



Malin Bogren

Strategy for supporting low-income countries in building a midwifery profession
Malin Bogren
Davidon mount Discontation Drief 2017.00
Development Dissertation Brief 2017:02
Expertgruppen för Biståndsanalys (EBA)

Malin Bogren disputerade år 2016 med avhandlingen "Building a midwifery profession in South Asia" (https://gupea.ub.gu.se/handle/2077/40890?locale=sv) vid Göteborgs universitet, Sahlgrenska akademin, institutionen för vårdvetenskap och hälsa. Hennes mailadress är bogrenupper@gmail.com
The Expert Group for Aid Studies - EBA - is a Government committee analysing and evaluating Swedish international development aid. This report can be downloaded free of charge at www.eba.se
Printed by Elanders Sverige AB
Stockholm 2017
Cover design by Julia Demchenko

Introduction

The past decades have seen significant achievements in global development goals and targets. Some of these have led to better access to sexual and reproductive health care, with a reduced number of unwanted pregnancies, improved access to safe and legal abortions, and with a reduction in maternal and newborn mortality (Bhutta et al., 2010, Shaw et al., 2016). However, for women from poor, marginalized communities, and those living in remote locations, reproductive health related morbidity and mortality remains a serious challenge (Graham et al., 2016).

The global Sustainable Development Goals (SDGs) directly address and call for universal health care, including sexual and reproductive health, and gender equality. Particularly SDG 3: ensure healthy lives and promote well-being at all ages, which includes universal access to sexual and reproductive health reducing maternal and neonatal mortality, and SDG 5: achieve gender equality and empower all women and girls, as well as working towards reduced inequalities (SDG 10).

One critical approach to achieving the above SDGs is the development of a cadre of professional midwives and ensuring their integration into the national health system. Professional midwives are globally recognized as experts on and dedicated to Sexual and Reproductive Health Rights (SRHR) of women and girls (Renfrew et al., 2014). Through this integration of midwives into the health system, access will become universal, and the right to Sexual and Reproductive Health (SRH) will be upheld.

The research presented in this brief focuses on building a midwifery profession in order to promote the rights women and girls. This paper draws largely on my doctoral dissertation "Building a midwifery profession in South Asia". The PhD thesis consists of four peer reviewed and published papers. In the first paper we assessed the situation of the midwifery education, regulation and association in six South Asian countries. In the second paper we conducted a feasibility study of establishing a professional midwifery cadre in Nepal that meets the global standards of competencies, and defined a strategy for achieving this. In the third and fourth papers we explored how actors connected in a system aiming at promoting the establishment of a midwifery profession in Nepal and Bangladesh (Bogren M, 2016). This research is consistent with Sweden's ambition to

remain a dependable partner for global health issues in collaborative countries. This means promoting countries' ability to reduce morbidity and mortality among women and children through offering better access to sustainable and resilient sexual and reproductive health services.

Background

Global maternal health situation

Maternal health refers to the health of women during pregnancy, childbirth and the post-partum period, and is inextricably linked to child health outcomes. Central health care activities for promoting maternal and newborn health, and preventing maternal and newborn morbidity and mortality, are family planning, preconception advice, abortion and post abortion care, as well as care in pregnancy, childbirth and post-partum care (Renfrew et al., 2014, ten Hoope-Bender et al., 2014, ten Hoope-Bender and Renfrew, 2014).

Complications resulting from pregnancy and childbirth remain the leading cause of maternal morbidity and mortality (UNFPA, 2014, Kassebaum et al., 2014b). It was estimated that 303,000 women died of such complications in 2015. The major leading cause of maternal morbidity and mortality is haemorrhage, followed by unsafe abortion, hypertensive disorders, infection, and obstructed labour and the majority of these deaths occur in developing countries. There has however been a decline in the global maternal mortality ratio (MMR) from 380 maternal deaths per 100,000 live births in 1990 to 216 in 2015 (WHO et al., 2015). This decline can be explained by the global strategies to increase the availability of family planning, safe abortion, antenatal care, and skilled attendance during pregnancy, childbirth and the post-partum period (Shaw et al., 2016).

