

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ABSTRACT:

Background

The proportion of women in The Gambia giving birth in health facilities has increased from 55% in 2000, to 63% in 2013. This positive development also brings challenges to under-resourced facilities such as the ability to provide hygienic care at birth, important for reducing infections in mothers and newborns. Recently published data from DSS sites found higher rates of pregnancy-related sepsis in The Gambia compared to other included countries. Clean Birth Kits are established as a method of providing a clean, safe environment for home deliveries. This study aims to assess their feasibility and acceptability for use in healthcare facilities.

Methods

Clean birth kits were given to pregnant women either at ante-natal clinic or on the labour ward. Questionnaires were conducted with women seven days post-natal. Semi-structured interviews were undertaken with midwives and post-natal women.

Results

To date, questionnaire results are available for 54 women who received kits: 96% said they used the kit and 92% would recommend one to friends. Women were prepared to pay a median of 35-70p for a kit. Interviews were conducted with 18 women and 11 nurses/midwives. These showed that midwives valued the kit for improving ease of hygienic care pre- and post-delivery, especially with regular shortage of key supplies. Women appreciated the kit as a status item as well as deeming it useful for both home and clinical births.

Conclusions

Clean birth kits are liked by women and health workers for use in health facilities, but strategies are needed to make them affordable.

Barriers within hospital (either real or perceived) to women seeking facility based birth in Nepal

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ABSTRACT:
Background - Nepal has made significant progress in reducing maternal mortality, however one of the major challenges remains the under-utilisation of health services. This qualitative, mixed methods, study aimed to establish what health care professionals in Nepal consider to be the keys reasons why pregnant women do not give birth in a facility.

Methods -Twenty-five hours of non-participant observation was conducted in one semi-rural and one urban, non-government hospital. Twenty interviews were undertaken with health care providers. Both observation and interview data were analysed thematically. Ethical approval was granted by Nepal Health Research Council, and Bournemouth University Ethics Committee.

Results are presented using Thaddeus and Maine's three phases of delay model. In the first phase of delay, staff perceived barriers to accessing services as: 1) lack of awareness of facility and its services; 2) women being too busy to attend; 3) poor services; 4) embarrassment; and 5) financial issues. Second phase themes were: 1) birthing on route; 2) by-passing facility in favour of another. Final phase themes: 1) absence of an enabling environment; 2) disrespectful care.

Conclusion - This study highlights a multitude of barriers in the pregnancy journey. It is clear that staff are aware of many of the barriers for women in reaching the facility to give birth, and these fit with previous literature on women's views. However, staff had limited insight into barriers occuring within the facility itself and were more likely to suggest that this was a problem for other institutions and not theirs.

Prevention of postpartum haemorrhage in Uganda: an observational study of WHO guideline adherence

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ABSTRACT:

Objective: To determine adherence to evidence-based clinical practice guideline recommendations for the active management of third stage of labour (AMTSL) to prevent postpartum haemorrhage (PPH).

Methods: A descriptive study was conducted between February and March 2014 to document practices related to the AMTSL based on direct observation of 154 deliveries at an obstetric regional referral hospital in Uganda. The degree to which healthcare professionals' practice concurred with the 2012 World Health Organisation (WHO) PPH guideline was determined.

Results: Adherence to three key WHO PPH guideline recommendations for the AMTSL was high: 79.3% of women received a uterotonic drug (oxytocin), Controlled Cord Traction (CCT) was undertaken in 77.3% and cord clamping occurred between 1-3 minutes postpartum in 61.7% of deliveries respectively. In contrast, only a minority of women (34.0%) received all three essential elements of AMTSL as defined by the WHO.

Conclusions: Implementation of the WHO 2012 PPH guideline is incomplete, despite the strength of the evidence-base for the active management of the third stage of labour. For best practice internationally, a single, concise and universally accepted set of recommendations for PPH prevention needs to be established and implemented to reduce the gap between best evidence and routine clinical practice.

Barriers and facilitators to the implementation of evidence-based guidelines for prevention and management of postpartum haemorrhage in Uganda: a qualitative study

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ABSTRACT:
Background: Postpartum haemorrhage (PPH) is the leading cause of global maternal mortality. Despite the existence of effective clinical interventions to prevent and treat PPH, the use of evidence-based clinical practice in low-resource settings remains low. We aimed to explore the context-specific barriers and facilitators to the implementation of evidence-based guidelines for prevention and management of PPH in Ugandan healthcare facilities.
Methods: A qualitative study was conducted using semi-structured interviews with 18 maternal healthcare practitioners (4 physicians and 14 midwives) in Uganda: 15 from an urban regional referral hospital and 3 from community healthcare facilities. A thematic analysis was conducted.
Results: Data analysis revealed three major themes: healthcare facility issues, current knowledge, awareness and use of clinical guidelines, in addition to healthcare practitioner attitudes to updating their clinical practice. A range of barriers and facilitators for each of these themes were identified.

Postpartum haemorrhage

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ABSTRACT:

Background

Postpartum haemorrhage (PPH) is the leading cause of maternal mortality in low-income countries and severe maternal morbidity in many high-income countries. Poor outcomes are often attributed to delays in the recognition and treatment of PPH. Experts have suggested that recognition could be improved by more accurate and reliable blood loss estimation, but there is little guidance on how to achieve this.

Methods

A systematic, integrative review of 36 studies evaluating methods and experiences of assessing maternal blood loss during childbirth was conducted. All types of studies were considered if they developed, tested, or aimed to improve methods and skills in quantifying blood loss during childbirth, or explored the experiences of those involved.

