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Maternal & Newborn Health in the Developing World

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In many developed nations, pregnancy and childbirth are no longer widely considered hazardous for mother or infant in the way they were just a few generations ago.

However, for the majority of the world's population this is not the case. Poverty, social attitudes and family structures, and a lack of social, physical and medical infrastructure mean that for many millions of women and infants, childbirth remains deeply hazardous. In Niger, one in seven women will die in childbirth, compared to one in 30,000 in Sweden.[1]

This file will look at some of the reasons for this, at how we can tackle the problem and some Christian responses to the challenge.

Causes of maternal & neonatal mortality

Most maternal and newborn deaths happen around the time of birth, although complications during pregnancy (including malnutrition, infections during pregnancy such as HIV, syphilis, malaria, anaemia, preeclampsia and chronic diseases eg diabetes) can also threaten the health and survival of mother and child. In the UK and most developed nations, monitoring during pregnancy, labour and after birth, with timely medical intervention when necessary, has greatly reduced both maternal and newborn mortality. Where there is limited or no access to midwives, trained birth attendants or obstetric units in community or secondary care institutions, the risks to both mother and child soar.[2]

Inequality

Lack of access to such simple facilities occurs for manifold reasons. If a country as a whole is poor, then it will have few skilled professionals and dedicated maternity units, and those that there are will be so over-stretched that the care they can offer will be limited. Even where better services are available, they are often too costly for poor families and too urban-centred and distant for rural families. If you have to travel 100 miles to your nearest clinic, let alone hospital, the costs of travel, hospital fees, paying for drugs and equipment and taking time away from earning a livelihood make it prohibitively expensive. In addition, there are often pressures on women from the wider culture that limit their access to health services, for example greater value may be placed on the health of men and boys than women and girls. Also girls tend to be less well educated than boys, although there is evidence that better education of girls leads to better health and well-being not just of the individual and her family, but the whole community.[3] Finally, the overall health of the population will have a significant impact. Where HIV, TB, malaria and other communicable diseases are endemic and where levels of nutrition are poor, the likelihood of mother and child suffering major ill health or of dying are significantly increased.

Family size and structure

However there are more complex factors at work. In most societies, children are insurance for old age – they will care for you, house you and support you financially in your frailty. The more offspring you have, the better the chance that one or two will survive to adulthood and be prosperous enough to care for you. So there is pressure to have many children. As it is often the expectation that the male children will care for their parents rather than the female, the pressure is on to have boys rather than girls. As we shall see, this can have worrying consequences. In addition, the more pregnancies a woman has, the greater the lifetime risks to her health and survival, and that of each subsequent child.[4]

Religion and culture

The cultural bias towards male children is often exacerbated by other economic factors such as inheritance patterns for land and property going down the male line and the social expectation that parents will pay a dowry to the husband of their daughter, or to his parents. Besides economic and biological factors, there are also religious and cultural beliefs about such issues as ideal family size and the relative value of men over women. All these affect how much will be spent to care for a mother in childbirth, how often she gets pregnant and the spacing between pregnancies.

Solutions

Solutions will need to address all of these economic, cultural and religious issues at some level, alongside improving access to timely, quality care from health professionals.

Family planning

Research has shown that just providing good family planning services to help families control the number and frequency of pregnancies has little impact on either family size or the overall health and well-being of mother and children.[5] Having smaller families is a disadvantage when a large family is your insurance policy for old age and sickness. However where pensions and health insurance are provided, or there is increased economic

ability for people to afford these products, alongside family planning services, family size begins to drop. Furthermore, as more children survive, due to better nutrition and childcare, so the number of pregnancies decreases although overall family size may not. Family planning policy which encourages smaller family size through imposing limits or offering short term economic incentives, leads to a negative effect on the health and education of the children compared to those in larger families. This is because the parents are forced to divert funds from feeding and educating their children into saving for their old age. In other words, reducing family size (and the risks to the woman and each subsequent child of repeated pregnancies) can only be achieved as part of addressing wider economic and development issues. [6] As we shall see later, this is not uncontroversial.