Global maternal rights situation

Maternal health is a human rights concern (Sen and Govender, 2015) which was recognised and gained foothold at the United Nations International Conference on Population and Development (ICPD), held in Cairo 1994. The conference brought together representatives from 180 countries, which ultimately adopted the ICPD Programme of Action, with goals for 2015, and recognised women's health and rights as central in sustaining global development efforts. In 2000 this plan was translated into the

Millennium Development Goals (MDGs), and maternal health was seen as a core element of a comprehensive reproductive health package. Although substantial global efforts have been made, maternal health targets are proving to be the hardest to achieve across the developing world as it is related to women rights (Kassebaum et al., 2014a, Thomas et al., 2014, Lozano et al., 2011). Maternal health targets continues to galvanise global support and feature to be prominently in the SDG's (Silver and Singer, 2014).

Despite the global recognition of women's and newborn's right to health, there are major disparities between wealthy and poor countries. It is well known that health, and specifically that of women during pregnancy, childbirth and early after, is affected by socio-economic factors such as education, household wealth, and place of residence (Koblinsky, 2014). Women's right to health is also influenced by health care systems; the greatest burden of ill health among women and newborns is concentrated in places where health services are inadequate or unavailable. Four key factors have been identified as determining whether a health system and its workforce provide effective coverage: availability, accessibility, acceptability and quality (Campbell J et al., 2013). This means that maternal and newborn health care-related facilities must be available in the nearby community, that the health system poses no financial barrier to accessing health care, and that the health facility is of good quality with competent and enabled health professionals. This includes providing safe and high-quality care to women and the fetus/newborn during pregnancy, labour and the post-partum period, in both rural and urban areas. Hence, women should be assisted by a skilled, competent health care professional who has the necessary competence and resources in place, to provide safe and high-quality reproductive, maternal and new-born care.

It is evident that women's SRHR needs to be promoted urgently in the world today. According to evidence, there is a need for competent, cost effective and skilled health care professionals who have the necessary competence and resources to provide safe and high quality reproductive, maternal and newborn care. The midwifery profession has been identified as the key profession to provide such care (ten Hoope-Bender et al., 2014, Renfrew et al., 2014, ten Hoope-Bender and Renfrew, 2014, UNFPA, 2014). It has been estimated that midwives who are educated and regulated to international standard can provide almost 90 % of the essential care needed for women and newborns; investing in

midwifery education, licensing and deployment to community based services can potentially yield a 16-fold return on investment in terms of lives saved and cots of cesarean sections averted (Renfrew et al., 2014).

This background motivates, in line with what the International Confederation for Midwives proclamation (ICM 2010), the need for professional midwives. This comprises midwives who have all the characteristics a profession should have, i.e.: a scientific body of knowledge and skills, a license to practice, autonomy, an ethical code, and a formal recognition of society (Abbott A, 1988). The findings from my doctoral research (Bogren M, 2016) were relevant both from an academic and policy perspective. From an academic perspective this research contributes to an understanding based on the fact that there is a need for professional midwives, who have all the characteristics a profession must have. Although there are many factors affecting the outcome of maternal and newborn health, such as socio- economic factors and the availability of adequate health care services, the research investigated what is required to build a midwifery profession according to international standards and thus obtain full jurisdiction that legitimises midwives to perform certain services but excludes others.

From a policy perspective such knowledge is important in future strategies addressing rights and equity in human resources planning, that effectively promote and improve maternal and newborn health. The aim of this brief is therefore to elucidate the situation of a midwifery profession in South Asia, and how influential actors connect to one another in the building of a profession, especially in Bangladesh and Nepal.

