RECLAIMING REDEFINING RIGHTS

ICPD+25:
Status of SRHR in Asia and the Pacific

PREGNANCY *and* CHILDBIRTH RELATED-MORTALITY *and* MORBIDITY *in* ASIA *and the* PACIFIC REGION

Sai Jyothirmai Racherla

arrow
asian-pacific resource & research centre for women

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ABOUT THIS BRIEF

This brief is part of ARROW's State of the Region Report on Sexual and Reproductive Health and Rights: International Conference on Population and Development (ICPD+25), developed as a result of monitoring of 25 years of implementing the ICPD programme of Action in the region by ARROW and our partners. This is the fifth five-yearly review, research and monitoring report contributing to insights on progress, gaps and challenges to ICPD PoA implementation in the region. This brief provides an overview of the status of SRHR in Asia and the Pacific region with a focus on 19 countries. The monitoring series also includes country level research findings around the status of ICPD implementation in 13 countries in the region.

ASIAN-PACIFIC RESOURCE & RESEARCH CENTRE FOR WOMEN (ARROW)

1 & 2 Jalan Scott, Brickfields, Kuala Lumpur, Malaysia 50470

Telephone (603) 2273 9913/9914/9915
Fax (603) 2273 9916
E-mail arrow@arrow.org.my
Web www.arrow.org.my
Facebook https://www.facebook.com/ARROW.Women
Twitter @ARROW_Women
Youtube youtube.com/user/ARROWomen
Pinterest arrowomen

arrow.org.my

PRODUCTION TEAM

Author: Sai Jyothirmai Racherla
Project Coordinators: Sivananthi Thanenthiran, Sai Jyothirmai Racherla, and Shamala Chandrasekaran
Copy Editor: Charity Yang
Graphic Design: Nicolette Mallari
Photo Credits: Nuamfolio / Shutterstock.com
Juan Alberto Casado / Shutterstock.com
rweisswald / Shutterstock.com
Laszlo Mates / Shutterstock.com

COUNTRY CASE STUDIES

Philippines: Junice Lirza D. Melgar, Alfredo R. Melgar, Joycelyn Salgado, Erickson R. Bernardo, Likhaan Center for Women's Health, Inc. (Likhaan)

PREGNANCY *and* CHILDBIRTH RELATED-MORTALITY *and* MORBIDITY *in* ASIA *and the* PACIFIC REGION

Sai Jyothirmai Racherla

Introduction

In 2017, despite progress towards reducing maternal deaths and morbidity, a disheartening number of 295,000 (UI 279,000 to 340,000) women and young girls continued to die as a result of maternal deaths.[1] Maternal mortality continues to remain unacceptably high, in many countries in the world, including in the Asia Pacific region, and every day in 2017, approximately 810 women died from preventable causes related to pregnancy and childbirth.[2] While progress has been made with a 38% reduction in the global maternal mortality ratio (MMR) since 2000, with the MMR in 2017 estimated at 211 (UI 199-243), this is just not enough progress towards the International Conference on Population and Development (ICPD) PoA and the Agenda 2030 for Sustainable Development maternal mortality reduction targets.[3]

The global adult lifetime risk of maternal mortality for a 15-year-old girl remains a high at 1 in 190, in 2017, as against 1 in 100 in 2000, again which is progress, but not enough progress. What is more serious is that regional variations in the adult lifetime risk of maternal death range between, a high 1 in 37 in Sub-Saharan Africa region, to 1 in 260 in Central and Southern Asia to 1 in 4800 in Europe and Northern America. This high number of maternal deaths, almost 94% occurring in low and lower middle-income countries points to inequalities in access, affordability, availability of quality health services, and a gross violation of equality, equity and the fundamental human right to health.

Pregnancy and childbirth-related mortality and morbidity remains a key challenge to be addressed in the Asia Pacific region, especially in Southern Asia. The risk of maternal mortality is highest for adolescent girls.[4] The irony of these premature maternal deaths and morbidities is that most maternal deaths up to 90% are avoidable, as the health care solutions to prevent and manage these complications are well known and hence, constitute a gross violation of human rights. Many more women and girls suffer serious morbidities, which have severe consequences for enjoyment of human rights and overall well-being of women and girls in the region. External factors such as non-responsive health systems at country level, poor infrastructure, poverty, and conflicts have further aggravated the situation in the region.

The irony of these premature maternal deaths and morbidities is that most maternal deaths up to 90% are avoidable, as the health care solutions to prevent and manage these complications are well known and hence, constitute a gross violation of human rights.