Midwives

Another intervention that may have a significant impact is providing trained midwives and trained birth attendants. Midwives do not just deliver healthy babies, they also ensure throughout the pregnancy that mother and child are healthy. A trained birth attendant can provide care during labour in settings where a midwife may be less readily available, and both midwife and birth attendant can ensure a mother is referred to an obstetric unit if there is a risk of complications at any stage. The United Nations Population Fund (UNFPA) estimates that there is a global shortfall of around 350,000 midwives but by meeting this shortfall we could save up to 3,000 lives each and every day, and reduce other health risks and challenges to mother and baby. However these midwives only really achieve this impact when there is also an emergency referral centre within reasonable travelling distance. [7]

Obstetric care

Increased access to good obstetric care through hospital and clinic-based units provides the essential back-up to midwifery services, allowing more complex needs to be addressed in a clinical setting. This requires funding for training doctors, midwives and birth attendants, both at a basic and an ongoing post-graduate/qualification level. It also means building teams so that community midwives, birth attendants, as well as doctors and nurses in hospitals and clinics all recognise that they are part of a wider team working together for a common aim. Communication between community and hospital is vital, so mutual respect, understanding and channels of communication that builds what is known as a 'Continuum of Care', as well as interdisciplinary training opportunities are part of building an effective response.

For example, the LAMB Hospital in northwest Bangladesh is a Lutheran mission hospital which has developed a 'Home to Hospital' continuum of care for mothers and babies. They include in this the training of village health workers in basic health education for pregnancy, birth planning, child care and family planning, the training of community skilled birth attendants in the villages, the provision of safe delivery units within the community and transport to comprehensive emergency obstetric care in the hospital should complications arise. This care is provided 24 hours per day, seven days per week. This continuum of care, which empowers the communities themselves to take responsibility for the health of their own women and children, has been shown to reduce newborn and maternal mortality significantly. This has been achieved by making health care, normally only accessible to the urban middle classes, available to the rural poor. [8]

Local community

As this example demonstrates, the local community also plays an important role. Neighbours, relatives, schools and other community networks all play a vital part in supporting expectant mothers. Very often at the heart of these networks is a church, mosque, temple or synagogue. In most developing countries, religion shapes the worldview and attitudes to health, women, childbirth, family size, gender balance and so forth. It is essential that any effective strategy to mobilise a community to support and care for pregnant women does so in the context of the religious environment in which the woman and her family live. [9]

Christian health initiatives have long advocated this kind of holistic approach, recognising that all aspects of health are not just physical, psychological or social, but also include spiritual, economic, cultural and political dimensions. We will look more at the underpinning of this later. However, it is worth highlighting that churches and Christian organisations have worked for centuries in improving maternal and newborn health, and continue to this day to be at the forefront actively involved in providing such care. [10]

Controversies

Abortion and sex selection

While women do undoubtedly die as a consequence of back-street abortions, and while there has been a great push to increase access to legal abortions in a clinically managed setting to reduce this risk, recent research has questioned how much impact this has had. Maternal mortality figures have dropped drastically over the last decade – from half a million to 340,000 deaths a year. [11] But when the figures are investigated at a country level, those with legal abortion services have had no greater reduction in mortality than those that do not. [12]

An issue that adds to this is the bias towards male children. Amartya Sen claimed 21 years ago that the world is missing 100 million women due to female infanticide [13] ie killing in infancy or neglecting to death female children to increase the chance of having and raising male children. Recent research has shown that sex selective abortion of girls is an increasing trend in India [14] and China [15] in particular. Over time this has led to a huge surplus of men over women in the two most populous nations on earth, with all the social consequences that can entail, let alone the physical and mental health consequences for women having one or more abortions, and for girls who tend to suffer neglect in the quest for male children. [16]

Even though the practise of sex selective abortion is illegal in both countries, it is still widespread, and has in the past been promoted by some aid agencies and governments. Addressing poverty and access to good health services alone is not enough – political agendas, aid policies,

social attitudes towards women and childbirth, family size and gender balance play a significant role and change much more slowly than economic or medical factors.[17]

Change in social attitudes happens through complex mechanisms, not always amenable to control, and policy alone is often ineffective in initiating and sustaining such change. Popular culture and religion are major forces in this. In countries like Brazil, Kenya and the UK, soap operas have been used to great effect to get health messages into popular consciousness around issues like HIV and AIDS. Also, in Uganda and Senegal, churches and government worked together to address issues around sexual behaviour in the face of the threat of HIV to good effect.[18]

Stillbirths

Another neglected issue is that of stillbirth. Every year there are estimated to be between 2.1 and 3.8 million still births.[19] However, statistics are seldom collected and there is no official reporting of stillbirths by the World Health Organisation and while maternal and neonatal mortality have been strongly recognised in the Millennium Development Goals, stillbirth has not. Yet the impact of giving birth to a dead child at any stage in pregnancy is devastating, not just emotionally, as it can lead to accusations and ostracism for the woman, and even abuse from her husband or wider family. A stillbirth can be seen as divine punishment for a moral failure by the woman, or by the couple, or a sign of some other failure.[20]

Like maternal mortality however, increased access to midwifery and obstetric care during pregnancy and labour can reduce the number of stillbirths dramatically.[21] However, as the definitions of stillbirth and legal time limits on abortion often overlap, there are political issues to do with recognising and addressing this need globally and nationally. Recognising a stillbirth as a human mortality would challenge the assumption that the unborn child should not be afforded full human rights, a view which is necessary to allow legal abortion to be practised.