Material

The research was primarily based on interviews and questionnaires with governments, policy-makers, donors, and academia and non-government organisations with influence in the establishment of the midwifery profession in six countries in South Asia with focus on Bangladesh and Nepal. It builds on a combined method research through the use of a mixed-methods design consisting of two parts: firstly, there was a focus on exploring the midwifery situation in six South Asian countries (Bogren et al., 2012) with a focus on Nepal (Bogren et al., 2013); and secondly, there was a focus on exploring how influential actors were connected to one another in this profession-building in Bangladesh (Bogren

et al., 2015) and Nepal (Bogren et al., 2016). An overview of the research designs is presented in Table 1.

Table 1. An overview of the design of the studies 1-IV.

Studies	Designs	Data	Analysis
I	Explorative, descriptive and comparative	Questionnaires with closed- and open-ended questions	Descriptive statistics and content analysis
II	Explorative and descriptive	Review of policy documents; semi-structured interviews; structured observations of competence and equipment of university colleges and hospital maternity departments	Descriptive statistics and content analysis
III-IV	Explorative and descriptive	Semi-structured interviews	Qualitative analysis

Setting

Six South Asian countries were in focus in this research – Afghanistan, Bangladesh, Bhutan, India, Nepal, and Pakistan (Figure 1). From a global perspective, South Asia has the highest maternal and child mortality ratio after the countries in sub-Saharan Africa (Kassebaum et al., 2014a, Wang et al., 2013). Despite progress in most maternal and child health indicators, data indicates that more work is needed to meet the ambitious SDG 2030 targets (Alkema et al., 2016). In order to provide an understanding of the maternal and child health situation in the six studied South Asian countries, below is a brief overview based on the latest demographic health surveys in the respective countries. Table 2 shows a compiled overview of maternal and child health indicators in the region.

PAKISTAN

New Deihi

Ratmandu

BHUTAN

BANGLADESH

Dhake

Bongar

Ranggon

ARABIAN

SEA

Male

MALDIVES

Figure 1. Map of South Asia

Table 2. Country-specific characteristics related to maternal health and under-five mortality rate

Country	Maternal mortality Ratio	Under-five mortality Rate	Total fertility Rate	% of women received four or more antenatal care visits	% of births delivered at a health facility	% of births attended by skilled attendants
Afghanistan	327	71	5.1	16	32	34
Bangladesh	176	46	2.3	31	37	42
Bhutan	148	69	2.4	77	65	63
India	174	50	2.7	37	40	46
Nepal	258	54	2.6	50	35	36
Pakistan	120	89	3.8	36	48	50

^{*}Source: Compiled data from each of the six South Asian countries' latest National Demographic Health Surveys and WHO's Trends in maternal mortality, 2015

Midwifery as a profession in South Asia

The research reveals that the establishment of a midwifery profession in the South Asia region has made some progress towards a grounded profession, but much remains before it is fully established. There was a considerable variations across countries in curricula, entry level, competencies and requirements for midwifery faculty and availability of

educational resources. Apart from Afghanistan and Bangladesh, midwifery education was combined with nursing education with a curricula lacking international competencies for midwifery education. None of the countries in the region reported having fully established a regulatory framework for midwives; consequently, there were no countries with an officially recognised definition of the midwife, and being a midwife was not recognised as an autonomous profession (Bogren et al., 2012).

In the South Asian context, definitions and concepts related to the midwifery profession have not been fully applied to the characteristics of being a profession. Drawing on the evidence essential for establishing a midwifery profession, the research identified a number of missing characteristics necessary for the establishment of a profession. Examples of such missing characteristics were: a unique body of knowledge and skills (except for Afghanistan and Bangladesh); a clear statement of code of ethics; a defined scope of practice; self-governing-autonomous; and formal recognition by society (Bogren et al., 2012).