Results

Health professionals were highly inaccurate at estimating volume of blood loss. Training improved skills in the short term but did not translate to improved clinical outcomes. Multi-faceted interventions changed some clinical practices but did not reduce the incidence of severe PPH or affect timing of responses to bleeding. Blood collection bags improved the accuracy of estimation but did not prevent delays or progression to severe PPH. Practitioners commonly used the nature and speed of blood flow and the condition of the woman to recognise excessive bleeding.

Conclusions

Recognition of PPH may rely on factors other than volume which, due to a lack of qualitative research, have not yet been explored. There is a lack of evidence on how to facilitate early diagnosis of PPH, and a change in direction for future research is advocated.

The Chinese Postpartum Custom of '*Zuo Yue*' In Hong Kong: Considering the Representation of Postnatal Depressive Mood and Non-Verbal Aspects of Mother-Infant Interaction during Picture-Book Reading

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ABSTRACT:
Postnatal-depression affects approximately 20% Chinese mothers living in Hong Kong. Given the cultural background with Western and traditional Chinese beliefs merging, it is essential to examine the influence of traditional and modern postnatal practices on postnatal-depression. In Chinese tradition for one month after childbirth, a woman is cared for while she follows a set of practices known as *zuo yue* to support her transition into motherhood. The present study examined the impact of *zuo yue* on depressive mood and maternal-infant touch behaviours in a Hong Kong Chinese sample. Forty-six mothers and their infants (23 boys, 23 girls, mean age= 15 months, range 6 - 26 months), were videotaped while reading a picture-book. Their touch behaviour was coded. The Edinburgh Postnatal Depression Scale, Postnatal Bonding Questionnaire and semi-structured interviews measured maternal postnatal depressive mood, the quality of the mother-infant relationship and the experience of *zuo yue*. Results indicated that positive touch behaviours were significantly more frequent in infants of mothers who had not practiced, compared with infants of mothers who practiced *zuo yue*. We argue that examining touch behaviours indicates that *zuo yue* might hinder the positive engagement of mother and child because the women practicing *zuo yue* might have less opportunity to interact with their child. Furthermore maternal evaluations of their relationship with the carer influenced their postnatal mood. This study highlights the importance of understanding the cultural context of mother-infant interactions and the importance of receiving appropriate social support postpartum to ensure well-being of both mother and child.

Proposed conceptual framework for 'Pregnancy Planning and Prevention' (P3)

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ABSTRACT:
Throughout their reproductive lives women and men have changing needs for preventing or planning pregnancy but to date services to meet these needs have been reactive. We have developed a conceptual framework with a strategic, proactive approach to the reproductive life-course, namely the 'Pregnancy Planning and Prevention' (P3) approach, that focuses on choice and preparation. It describes the needs of the general population, whether currently pregnant or not, and is easily applied to sub-populations. It is equally applicable to high- and low-resource settings.

The primary goal of this conceptual framework is to enable women and their partners to have children by choice, not by chance. In order for services to support this goal it is necessary to be able to assess prospective pregnancy intentions. Several such tools have been proposed but to date there is no psychometrically validated measure; a major omission.

Were such a tool to exist women (and ideally men) of reproductive age could be asked about pregnancy intentions at any health service contact and could be triaged to 'pregnancy prevention', where contraceptive needs should be established and met, or 'pregnancy planning' services where pre-conception advice could be given, important conditions tested for and pre-existing conditions stabilised.

The P3 framework can be used to support women and their partners to assess, articulate and actualise their reproductive health needs, empowering couples to have both the fulfilled sexual relationships and the fertility outcomes that they desire, reducing unplanned pregnancies, improving pregnancy outcomes and potentially reducing chronic diseases in the long-term.

The efficacy of the PPH butterfly to facilitate uterine compression using a mannequin model: A randomised crossover study

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ABSTRACT:
Postpartum haemorrhage (PPH) remains the major cause of maternal mortality worldwide. Bimanual uterine compression (BMC) is an appropriate procedure to initiate the management of atonic PPH. The technique of BMC is both painful and intrusive. If, however, it could be performed in a less invasive manner, then it could act as a low-cost treatment for PPH.

The PPH butterfly is a new device designed to make uterine compression available for use at a much earlier stage in the PPH process. This study tested the device use in a mannequin model at Liverpool Women's Hospital, with the hypothesis that using the PPH butterfly produces an equivalent amount of uterine pressure as standard BMC, but can be sustained for a longer time.

Participants (20 experienced obstetricians, who are expert at BMC, and 22 midwives, who had not done BMC before) were randomly allocated to conduct two forms of uterine compression on a mannequin model: bimanually and using the PPH butterfly. The mannequin was supplied with an atonic uterus, modified to facilitate BMC and containing a pressure sensor. The sensor assessed the amount of intrauterine pressure produced by compression of each participant.

We compared the two methods, and examined the effect of experience on uterine pressures. There was no difference between the two groups in the amount of uterine pressures produced by the two methods (P value = 0.73). PPH Butterfly is simple to use on manikin model, even among obstetric care providers with little experience and produces equivalent pressure to BMC.

Maternal experiences of caring for an infant with disability after newborn brain injury in Uganda: a qualitative study

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ABSTRACT:
Complications around the time of birth ('birth aphyxia') are responsible each year for more than one million cases of newborn brain injury (neonatal encephalopathy). Amongst survivors, a quarter are affected by neurological disability including mobility, toileting and feeding difficulties, cerebral palsy and cognitive delay. We investigated maternal experiences of caring for a child affected by disability after neonatal encephalopathy amongst an urban population in Uganda.

Methods
Between September 2011 and October 2012, small group and one-on-one in-depths interviews were conducted amongst mothers recruited to the ABAaNA study; examining outcomes from neonatal encephalopathy amongst 128 infant survivors at Mulago Hospital, Kampala. Data were analysed thematically from 15 mothers and 1 carer with Nvivo 8 software.