International commitments such as the International Conference on Population and Development (ICPD) Programme of Action (PoA); Beijing Platform for Action (BPfA); the World Health Assembly resolution 69.2 and the report A68/16; the General Assembly resolution 70/1 – Transforming our world: the 2030 Agenda for Sustainable Development and the Addis Ababa Action Agenda of the Third International Conference on Financing for Development; and the Secretary-General's renewed Global Strategy on Women, Children and Adolescents Health have prioritised maternal health, specifically maternal mortality reduction and this is seen as a stepping stone to not only reducing maternal deaths but also improving overall maternal health and well-being.

The ICPD PoA calls upon countries to:

- achieve a rapid and substantial reduction in maternal morbidity and mortality (ICPD PoA para 8.20);
- reduce the differences observed between developing and developed countries, and disparities within countries, between geographic regions, socio-economic and ethnic groups should be narrowed (ICPD PoA para 8.20 and para 8.22)
- reduce greatly the number of deaths and morbidity from unsafe abortion (ICPD PoA para 8.20);
- improve health and nutritional status of women, especially of pregnant and nursing women (ICPD PoA para 8.20);
- expand the provision of maternal health services in the context of primary health care, based on the concept of informed choice, which should include education on safe motherhood, effective prenatal care, maternal nutrition programmes, adequate delivery assistance, provision of obstetric emergencies, referral services for pregnancy, childbirth and abortion complications, post-natal care and family planning and assist all births by trained persons (ICPD PoA para 8.22); and

- take measures to prevent, detect and manage high-risk pregnancies and births, particularly adolescents and late parity women (ICPD PoA para 8.23).

The above action areas of the ICPD PoA underpin a range of human rights that are directly implicated by maternal mortality and morbidity, namely, the "right to life, to be equal in dignity, to education, to be free to seek receive and impart information, to enjoy the benefits of scientific progress, to freedom from discrimination, and to enjoy the highest attainable standard of physical and mental health, including sexual and reproductive health and rights."

Maternal Health and Well Being and Human Rights Frameworks

Maternal mortality and morbidity and maternal health and well-being are being recognised in the arena of the Human Rights Council (HRC) spaces, including the Universal Periodic Law review mechanism, the Committee on the Elimination of all Forms of Discrimination Against Women (CEDAW), and International Covenant on Economic Social and Cultural Rights (ICESCR).

The Universal Periodic Review in the first three years of its process saw over 50 recommendations raised by governments to other governments on improving maternal mortality and morbidity.[5]

The Human Rights Council has highlighted maternal mortality as an issue bearing not just on development but also on human rights.[6, 7] This framing of the issue from the human rights lens should further enable accountability towards maternal mortality and morbidity.

In March 2009, 83 governments in a joint statement delivered to the UN HRC, reaffirmed their commitment to addressing maternal mortality as a human rights issues and called upon UN HRC to take decisive action to address maternal mortality. Further to this, in June 2009, UNHRC adopted resolution 11/8, entitled "Preventable maternal mortality and morbidity and human rights"[8] with a solid 69 governments co-sponsoring the resolution, and this was the first intergovernmental recognition of maternal mortality and morbidity as a human rights issue, a huge paradigm shifts indeed to articulate maternal mortality and morbidity as a human rights issue at the UN space.[9]

Subsequent resolutions, in September 2010 "Preventable maternal mortality and morbidity and human rights: follow-up to Council resolution 11/8", additionally recognised maternal health as a human right;[10] the resolution adopted (A/HRC/18/L.8) in 2011, encouraged States and other relevant stakeholders to take action at all levels to address the interlinked root causes of maternal mortality and morbidity, such as poverty, malnutrition, harmful practices, lack of accessible and appropriate health-care services, information and education, and gender inequality, and to pay particular attention to eliminating all forms of violence against women and girls. Another resolution in 2016 ((A/HRC/33/L.3/Rev.1) on maternal mortality decided to convene, at its thirty-fourth session, a panel discussion on the linkages between Sustainable Development Goals 3 and 5 in relation to preventable maternal mortality and morbidity and sexual and reproductive health and rights.[11] Treaty Monitoring Bodies and the system of the "UN special procedures" have also made contributions to hold governments accountable, in relation to maternal mortality.

The Committee also established that governments outsourcing services to private health-care institutions remain directly responsible for, and must regulate and monitor the actions of, these institutions.

In August 2011, the Committee on the Elimination of Discrimination against Women (CEDAW) issued a decision. The reference case, Alyne da Silva Pimentel v. Brazil established that States have a human rights obligation to guarantee women of all racial and economic backgrounds timely and non-discriminatory access to appropriate maternal health services. The Committee also established that governments outsourcing services to private health-care institutions remain directly responsible for, and must regulate and monitor the actions of, these institutions.[12] These cases serve as positive opportunities for national and international accountability.