Most of the countries were lacking in the ability to regulate the midwifery profession. Nepal for example had no regulatory mechanism protecting midwives and midwifery care to ensure that midwives were educated according to international standards, no access to professional development, and no regulated scope of midwifery practice (Bogren et al., 2012, Bogren et al., 2016). Bangladesh, on the other hand (Bogren et al., 2012, Bogren et al., 2015), had followed international standards on midwifery education and competencies, and thus achieved scientific knowledge and skills, through in-service and pre-service education, regulated by a regulatory body.

Professionalisation and jurisdiction of the midwifery profession in South Asia

The process of gaining professional status, and developing and maintaining market closure of the midwifery profession, the professionalisation of midwives in South Asia took place in the context of membership in professional midwifery associations in which the midwives operated in their profession as a professional group. Examples of this could be dealing with challenges such as the lack of professional recognition, inadequate formal midwifery education, and insufficient midwifery legislation (Bogren et al., 2012).

Bangladesh had organised midwifery into a professional association, and the association was formally recognised. However, the profession was yet not recognised as an autonomous profession with a protected title (Bogren et al., 2012, Bogren et al., 2015).

In Nepal, on the other hand, the professional association for midwives had gained formal recognition by the government. Although, the association had not fully convinced the government to establish a midwifery profession separate from the nursing profession. Thus, the move of midwifery from an occupation to a profession was accompanied by a series of barriers such as different political interests and priorities, divergent academic opinions on a midwifery profession, and poor communication among the involved actors promoting the establishment of a midwifery profession in the country (Bogren et al., 2013, Bogren et al., 2016).

Nepal was still struggling to gain status and a formal control, and was seeking status and recognition for the profession and its work. For the midwifery profession to achieve full jurisdiction in Nepal, midwifery services and education need to be protected through legislation and public regulation, including licensing rules. This was true also for Bangladesh (Bogren et al., 2012, Bogren et al., 2015). Although Bangladesh had a body regulating the midwifery education, there was no official recognised definition of the midwife, midwives were not recognised as an autonomous profession, and the profession did not hold a protected title (Bogren et al., 2012).

In Nepal there was a lack of social acceptance for establishing a cadre of midwives (Bogren et al., 2016), which may be related to there being no demand to have the midwifery profession separated from nursing. In the Nepali context, obtaining jurisdiction not only in the legal arenas, but also in the public arenas, would therefore require the midwife to demonstrate competence according to international standards and thus contribute to improving outcomes for women and newborns. However, the prerequisite for the profession to perform such competencies would require, applied competencies and standards for midwifery education and practice based on a regulating framework. Applied standards for education, as well as regulation including licensing, would therefore benefit the midwifery profession in Nepal (Bogren et al., 2012, Bogren et

al., 2013, Bogren et al., 2016), to secure the public's trust in and acceptance of the services the profession provides to women and children.

Connected actors in the establishment of a midwifery profession in Nepal and Bangladesh

The research revealed both system facilitators and barriers that affected the connections between the actors (governments, policy-makers, donors, and academia and non-government organisations) in the establishment of the midwifery profession in Bangladesh and Nepal. Table 3 illustrates a summary of how actors connected aiming at promoting the establishment of midwifery in Nepal and Bangladesh.

The actors promoting the establishment of a midwifery profession in Nepal and Bangladesh were connected through a set of identified facilitators. For example, having a common goal was found to be an important dimension; similarly, a joint desire to collaborate to move this common goal forward was another important finding. Having a common goal or following simple rules was found to be essential for the systems' survival.

Table 3. How actors connect in a system aiming at promoting the establishment of midwifery in Nepal and Bangladesh

How actors connect in a system aiming at promoting the establishment of a midwifery profession			
Nepal (Study III)	Bangladesh (Study IV)		
A common goal	Having a common goal		
Desire to collaborate	Contribute with different competencies		
Different political interests and priorities	Move forward through collaboration Challenges to collaborating		
Competing interests from nursing profession and societal views	Create communication channels for visibility Challenges to communicating		
Divergent academic opinions on a midwifery profession	Being dependent on financial and technical support		
Insufficient communication			
Competition for financial and technical support			