Results
Mothers reported caring for an infant with impairment was often complicated by substantial social, emotional and financial difficulties and stigma. High levels of emotional distress, feelings of social isolation and fearfulness about the future were described. Maternal health-seeking ability was exacerbated by high transport costs, lack of paternal support and poor availability of rehabilitation and counselling services. Meeting and sharing experiences with similarly affected mothers was associated with more positive maternal caring experiences.

Conclusion
Mothering a child with neurological disability after neonatal encephalopathy is emotionally, physically and financially challenging but this may be partly mitigated by good social support and opportunities to share caring experiences with similarly affected mothers. A facilitated, participatory, community-based approach to rehabilitation training may have important impacts on maximising participation and improving the quality of life of affected mothers and infants.

Maternal Mortality in Ghana: is MDG5 reachable?

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ABSTRACT:
Objective: This study aims to see whether Effia-Nkwanta Regional Hospital in Takoradi, Ghana is going to meet the Millennium Development Goal 5 (MDG 5) set by the World Health Organisation (WHO) in 2000 regarding maternal health, that sought to reduce the maternal mortality ratio (MMR) by 75% between 1990-2015.

Methods: A retrospective review of audited data related to MMR was sought from the statistics department at Effia-Nkwanta Regional Hospital. Data with regards to calculating the MMR for each year was found from 2007-2013. Causes attributed to each death, both direct and indirect were only audited since 2009, so such data could only be collected from 2009-2013.

Results: MMR has almost halved (48%) from 1024 in 2007 to 531 in 2013, despite an increase in the number of deliveries by 16%. Hypertensive disorder remains the greatest cause of maternal mortality, accounting for the majority of deaths (n=38) between 2009 and 2013. For a brief period between 2010-2011, however, the majority of the maternal deaths were attributed to haemorrhage, accounting for as much as 60% of maternal mortality in 2011.

Conclusion: The WHO has estimated that Ghana achieved a percentage reduction in MMR of 49% between 1990 (MMR 760) to 2013 (MMR 380). If we assume the 1990 figure, then Effia-Nkwanta has only achieved a reduction in MMR of 30%, which would suggest that Ghana is nowhere near meeting its 2015 target. Registry and surveillance in Ghana is poor; this must improve if we wish to correctly quantify progress in maternal health.

Redefined roles for Traditional Birth Attendants in Malawi: a missed opportunities for collaboration at community level?

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ABSTRACT:

Background

The effectiveness of engaging Traditional Birth Attendants (TBAs, who are non-formally trained, community-based) in maternal health care has been debated for decades. In Malawi, where the maternal mortality ratio is high, the Government has prioritised skilled birth attendance and institutional deliveries. In 2007, it issued community guidelines effectively discouraging TBAs from conducting deliveries, and tasking them with giving advice and referring women to facilities for deliveries.

Objective

This qualitative study explores perceptions of this change in policy, the difficulties in operationalising them at community level, and relates those perceptions to the issue of reduced linkages between formal and traditional maternal health care systems in rural communities.

Methods

This study used a grounded theory methodology to analyse 46 semi-structured interviews and 19 focus group discussions, conducted with TBAs , Skilled Birth Attendants (SBAs), women , men , and other stakeholders, in three Districts of Central and Southern Malawi.

Results & conclusions

Findings show that the Community Guidelines which redefined the TBA roles are perceived as a top-down policy, which, in areas where referral systems are weak, place TBAs and those who may seek their services between a rock and hard place. Furthermore there no longer are contacts between TBAS and SBAs, yet participants felt that collaboration between providers may help save lives.

We contend that the lack of linkages between traditional and formal maternal health system and the exclusion of the TBAs may be detrimental to the hardest – to-reach women in rural communities.

Misoprostol vs oxytocin in Uniject for PPH Prophylaxis at the community level: Research from Senegal

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ABSTRACT:
Introduction:
In spite of high levels of enthusiasm and evidence of clinical safety and efficacy of both misoprostol and oxytocin in Uniject® for preventing PPH, there have been no studies comparing the programmatic effectiveness of these two methods in large-scale community-based PPH prevention programs.

Objectives:
To compare routine prophylactic use of 600 mcg of oral misoprostol and 10 IU oxytocin IM delivered intramuscularly with the Uniject® device during the third stage of labor for PPH prevention.

Methods:
A large community-based cluster-design randomized trial was conducted in two districts in Senegal. A total of 28 primary level “health huts” manned by community midwives were trained to provide prophylaxis based on their allocated cluster. This study aimed to assess the programmatic implications for community settings planning to introduce misoprostol and/or oxytocin in Uniject® into clinical practice for prevention of PPH.

Results:
A total of 1375 women who delivered in the health hut with a trained birth attendant were included in the study. The average change in Hb between the two prophylactic regimens was not significant (p= 0.17). One woman in the Uniject group was diagnosed with PPH. Significantly more women taking misoprostol reported experiencing chills (61% vs. 5%). But no differences were found between the groups for fever, nausea, vomiting diarrhea or other side effects.

Assessing early medical abortion success using a semi-quantitative pregnancy test: Can we shorten the medical abortion process?

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ABSTRACT:
Objective: To compare the effectiveness, usability and acceptability of home use of two types of pregnancy tests at 4, 7 and 14 days after mifepristone.

Methods: Randomized controlled trial of 600 women seeking medical abortion at two hospitals in Vietnam. Participants were randomized to at-home follow-up with either a semi-quantitative pregnancy test (SQPT) or a high sensitivity pregnancy test (HSPT). A baseline test was administered on day one of the medical abortion and study participants were instructed to administer up to three additional tests at-home on days 4, 7 and 14. During the exit interview, feasibility and acceptability of both tests were also assessed.