The above paragraphs underpin the existence of a range of international human rights and development norms and standards, addressing maternal mortality and morbidity at the global level. These international norms and commitments from the Member States go a long way towards ensuring accountability of duty bearers to women including young women.

Closer to home in the Asia Pacific region, the sixth Asia Pacific Population Conference, prioritised actions call to:

> *Eliminate preventable maternal and newborn mortality and morbidity through increasing the proportion of births attended by skilled health personnel, particularly in developing countries, the use of prenatal and postnatal care, access to family planning services and information, access to emergency obstetric and newborn care, and management of complications arising from unsafe abortion and comprehensive abortion care where it is not against the law, as well as training and equipping health service providers and take other measures to ensure that abortion is safe and accessible in order to safeguard the lives of women and girls.*[13]

Data

Given the above international commitments pertaining to maternal health and well-being, in the subsequent sections, we will monitor how far governments have implemented the commitments at the national level as serious gaps continue to exist in further reducing maternal mortality and morbidity and ensuring maternal health and well-being in many countries in the Asia Pacific region.

Through the below identified rights-based indicators, we will monitor the progress towards the ICPD PoA recommendations on maternal mortality, morbidity, maternal health and well-being, its implementation, progress, gaps and challenges:

1. The indicators, maternal mortality ratio (MMR) and the lifetime risk of maternal death, provide a measure of the extent of maternal deaths and the risk associated with childbirth for women of reproductive age in respective countries. These indicators will help assess the magnitude of maternal deaths in the countries in the region. At the same time, causes of maternal deaths are also discussed.

2. The indicators relating to preventing maternal deaths such as emergency obstetric care (EmOC), skilled attendants at birth, as well as postpartum care, will help assess the extent to which these critical interventions are available in the countries under review and their access and utilisation in the ARROW ICPD+25 countries.

3. The indicator relating to the promotion of maternal health, which is utilisation of antenatal care for at least 4 visits, is another key maternal health and well-being indicator that will help assess the availability of antenatal care services for pregnant women in the ARROW ICPD+25 countries under review.

4. The situation of maternal morbidities will be assessed using indicators relating to maternal morbidity conditions such as obstetric fistula and uterine prolapse.

Overall, the above set of key maternal health and well-being indicators aim to provide an assessment of the extent of improvements in the reduction of maternal deaths in the respective countries, as well as the availability and access to critical interventions that can prevent maternal deaths and promote maternal health.

There is a need to distinguish between maternal death and maternal health because a woman's health status does not a guarantee that she will have a risk-free delivery. This distinction between preventing maternal deaths and promoting maternal health has significant implications on setting priorities, framing strategies, designing programmes, and on choosing indicators to use for monitoring and evaluation of the reduction in maternal mortality and improving maternal health.

While improvements in maternal health and well-being of a pregnant woman, including the overall physical, mental, and emotional health during and before pregnancy, is very important, further efforts are needed in terms of interventions such as universal access to emergency obstetric care (EmOC) during childbirth, access to skilled birth attendance and postpartum care which will guarantee reduction in maternal mortality. It needs to be underscored that all pregnant women are at risk of developing complications at any time during pregnancy, at delivery, or in the postpartum period, and hence, skilled attendance, functional health systems, and community support remain fundamental to reduction of maternal mortality and morbidity in the region.

TABLE 1: TRENDS IN MATERNAL MORTALITY

	MMR Point Estimate 2000	MMR Point Estimate 2010	MMR Point Estimate 2017	Number of Maternal Deaths	Lifetime Risk of Maternal Deaths 1 in:	ICPD Target of 75/100,000 Live Births High MMR Countries and 60/100,000 Live Births for Countries With Intermediary MMR Rates
EAST ASIA						
China	59	36	29 (UI 22-35)	4,900	2,100	Yes
Mongolia	155	66	45(UI 36-56)	35	710	Yes
SOUTH ASIA						
Bangladesh	434	258	173 (UI 131-234)	5,100	250	No
India	370	210	145 (UI 117-177)	35,000	290	No
Maldives	553	305	186 (135-267)	1,100	230	No
Nepal	286	191	140 (UI 85-229)	8,300	180	No
Pakistan	125	67	53 (UI 35-84)	4	840	Yes
Sri Lanka	56	38	36 (UI 31-41)	120	1300	Yes
SOUTH EAST ASIA						
Cambodia	488	248	160 (UI 116-221)	590	220	No
Indonesia	272	228	177 (UI127-254)	8,600	240	No
Lao PDR	544	292	185 (UI 139-253)	310	180	No
Malaysia	38	30	29 (UI 24-36)	150	1,600	Yes
Myanmar	340	265	250 (UI 183- 351)	2,400	190	No
Philippines	160	144	121 (UI 91-168)	2,700	300	No
Thailand	43	42	37 (UI 32-44)	270	1,900	Yes
Vietnam	68	47	43 (UI 32-61)	700	1,100	Yes
PACIFIC	**(Overall SRHR Intersectionality Analysis)**					
Fiji	51	39	34 (UI 27-43)	6	6	Yes
Papua New Guinea	249	168	145 (UI 67-318)	340	340	No
Samoa	88	58	43 (UI 20-97)	2	2	Yes