Vesicovaginal fistulae

In addition to the threats to maternal survival are the challenges to the health of mothers. One of the major long-term health consequences of complications during delivery is vesicovaginal fistulae,[22] whereby damage to the vagina and urethra during childbirth leads to the woman constantly leaking urine. This is not only unpleasant but socially disabling, often leading to divorce and ostracism by family and wider community. It is also both preventable, and in most cases, surgically reversible.

Population and family size

Finally, the issue of family size and birth spacing has political and environmental overtones. There is an emerging view, (though controversial and contested),[23] that limiting family size as a means to reducing the global human population is essential to reduce CO_2 levels and ease demand on raw materials.[24, 25] The United Kingdom Government's Department for International Development (DFID) recognises this in its maternal health strategy.[26] However, the poorest families, who tend to have the largest families for reasons we have already explored, produce negligible CO_2 or consumption of raw materials. When there is uplift in their economic status (and with it, an increase in consumption and CO_2 production) there tends to be a natural reduction in family size. As already discussed, forcing a reduction in family size for the poorest families actually may have a detrimental impact on the health, education and future prospects of children, while achieving negligible environmental benefits.[27]

Christianity and maternal & neonatal health

The Bible is not a textbook on healthcare, let alone a manual on how to care for pregnant women and their newborn children, but it does speak of a God who values human beings at all stages of life, of whatever gender, age or social class. Psalm 139:13-16 speaks of God knowing us in the womb, and having our lives opened out like a book before him, from conception to death.

Children

Psalm 127:3-5 tells us that '*children are a heritage from the LORD, offspring a reward from him. Like arrows in the hands of a warrior are children born in one's youth.*' and Psalm 128:3 likens one's offspring to olive shoots around the family table. The Bible consistently affirms children as a blessing rather than a problem although it is unflinching and unsentimental in its portrayal of family life and its conflicts and challenges (for example the stories of the Patriarchs and their families in the book of Genesis).

Women

Women also are held in high esteem, especially by Jesus, who not only had many female disciples, but was unafraid to cross social boundaries in talking to unrelated women, even those of other races, both things a respectable male Jew of that time would never have done. Furthermore, he did so with care and respect.[28]

Yet, we also know from Genesis 3:16 that the pain and suffering of childbirth are a consequence of the Fall of humanity and so childbirth becomes a curse; dangerous and painful. So there is fallen brokenness from the very moment we are born.

Furthermore, Genesis 3:16 includes the subjugation of women as part of the curse of the Fall so the oppressive social attitudes that detrimentally affect the health of women and expectant mothers and their children are also a consequence of humankind's rejection of God. Thus the hazards to women, both biological and social are not part of the original pattern for humanity, but dimensions of our fallen nature.

Redemption

The Bible is the story of God's salvation of humanity and rescue into a perfect and eternal relationship with God. Part of this story is the New Testament account of Mary, Jesus' mother, and her cousin Elizabeth, both unexpectedly pregnant, both carrying children who will shape the future of humanity.[29] The children recognise each other in the womb,[30] and the mothers recognise that God is at work through their pregnancies. It is in the incarnation of God in the person of Jesus that the curse of Genesis 3 begins to be reversed, as God entered into the everyday danger and frailty of life as a baby in the womb.

Ordinary women are giving birth to children like this all the time, and in entering into this most human of experiences God is dignifying and making sacred the reality of childbirth, infancy and motherhood. In his death on the cross and resurrection from the dead we see the curse of sin and death broken altogether.[31]

Relationships

The Bible shows each human being as a relational creature, embedded in a network of human relationships and primarily in a relationship with God himself, therefore all Christian responses to health and illness of any kind should seek to look at the restoration of these relationships; not just personal and spiritual relationships, but wider social, economic and political ones too.

Christian responses

As a consequence, Christians have run maternity clinics and hospitals, trained midwives, birth attendants and obstetricians, and worked with local communities and churches to improve the health and well-being of women and their children for many years. Christians continue to this day to provide good maternal care throughout the world.

So a Christian response to maternal and neonatal health is to see every life as sacred, known by God from the womb to the tomb, embedded in a network of human relationships and worthy of the utmost care and respect. In cultures where women and children are not valued, we need to be countercultural, showing God's concern and love for every woman and newborn child in how we treat and afford them care and dignity. While childbirth remains hazardous and painful for many, we know that we have the human means to make it significantly less so, and so have an obligation to ensure that no-one is left without care that could save and enrich their lives.

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