Results: At all three time points, the sensitivity and negative predictive value (NPV) of both tests was 100.0%. In contrast both tests had low positive predictive value (PPV) at all three time points. There were notable differences in specificity: in the SQPT group, test specificity was 63.6% (95% CI 57.8-69.2), 81.4% (95% CI 74.1-87.4), and 100.0% (95% CI 92.1-100.0) on days 4, 7 and 14, respectively. In the HSPT group, test specificity was 6.0% (95% CI 3.5-9.4), 16.5% (95% CI 12.3-21.6), and 51.7% (95% CI 44.1-59.2), respectively. Nearly all women in both groups rated their pregnancy tests as very easy or easy to use.

Conclusions: Home use of an SQPT for medical abortion follow-up could substantially reduce the need for clinic follow-up and is feasible and highly acceptable. The test is especially valuable for determining when follow-up is not needed, even as early as four days following medical abortion.

Maternal mortality in Nigeria: Addressing with risk communication

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ABSTRACT:
Approximately two thirds of the women in Nigeria, and three quarters of rural Nigerian women, deliver their babies outside of health facilities without medically skilled attendants. Maternal mortality is therefore one of the major challenges in reproductive health in Nigeria. Communication and education are vital since so many births take place outside formal healthcare environments and the high mortality rate suggests that there is potential for progress, which can supplement Nigerian government efforts. The purpose of the study was to compare expert and lay knowledge and interpretations about the important components of the problem as part of a wider mental models study aimed at improving risk communication.

An expert mental model has been constructed by extensive literature review and consultation with experts. This model was used for preliminary evaluation of lay perceptions among the target group. These perceptions were elicited through semi-structured interviews with women of childbearing age (15-49).

Interviews were analysed to evaluate common themes that will be used to model lay perceptions for comparison to the expert mental model. The emergent themes will be presented and discussed in the context of the identification of important gaps in knowledge and misperceptions that have the potential for development of improved risk communication.

Results will also be presented from a structured questionnaire that was subsequently given to a wider target group of women to assess the extent to which these key information gaps and misconceptions are prevalent. Future work includes the development and evaluation of risk communication protocols to address them.

The story of the sphyg: Increasing BP measurement for primary prevention of pre-eclampsia in Uganda

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ABSTRACT:
Background: The WHO states that all women should have their blood pressure (BP) checked at each of their four antenatal visits for early identification of pre-eclampsia. Heavy work burden was found to be a significant barrier to BP measurement for midwives, despite knowledge of sphygmomanometer technique and its importance. The aim of this study was to increase the percentage of women having their BP measured when attending antenatal clinic at a government health centre in peri-urban Uganda.

Methods: Two electronic sphygmomanometers were introduced at Kasangati Health Centre to enable non-medically trained staff to undertake BP measuring, and the importance of measuring BP was verbally emphasised to staff. The antenatal clinic was restructured; BP measurements were undertaken whilst women waited for their appointments to improve efficiency.

Results: Following the introduction of the electronic sphygmomanometers, BP recording rate increased from 61% to 97%, with a non-medical member of staff taking responsibility for BP measurement. The antenatal clinic was successfully restructured in collaboration with local midwives but measurement rates fluctuated depending on the staff present.

Conclusions: The introduction of electronic sphygmomanometers at a health centre in peri-urban Uganda significantly increased the percentage of women having their BP measured as part of primary prevention of pre-eclampsia. Furthermore, the use of electronic sphygmomanometers opens up the opportunity for women to measure their own BP at the clinic to minimise staff workload; this showed great promise in the pilot study we undertook, where BP technique was taught and readings were checked and found to be accurate.

An audit of operative vaginal deliveries at Mengo Hospital, Kampala, Uganda.

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ABSTRACT:

Introduction: During my elective in obstetrics and gynaecology, it became apparent that operative vaginal delivery (OVD) was much less commonly used at Mengo Hospital compared to what I had seen during my attachment in the UK. I therefore decided to undertake an audit of OVD in order to evaluate practice.

Methods: A retrospective casenote audit was conducted, for women that underwent OVD between January and December 2013 on the ward I was attached during my elective. Outcomes were evaluated against parameters derived from the RCOG Green Top Guideline 26 (Operative Vaginal Delivery).

Results: There were a total of 1436 deliveries during 2013 on the ward. Of those, 20 were OVDs, giving a prevalence of 1.4% compared to the UK prevalence of 10-15%. Indications included 'delayed second stage' and 'fetal distress'. All OVDs were vacuum extraction and none of the deliveries were rotational. Of the 20 sets of notes evaluated, there were no failed OVDs and no sphincter injuries. Episiotomy was performed in 88% of OVDs but perineal lidocaine analgesia was used in just 65%. Pudendal nerve blocks weren't used. Documentation was sparse, with consent and position / station of the fetal head seldom documented.

Conclusions: OVD is uncommon. However, the rate of Caesaren section at Mengo Hospital is high at 32%. Perhaps through a programme of training and adoption of the RCOG documentation proforma, OVD practice may be improved and the section rate could be reduced.

Obstetric Emergency Teaching in Ugandan Health Centre IV's – A Solution to Problematic Referrals?

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ABSTRACT:
During my long-term volunteer placement in the O&G department of Mbarara Regional Referral Hospital (MRRH) in south-west Uganda two problems became apparent immediately; the maternal mortality rate MMR was unacceptably high and that the majority of women who died were referred in from surrounding health-centres.

The MMR for this unit was 438/100000 in 2013 and 86% were referred from HC's outside Mbarara.

Women were arriving moribund, without simple resuscitative measures being implemented.