The ability to take advantage of the unique competence of each of the actors forming the midwifery system in Bangladesh was supporting the actors in getting closer to reaching

results. The competencies identified in Bangladesh encompassed a broad range within a chain of change, from advocacy to policy change, in order to make final policy decisions in the establishment of a midwifery profession. In the context of Bangladesh the joint contribution of necessary competencies gave the system actors the strength and power to perform, and created a dynamic, thriving system in which the actors were interdependent on each other's resources in order to deliver. Significant results of this were that midwifery curricula and faculty preparation to teach the midwifery curricula had been implemented. (Bogren et al., 2015).

Alternatively, in Nepal, the research showed that rather than utilising each other's competence to advance the establishment of the midwifery profession, there were competing interests from the nursing profession to have midwifery separated from nursing, and the establishment turned into a political territory. Limited progress was made in the establishment of professional midwives in Nepal, which may be a result of not utilising each other's expertise and competence (Bogren et al., 2016).

Although the results noted that both Bangladesh and Nepal had a strong desire to achieve the common goal of reducing the high maternal and child mortality through the establishment of professional midwives, this was often in combination with barriers. In Nepal these barriers involved, for example, different political interests and priorities among the actors, competition over financial and technical support, divergent academic opinions on a midwifery profession, in a combination with insufficient communication.

Barriers involved in Bangladesh's were mostly related to challenges to collaborating and communicating. The level of collaboration varied depending on interest, priorities, and individual philosophies versus organisational mandates. It would appear that newcomers with innovative ideas were denied access on the same terms as others.

Policy implications

Establishing a midwifery profession who are recognised as experts on and dedicated to sexual and reproductive health rights of women and girls is crucial in achieving the SDG 3 and 5. It is acknowledged that focusing on education alone is not enough to establish a midwifery profession. Support for building educational infrastructure, resources, and regulation systems are also required to establish a cadre of midwives that can meet the

needs of women and children. A prerequisite for ensuring that midwives can meet the needs of women and children is that the profession is aligned with and integrated in national policies, and that midwifery strategies are in place to guide the establishment forward. Such an approach will require close connection among all involved actors in terms of their ability to collaborate and utilise each other's competence to achieve results.

This research showed that much remains before the midwifery profession is fully established in South Asia. To establish a midwifery profession in accordance with international standards will require a comprehensive collaborative systems approach. While this research focuses on South Asia, the following strategies can likely be useful in other countries with similar challenges where the midwifery profession is not fully established.

Policy-makers

- Recognise the midwifery profession (aligned with international standards) in national Health Sector Plans.
- Incorporate midwifery as a separate profession in national strategies for human resources for health.
- In partnership with all involved actors develop midwifery policies strategies, including procedures to guide its operations.
- Develop a highest level of regulation which controls the legislative framework of the profession.
- Ensure an enabling environment with supportive and legal framework and overall coordination among the policy, organisational and institutional levels that maximizes midwives' contribution to sexual and reproductive health care.

Civil society (professional midwifery associations, NGOs)

- Improve the population's awareness of the midwives full scope of practice in maternal
 and newborn care, contraceptive advice and/or abortion, post-abortion care and its
 relation to women's rights.
- Educate the wider public about the roles and responsibilities of a midwife, and how
 the midwifery profession differs from that of other health workers, to gain societal

- support for the establishment of midwifery as an independent profession.
- Involve media in the production of public debates on the need for professional midwives to improve the health outcome for mothers and newborns.

Academia

- Ensure midwifery faculty are capacitated to deliver quality and evidence based education as per global standards.
- Ensure midwifery faculty includes predominantly of midwives (teachers and clinical preceptors/clinical teachers) who work with experts from other disciplines as needed
- Identify the necessary human, financial and material resources for starting the midwifery programme.
- In collaboration with all involved actors, develop and implement a midwifery curriculum in line with global standards and national needs.