Source: WHO et al., Trends in Maternal Mortality 2000 to 2017: Estimates by WHO, UNICEF, UNFPA, World Bank Group and the United Nations Population Division.[14]

1. Maternal Mortality

Measurements of Maternal Mortality

The International Conference on Population and Development (ICPD) Programme of Action (PoA) urged countries to strive to affect significant reduction in maternal mortality by the year 2015. Further to this the PoA notes that countries with intermediate levels of mortality should aim to achieve a maternal mortality rate below 60 per 100,000 live births by the year 2015, and countries with the highest levels of mortality should aim to achieve a maternal mortality rate below 75 per 100,000 live births by 2015. In addition to this the SDG health target 3.1 calls for a reduction in the global maternal mortality ratio to less than 70 per 100,000 live births by 2030. It is important to note here that measurements of maternal mortality are crucial indicators, however it is important that we acknowledge to equally measure and move beyond mortality and survival measurements in addressing maternal health and well-being.

a. Maternal Mortality Ratio (MMR) and Maternal Deaths

Monitoring the MMR against the ICPD target of *reducing maternal mortality by 75/100,000 live births by 2015 in countries with the highest levels of maternal mortality and 60/100,000 live births by 2015 in countries with intermediate levels of maternal mortality*, it is noted that only 9 of the 19 ICPD+25 countries under review were able to meet the ICPD target on maternal mortality reduction. Further to this, the agenda 2030, target 3.1 notes that by 2030, the aim is to reduce the global maternal mortality ratio to less than 70 per 100,000 live births, which is the new target that countries are working towards.

The most recent MMR estimates in 2017, also point to a high maternal mortality of 415 (UI 396-477) about 130,000 maternal deaths, in the least developed countries (LDCs), (12 Asia- Pacific countries fall in the category of LDC countries) and this is 40 times higher than that of the MMR in Europe (10 ; UI 9-11).[15] Further to this, moderate MMR (100-299) is estimated in Oceania, excluding Australia and New Zealand, Southern Asia, South Eastern Asia and in small island states. Four subregions, Australia and New Zealand, Central Asia, Eastern Asia, and Western Asia in the region have reported low MMR (<100).[16]

Southern Asia accounted for approximately 20% of the global maternal deaths at 58,000 maternal deaths and South Eastern Asia accounted for over 5% at 16,000 maternal deaths.

A country level breakdown of MMR points to very high MMR in Afghanistan (638 MMR Point prevalence in 2017).[17]

The SDG health target 3.1 calls for a reduction in the global maternal mortality ratio to less than 70 per 100,00 live births by 2030. It is important to note here that measurements of maternal mortality are crucial indicators, however it is important that we acknowledge to equally measure and move beyond mortality and survival measurements in addressing maternal health and well-being.

India reported the second highest estimated maternal deaths after Nigeria at 35,000, contributing to 12% of global maternal deaths. Among the other countries in the region, Bangladesh(173), Cambodia (160), India (145), Indonesia (177), Lao PDR (185), Myanmar (250), Nepal (186) , Pakistan (140) , Papua New Guinea (145), and the Philippines (121) all have particularly high maternal mortality ratios based on point prevalence estimates in 2017, of over 100 deaths per 100,000 live births. Bangladesh, Indonesia, Lao PDR according to certain projections will be able to meet the target of SDGs, however the rest of the countries above might take another 26 years to reach the targets.[18]

Inequities and the reduction in the disparities among countries, which is one of the action points in the ICPD PoA, needs to be addressed on an urgent basis. It is important to emphasise that the SDG target should work towards a universal reduction of MMR to 70/100,000 live births within the countries, and not an aggregate national MMR of 70/100,000 live births.