Therefore the intervention of an O&G emergency teaching programme in the 9 HC's and community hospitals most commonly referring to MRRH was conducted.

The aim was to refresh knowledge already held by the healthcare professionals, impart new knowledge and a simple, structured approach to management of O&G emergencies, to practice management through hands-on skills/drills and evaluate teaching using pre/post-test questionnaires and obtain course feedback.

The content included: sepsis, the unconscious patient, massive obstetric haemorrhage, pre-eclampsia and eclampsia, vaginal breech delivery, shoulder dystocia, neonatal resuscitation and manual vacuum aspiration (MVA).

Faculty consisted of a multidisciplinary team from University Hospitals Bristol (UBHT) and MRRH including midwives, obstetricians and anaesthetists.

Training for trainers was provided before the programme and afterwards for HC staff identified as future trainers.

The long-term aim is to run these sessions annually for 2 years, ensuring that >75% of healthcare professionals in the Isingero and Mbarara districts are trained. Thereafter the annual skills drills will continue and will be led by local faculty. The pre and post test questionnaires, feedback, future maternal mortality rates and referral rates will measure our success.

Addressing the maternal and reproductive health needs of married adolescent girls in Northern Nigeria.

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ABSTRACT:
Despite significant efforts to curb the practice of early marriage in developing countries, figures still remain high. For example, Northern Nigeria records some of the highest numbers of maternal deaths globally with early marriage as a major contributing factor to this. The reproductive health needs of these girls continue to remain largely unmet with more focus been given to unmarried girls and older women. Thus this study seeks to explore marriage and specific health challenges as perceived and experienced by married adolescents as well as their valuable suggestions for addressing these challenges. The study also examines how advocates for married adolescents engage with other stakeholders and decision makers in bringing pertinent issues concerning these girls to light. Using semi-structured interviews, focus group discussions and participatory techniques, 33 participants from North central Nigeria were recruited for this study, adopting a grounded theory mode of inquiry. Initial findings indicate a form of self-pressure and agency on the part of the girls in choosing to get married at an early age. It also points out the health challenges they face, particularly access to quality health care and the coping strategies adopted in seeking to address these issues. This research will contribute to current debates surrounding the health implications of early marriage with a focus on maternal and reproductive health, and incorporate findings that serve to illuminate the advocacy process in response to the challenges faced by these girls.

Maternal self-reports of postpartum bleeding: Findings from a trial of self-administered misoprostol in rural Uganda

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ABSTRACT:

Background: Studies assessing the clinical effectiveness of interventions for postpartum haemorrhage (PPH) have utilized various tools and outcomes for PPH diagnosis and evaluation of its severity, including blood collection receptacles/mats, self-reported bleeding, haemoglobin (Hb) assessments, and additional interventions.

Methods: Results from a community-based trial of self-administered misoprostol were analysed to explore the relationship between self-reported postpartum bleeding among homebirths and Hb outcomes. Consenting women at four antenatal Ugandan clinics were enrolled and pre-delivery Hb was assessed (Hemocue® device). Postpartum interviews, which included two questions on perceived blood loss, were conducted 3-5 days after birth to record details of delivery. Postpartum Hb was measured at this visit. Sensitivity was calculated to explore the utility of maternal self-reports.

Results: Data for 177 homebirths were analysed. Few women (8%) experienced a decline in Hb >20%. When asked to describe their blood loss, eight women (4%) indicated 'heavy" referring to a Picturegram (mild/moderate/heavy). Four women rated their bleeding as 'a lot' or 'heavy' in a separate question (Likert scale, 1='very little',5='heavy'). Women's reports were inconsistent between these two questions, and there was poor agreement when comparing perceived heavy bleeding with Hb fall >20% (sensitivity value 0.20). Only 1 out of 8 reporting heavy bleeding had sought care.

Conclusions: Women's reports of heavy bleeding were generally not reliable or consistent. Low sensitivity may be due to the mild nature of most bleeding. New, simple ways for assessing PPH in homebirths are needed to improve PPH recognition and confirm rates of this complication.

Evaluation of the Nigerian Midwives Service Scheme: barriers and facilitators
to implementation

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ABSTRACT:
The Nigerian Midwives Service Scheme (MSS) was created in 2009 with the aim of reducing maternal and infant deaths by 60 percent by December 2015. Key features of the MSS include the recruitment and deployment of newly qualified, unemployed and retired midwives to rural health clinics to ensure access to skilled care.

The BORN study1 aimed to evaluate the effectiveness of the MSS. Outcomes were compared between households in the catchment areas of MSS clinics (n=208) and in the catchment of matched comparison clinics (n=208) in 12 states. A nested qualitative study was conducted in three states around nine clinics which appeared to be having differing success in terms of recruitment/retention and uptake of services.

We will focus on the qualitative findings. Drawing on interviews with policymakers at different administrative levels (n=21), MSS deployed midwives (n=15) and women who have recently given birth (n=45) as well as 9 focus groups with wider community members, we will discuss the barriers and facilitators to implementation of the programme; explore the underlying mechanisms of action for any observed programme effects; and the experience of those providing/receiving care under the MSS programme. The findings will provide valuable lessons in informing the ongoing development of the MSS programme in Nigeria and for complex, large-scale, human resource interventions more broadly.

1 This study has been funded by the International Initiative for Impact Evaluation.

A quantitative study of maternal health practices in Northern Mozambique: are cultural beliefs posing a considerable barrier to women accessing health services?

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ABSTRACT:

Introduction

MMR in Mozambique is estimated to be 405 deaths per 100 000 live births. Little progress has been made towards reaching MDGs 4 and 5. Barriers to accessing health care during the 'golden 24 hours' peri-delivery are multifactorial. Delay in 'seeking care' (1st delay) is thought to play a key part. This study aimed to quantify the contribution that cultural beliefs make to this delay in the rural district of Chiure.