Bilateral and multilateral organisations

- Ensure a rights perspective is applied and promote preventive approaches and combat structural obstacles and harmful practices, which contribute to the opportunity and rights for women to have control over their sexual and reproductive health, through supporting countries in having well educated midwives.
- Gather all involved actors for joint planning to consolidate growth by engendering better resource flows and enhanced co-ordination of the establishment of the midwifery profession.
- Complementary and synergies at global and regional levels, as an added value to address common challenges in a coordinated and similar manner using existing arenas and platforms.
- Ensure that all competence within the group of actors is fully utilised, to ensure better outcomes in the establishment of the midwifery profession.
- Support capacity strengthening to ensure professional midwives are available for sexual and reproductive health service delivery.
- Support policy dialogue for strategies that effectively improve maternal and newborn

health care especially in the lowest income countries.

Conclusion

The knowledge gained from this research can provide an understanding of the importance of supporting countries at different system levels in building a midwifery profession to provide quality care in the area of sexual, reproductive and newborn health, which in the long term may contribute to poverty reduction and gender equality.

References

- Abbott A 1988. The System Of Professions- An Essay On The Division Of Expert Labour, Chicago, The University Of Chicago Press.
- Alkema, L., Chou, D., Hogan, D., Zhang, S., Moller, A.B., Gemmill, A., Fat, D.M., Boerma, T., Temmerman, M., Mathers, C. and Say, L., 2016. Global, regional, and national levels and trends in maternal mortality between 1990 and 2015, with scenario-based projections to 2030: a systematic analysis by the UN Maternal Mortality Estimation Inter-Agency Group. *The Lancet*, 387(10017), pp.462-474.
- Bhutta, Z. A., Chopra, M., Axelson, H., Berman, P., Boerma, T., Bryce, J., Bustreo, F., et. al. 2010. *Lancet*, 375, 2032-44.
- Bogren M. 2016. Building A Midwifery Profession In South Asia. Diss, University Of Gothenburg. Gothenburg, Kompendiet
- Bogren, M. U., Berg, M., Edgren, L., Van Teijlingen, E. & Wigert, H. 2016. Shaping The Midwifery Profession In Nepal Uncovering Actors' Connections Using A Complex Adaptive Systems Framework. Sex Reprod Healthc, 10, 48-55.
- Bogren, M. U., Van Teijlingen, E. & Berg, M. 2013. Where Midwives Are Not Yet Recognised: A Feasibility Study Of Professional Midwives In Nepal. *Midwifery*, 29, 1103-9.
- Bogren, M. U., Wigert, H., Edgren, L. & Berg, M. 2015. Towards A Midwifery Profession In Bangladesh--A Systems Approach For A Complex World. *Bmc Pregnancy Childbirth*, 15, 325.
- Bogren, M. U., Wiseman, A. & Berg, M. 2012. Midwifery Education, Regulation And Association In Six South Asian Countries--A Descriptive Report. Sex Reprod Healthc, 3, 67-72.
- Campbell J, Buchan J & Cometto G. 2013. Human Resources For Health And Universal Health Coverage: Fostering Equity And Effective Coverage. *Bulletine Of The World Health Organization*, 91, 853-863.
- Fullerton, J.T., Ghérissi, A., Johnson, P.G. and Thompson, J.B., 2011. Competence and competency: core concepts for international midwifery practice. *International Journal of Childbirth*, 1(1), pp.4-12