Methods

A cross-sectional survey design was chosen. 9 focus group discussions informed the questionnaire. From an estimated target population of 31700 women and their partners who gave birth in the last 2 years, a random sample of 730 were selected (367 women and 363 men). This allowed for a representative sample detecting determinant factors at a frequency of 20%, power 80% and 95% Confidence Intervals.

Results

50.3% reported giving birth at home. 52.0% reported distance as the reason and 80.6% said walking was there only form of transport. 40.0% of interviewees believe that if labour is not successful it is due to extramarital relations during the pregnancy and that only confession will change the outcome. 87.1% of interviewees know of a women dying in labour in their village and 45% believe it was inevitable (destiny).

Conclusion

Although lack of transport remains a key barrier to access to safe delivery, cultural beliefs continue to contribute enormously. Further analysis is underway to better understand whether women's rights issues are at the heart of these harmful beliefs.

Lessons from 150 years of UK maternal hemorrhage deaths

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ABSTRACT:
Objective: To review maternal haemorrhage death rates in the UK over the past 150 years in order to draw lessons for current attempts to reduce global maternal mortality.

Methods: Mortality rates from data in the *Annual Reports from the Registrar General* were entered into a database. This was supplemented with national data from *Munro-Kerr's 1933 text Maternal Mortality and Morbidity*; the *Chief Medical Officer's Annual Reports* and the *Reports from the Confidential Enquiries*. Charts were created to display trends in haemorrhage mortality, allowing comparison with historical medical advances.

Results: UK maternal mortality persistently fluctuated at around 400 to 500 deaths per 100 000 births between 1847 and 1935. Reducing sepsis deaths were chiefly responsible for a 85% drop in overall maternal mortality between 1932 and 1952. In contrast, maternal haemorrhage death rates had their majority fall before the 1930s. Haemorrhage deaths had reduced by 56% from 1874 to 1926, from 108 to 50 deaths per 100 000 births.

Conclusion: The majority of UK maternal haemorrhage mortality reductions occurred prior to the availability of effective oxytocics, antibiotics, and blood transfusion. Improving access and standards of maternal care is key to addressing global maternal mortality today.

Using clinical scoring scales in patients with obstetric fistula.

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ABSTRACT:

Introduction:

Obstetric fistula is a devastating, life altering condition that affects 2 million women globally[1]. We report the first use of clinical scoring scales to evaluate the success of obstetric fistula repair.

The LINK fistula record was developed as an alternative to the WHO Addis Ababa fistula card and implemented for patients attending Kitovu Fistula Centre, Masaka Uganda.

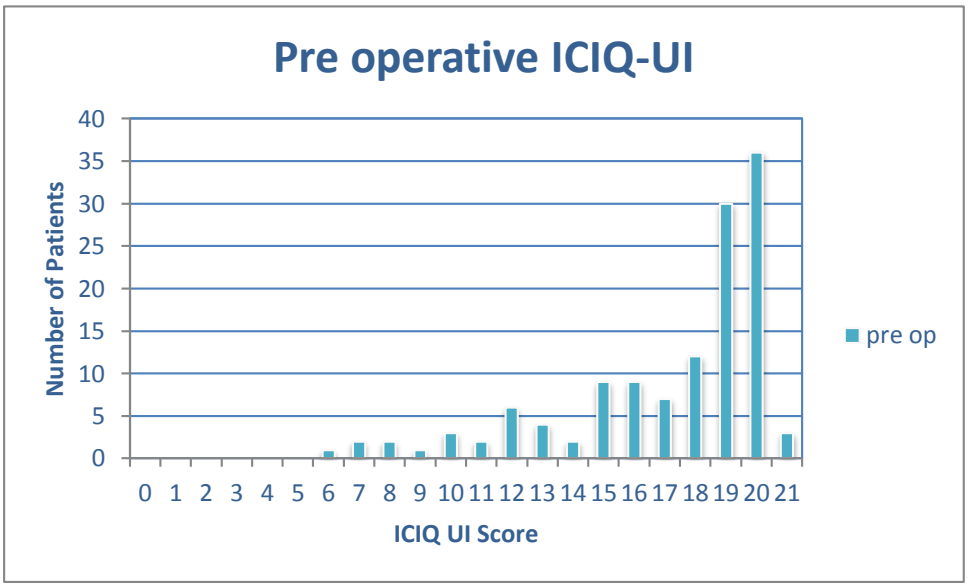
NICE guidance states to use incontinence-specific quality-of-life scales when incontinence therapies are being evaluated[2]. To date there is no publish data of these scores being used for the management of patients in the developing world with Obstetric Fistula; despite minimal logistical and cost implications.

The LINK fistula recorded records ICIQ Urinary Incontinence score as part of routine patient assessment.

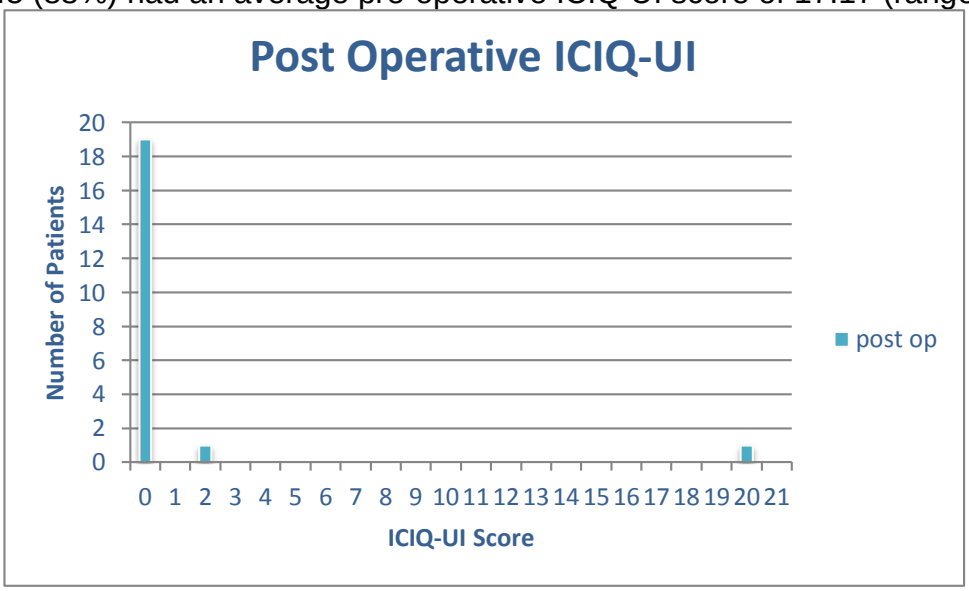
ICIQ UI is a well validated[3] internationally reliable[4] score, which uses 3 questions to measure severity of incontinence.

1 How often do you leak urine? (Tick one box)	
never	0
about once a week or less often	1
two or three times a week	2
about once a day	3
several times a day	4
all the time	5
2 We would like to know how much urine you think leaks. **How much urine do you usually leak (whether you wear protection or not)?**(Tick one box)	
none	0
a small amount	2
a moderate amount	4
a large amount	6
3 Overall, how much does leaking urine interfere with your everyday life? Please ring a number between 0 (not at all) and 10 (a great deal)	
0 1 2 3 4 5 6 7 8 9 **10** not at all a great deal	
ICIQ score 3+4+5 =_____	

125/145 patients undergoing fistula surgery where assessed with an ICIQ score pre operatively, and also at 3 months FU.



128/145 (88%) had an average pre-operative ICIQ UI score of 17.17 (range 6-21).



We have 3 month follow up on 21 (14.5%) cases which had ICIQ UI of 0-20 average score of 1.62.

Using the LINK fistula record we are able to report the first data that considers patient reported symptoms as the hallmark of successful surgical outcome.

1. WHO: http://www.who.int/features/factfiles/obstetric_fistula/en/

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4. Reliability of Arabic ICIQ-UI short form in Saudi Arabia. Al-Shaikh G, Al-Badr A, Al Maarik A, Cotterill N, Al-Mandeel HM. Urol Ann. 2013 Jan; 5(1):34-8.

Strengthening research capacity for effective implementation of maternal and perinatal death reviews in Tanzania

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ABSTRACT:

Background

Evidence for Action Tanzania (E4A) is a DfID-funded programme to accelerate progress in maternal and newborn survival, through improved use of evidence, sustained and locally-driven advocacy efforts, and strengthened accountability mechanisms, for improved planning and decision-making.

One mechanism for improved evidence-based decision-making with accountability is though maternal and perinatal death reviews (MPDR). Tanzania institutionalised MPDR in 2006, yet there is inconsistent evidence on the extent and quality of implementation and a recognised need for local capacity to improve and evaluate the process. The Ministry of Health and Social Welfare announced plans to revise the national guidelines on MPDR. E4A sought to develop and strengthen capacity for an analytical approach and an evidence-based policy process.

Methods

We performed a series of activities for strengthening the analytical approach for evaluation of MPDR, and for research-led decision-making in MPDR, including:

- Catalysing consensus around the need for an evidence-based revision process for the national guidelines.
- Conducting an analytical review of the existing national MPDR guidelines.
- Conducting an evaluation of the effective implementation of MPDR, involving qualitative research with key informant interviews across hospitals and administration in one region (Mara), and with national level stakeholders.
- Facilitating an MPDR Evidence Workshop (October 2013)
- Providing technical support to the generation of new national guidelines and to their implementation.

Results and Conclusion

We applied an integrated capacity strengthening approach, building an analytical understanding and sustainable political momentum for safe pregnancy and childbirth through wide stakeholder engagement and evidence-based consensus-building. E4A and LSHTM led the drive for gathering primary data on the effectiveness of the existing MPDR system, as well as drawing together evidence from national MPDR partners, to build a collaborative process. Importantly, and for greater sustainability, the process was owned and led by the Ministry of Health. This fostered an understanding of the need to improve and use regional and national evidence for decision-making. Future sustainability will be evident through ongoing leadership from Ministry of Health, continued use of an evidence-based approach for decision-making and an analytical approach for evaluation of implementation.

The role of the private sector in provision of modern contraceptive methods in middle and low-income countries

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ABSTRACT:

Objective

Family planning in low-income countries has been neglected for almost two decades. Recently, renewed interest was sparked by the 2012 London Summit. There is a gap in understanding of private sector family planning provision, in terms of its extent and its characteristics. This paper characterizes women with respect to their need for modern family planning methods and describes the sector where women are obtaining modern contraceptives (public, private, other). We develop a typology of family planning providers and examine the extent and equity of their provision.

Methods

We use nationally-representative population-based data collected since 2000 in 57 countries through Demographic and Health Surveys. We aggregate these data by world region and disaggregate them by wealth quintile and type of provider.

Results

Data were obtained for >850,000 women aged 15-49 years old. We found 152 different types of family planning providers. We could classify these into 9 separate categories (Public medical, Public non-medical, Private retailer, Private specialised drug seller, Private medical, Faith-based, NGO, and Other). Among women who used modern family planning method, 40% obtained them from the private sector. In all regions except for Sub-Saharan Africa, public family planning services favoured the poorest, while private services favoured the richest. This pattern meant the public sector attenuated the inequality gradient seen in overall service use.