- Graham, W., Woodd, S., Byass, P., Filippi, V., Gon, G., Virgo, S., Chou, D., Hounton, S., Lozano, R., Pattinson, R. and Singh, S., 2016. Diversity and divergence: the dynamic burden of poor maternal health. *The Lancet*, 388 (10056), pp.2164-2175.
- Icm, 2010. Essential Competencies For Basic Midwifery Practice. http://www.internationalmidwives.org/what-we-do/education-coredocuments/essential-competencies-basic-midwifery-practice/: Iinternational confederation of midwives. [Accessed 1st Of April 2015].
- Kassebaum, N. J., Bertozzi-Villa, A., Coggeshall, M. S., Shackelford, K. A., Steiner, C., Heuton, K. R., Gonzalez-Medina, D., Barber, R., et. al. 2014. *The Lancet*, 384, 980-1004.
- Kassebaum, N. J., Wang, H., Lopez, A. D., Murray, C. J. & Lozano, R. 2014b. Maternal Mortality Estimates Authors' Reply. *The Lancet*, 384, 2211-2.
- Koblinsky, M. 2014. Reducing Maternal And Perinatal Mortality Through A Community Collaborative Approach: Introduction To A Special Issue On The Maternal And Newborn Health In Ethiopia Partnership. *J Midwifery Womens Health*, 59 Suppl 1, S1-5.
- Likis, F. E. 2014. The Lancet Series On Midwifery: A Momentous Opportunity To Improve Maternal And Newborn Health. *J Midwifery Womens Health*, 59, 477-8.
- Lozano, R., Wang, H., Foreman, K.J., Rajaratnam, J.K., Naghavi, M., Marcus, J.R., Dwyer-Lindgren, L., Lofgren, K.T., Phillips, D., Atkinson, C. and Lopez, A.D., 2011. Progress towards Millennium Development Goals 4 and 5 on maternal and child mortality: an updated systematic analysis. *The Lancet*, 378 (9797), pp.1139-1165.
- Renfrew, M.J., McFadden, A., Bastos, M.H., Campbell, J., Channon, A.A., Cheung, N.F., Silva, D.R.A.D., Downe, S., Kennedy, H.P., Malata, A. and McCormick, F., 2014. Midwifery and quality care: findings from a new evidence-informed framework for maternal and newborn care. *The Lancet*, 384 (9948), pp.1129-1145.
- Sen, G. & Govender, V. 2015. Sexual And Reproductive Health And Rights In Changing Health Systems. *Glob Public Health*, 10, 228-42.
- Shaw, D., Guise, J.M., Shah, N., Gemzell-Danielsson, K., Joseph, K.S., Levy, B., Wong, F., Woodd, S. and Main, E.K., 2016. Drivers of maternity care in high-income

- countries: can health systems support woman-centred care?. *The Lancet*, 388 (10057), pp.2282-2295.
- Silver, K. L. & Singer, P. A. 2014. Sdgs: Start With Maternal, Newborn, And Child Health Cluster. *Lancet*, 384, 1093-4.
- ten Hoope-Bender, P., de Bernis, L., Campbell, J., Downe, S., Fauveau, V., Fogstad, H., Homer, C.S., Kennedy, H.P., Matthews, Z., McFadden, A. and Renfrew, M.J., 2014. Improvement of maternal and newborn health through midwifery. *The Lancet*, 384(9949), pp.1226-1235.
- ten Hoope-Bender, P. & Renfrew, M. J. 2014. Midwifery A Vital Path To Quality Maternal And Newborn Care: The Story Of The Lancet Series On Midwifery. Midwifery, 30, 1105-6.
- Thomas, T. N., Gausman, J., Lattof, S. R., Wegner, M. N., Kearns, A. D. & Langer, A. 2014. Improved Maternal Health Since The Icpd: 20 Years Of Progress. *Contraception*, 90, S32-8.
- Unfpa 2014. The State Of The World's Midwifery. Delivering Health Saving Lives.
- Wang, H., Liddell, C.A., Coates, M.M., Mooney, M.D., Levitz, C.E., Schumacher, A.E., Apfel, H., Iannarone, M., Phillips, B., Lofgren, K.T. and Sandar, L., 2014. Global, regional, and national levels of neonatal, infant, and under-5 mortality during 1990–2013: a systematic analysis for the Global Burden of Disease Study 2013. *The Lancet*, 384(9947), pp.957-979.
- WHO 2015. Trends in maternal mortality: 1990 to 2015: Geneva