The role of the private sector in the provision of antenatal care in middle and low-income countries

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ABSTRACT:

Objective

To examine the role of the private sector in the provision of antenatal care across low- and middle-income countries.

Methods

Demographic and Health Survey data from 46 countries in 4 regions were used to examine the source of antenatal care given to >300,000 women aged 15-49 years for their most recent birth. We identified 79 unique sources of antenatal care and examined equity in its provision.

Results

Across all countries the main source of antenatal care was the public sector, but there were large variations by region. The percentage of women in need of antenatal care who used it ranged from 78% to 92% across the regions. Among users of antenatal care, 43% sought facility based care from a private provider at least once. In all regions except for Sub-Saharan Africa, public antenatal care services favoured poorest women, while private antenatal care services favoured the richest.

Conclusions

Our analysis is the first multi-country comparison to look at whether antenatal care is obtained from the public or private sector. It also offers a comprehensive assessment of equity in provision of antenatal care, by sector.

The role of the private sector in the provision of delivery care in middle and low-income countries

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ABSTRACT:

Objective

Maternal mortality rates have decreased globally in recent decades but remain off-track for Millennium Development Goals. Strategies to achieve equitable maternal outcomes will need to effectively reach the most socio-economically vulnerable women. This study's objective was to examine the role of the private sector in the provision of institutional delivery care.

Methods

The most recent Demographic and Health Survey (DHS) between 2000 and 2012 for each of the 57 countries was used to analyse delivery care for the most recent birth among >330,000 women. We differentiated facility-based deliveries into public-sector delivery locations (those occurring in public, government or social security health facilities) and private-sector locations (private facilities, private professionals, faith-based facilities, NGO, and other private facilities) and used DHS wealth quintiles for equity analysis.

Results

The proportion of women who delivered in a facility ranged widely between regions (lowest in South/Southeast Asia at 42%, highest in North Africa/West Asia/Europe at 79%). The proportion of facility deliveries occurring in the private sector was 41% overall, and ranged from 10% in Latin America & the Caribbean to 57% in South/Southeast Asia. In all regions both public and private-sector delivery care favoured the richest, which exacerbated inequalities, and increased the slope of the inequality gradients.

Conclusions

This is the largest analysis to-date of the role of the private sector in delivery care. The private sector provides a substantial proportion of facility delivery care in low- and middle-income countries. More information is needed on whether the role of the private sector in various countries is a reaction to the failures within the public system or a substitution effect. Future research should describe countries that achieved rapid improvements in facility delivery rates and assess the contribution of the private sector to this trend.

Pregnancy, productivity and post-partum family planning: an inter-disciplinary cohort study in Burkina Faso

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ABSTRACT:
Background: It is estimated that poor maternal and neonatal health costs USD 15 billion globally each year due to lost productivity. However, there is limited research of the effect of reproductive health on women's work and productivity, particularly from a longitudinal perspective.

Objective: To document how reproductive health during pregnancy and postpartum influences women's participation in income-generating and non-income generating production in Burkina Faso, and investigate to what extent postpartum family planning uptake is associated with production related activities.

Methods: Mixed-methods cohort study of 841 women living around Bobo-Dioulasso, southwest Burkina Faso, who were between 7 months gestation and 3 months postpartum at baseline, with follow-up for 9 months. A sub-cohort of 30 women and their husband/partner participated in longitudinal in-depth interviews. Additional focus groups explored community norms surrounding women's work and attitudes towards family planning.

Findings: Although the law allows for 14 weeks maternity leave, in reality <1% of our sample had access to this as the majority of the women work in the informal sector. Women report that all pregnancies are different in terms of how they can affect their health and by extension their productivity. We will present data on the time women spend working during pregnancy and postpartum. Women say they find the postpartum period particularly difficult to plan for, and recognise that pregnancy-related ill-health can deplete the funds and/or stock used for their own income-generation activities; this increases their dependence on other household members in a setting where gender relations and norms remain traditional. Before the birth a substantial majority of women said they planned to use contraception postpartum, but actual uptake is much lower. Attitudes towards family planning were very mixed, with some of the community citing the economic benefits of smaller family sizes but some men in particular expressing negative attitudes. As a follow on from this work, a cluster RCT is about to start aiming to increase men's involvement in family planning counselling during antenatal and postnatal care.

Assessing the impact of internal migration on maternal and child health in Pakistan

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ABSTRACT:
Background: Human migration is driven by inequitable distribution of resources, services and opportunities. While internal migrants constitute roughly three-quarters of the one billion migrants globally, there are few evidence-based policies specifically targeted at better migrant health and health rights. Evidence shows that internal migration is increasing, especially among women. This study explored the impact of internal migration on maternal and child health care in women and their children in Pakistan.

Methods: Analyses of data from the 2012-2013 Pakistan Demographic and Health Survey were used to estimate the effect of internal migration on antenatal care (ANC) visits, skilled birth attendance (SBA) and the prevalence and treatment of acute respiratory infection (ARI) in children of migrants.

Findings: In all, 13,009 women and their children were included in the study. Internal migrants were found to have poorer access to SBA and treatment for symptoms of ARI than non-migrants. Rural-to-urban migrants had poorer access to ANC visits, SBA and treatment for symptoms of ARI than did urban non-migrants. Finally, children of rural-to-rural migrants had higher prevalence of symptoms of ARI than did children of rural non-migrants.

Interpretation: This study found that internal migrants have poorer maternal and child health care access and outcomes than non-migrants. There is an underlying assumption that once in an urban area all residents have better access to care because of the proliferation of private sector facilities there. However, our findings prove otherwise and highlight that the vulnerabilities of internal migrants should be considered alongside their contributions to economic development.