Disparities at the country level are huge across all the ICPD+25 review countries. The Sample Registration System (SRS) report, which also provides MMR data on a regular basis in India, shows MMR is down from 167 in 2011-2013 to 130 in 2014-16. The progress in the reduction of MMR is not uniform, with MMR still high in the Northern states of India, and the Southern states (Kerala, Tamil Nadu, Andhra Pradesh and Telangana) ahead with a decline of MMR from 93 to 77, close to the SDG target of 70 by 2030 under the SDGs. The Empowered Action Group (EAG) states[19] that India has shown progress in reducing MMR from 246 to 188, however this is far from the target.[20]

The region is also facing conservative backlash with family-planning and sexual and reproductive health and rights policies becoming more restrictive, and boosting the pace of progress could be difficult, and for some countries, progress may even slow down.

In a number of these countries, conflict, poverty, and weak infrastructure and health systems combine to make tackling the problem more difficult. Monitoring and reporting are also bigger challenges, meaning that the number of deaths may actually be higher. The region is also facing conservative backlash with family-planning and sexual and reproductive health and rights policies becoming more restrictive, and boosting the pace of progress could be difficult, and for some countries, progress may even slow down.

b. Adult Lifetime Risk of Maternal Death

The adult lifetime risk of maternal mortality is a synthetic estimate which corresponds to the probability of a 15-year-old eventually dying from a maternal cause,[21] assuming she is subjected throughout her lifetime to the age-specific risk of maternal deaths observed for a given population in a given year.

In 2017, the global lifetime risk of maternal mortality nearly halved between 2000 and 2017 with an estimated lifetime risk of dying due to maternal causes still remaining at a high 1 in 190. In the 19 ICPD+25 review countries, one in 180 women in Lao PDR, and Pakistan, one in 190 women in Papua New Guinea (PNG) and Myanmar face a lifetime risk of maternal death. This is considered very high and on the other spectrum, in the ICPD+25 review countries, this risk is observed to be the lowest in China with one on 2100, Thailand with one in 1900, Malaysia with one in 1600 women, and Sri Lanka with one in 1200.

As noted earlier, the huge variations among regions, and countries go against ICPD PoA commitments to reduce disparities between countries and within countries as regional variations in the adult lifetime risk of maternal death range between, a high 1 in 37 in Sub-Saharan Africa region, to 1 in 260 in Central and Southern Asia to 1 in 4800 in Europe and Northern America in 2017.[22]

c. Causes of Maternal Deaths in the Asia-Pacific Region

The WHO systematic analysis of global causes of maternal deaths[23] published in 2014, analysed the global, regional, and sub-regional estimates of the causes of maternal deaths, updating the previous WHO systematic review. Findings from this systematic review noted about 73% (1,771,000 of 2,443,000) of all maternal deaths between 2003 and 2009 were due to direct obstetric causes and deaths due to indirect causes accounted for 27.5% (672,000, 95% UI 19.7–37.5) of all deaths.

Haemorrhage accounted for 27.1% (661,000, 19.9–36.2), hypertensive disorders 14.0% (343,000, 11.1–17.4), and sepsis 10.7% (261,000, 5.9–18.6) of maternal deaths. The rest of deaths were due to abortion (7.9% [193, 000], 4,7–13,2), embolism (3,2% [78,000], 1.8–5.5), and all other direct causes of death (9.6% [235,000], 6.5–14.3).

Findings from the systematic review, on the Asia Pacific region shows haemorrhage in the range of 35.8% to 29.5%, hypertensive disorders in the range of 14.7% to 10.3%, and sepsis in the range of 2.6% to 13.7% of all maternal deaths. The rest of deaths were due to abortion in the range of 0.8% - 7.4%, embolism in the range of 11.5% - 2.2%, and all other direct causes of deaths in the range of 16.8% - 8.3%. Indirect causes accounted for 29.3%- 16.8% of all maternal deaths in the region.

The estimates of causes of maternal deaths, however, need to be examined carefully given that in most of the countries in the Global South and in the Asia Pacific region, reliable data is still a challenge and can result in the misclassification of causes of death, and health service providers are mostly not trained on the cause-of-death certification.

TABLE 2: CAUSES OF MATERNAL DEATH

	Abortion		Embolism		Haemorrhage		Hypertension		Sepsis		Other Direct Causes		Indirect Causes	
	N	% (95% UI)	N	% (95% UI)	N	% (95% UI)	N	% (95% UI)	N	% (95% UI)	N	% (95% UI)	N	% (95% UI)
REGION														
Worldwide	193,000	7.9% (4.7-13.2)	78,000	3.2% (1.8-5.5)	661,000	27.1% (19.9-36.2)	343,000	14.0% (11.1-17.4)	261,000	10.7% (5.9-18.6)	235,000	9.6% (6.5-14.3)	672,000	27.5% (19.7-37.5)
Eastern Asia	420	0.8% (0.2-2.0)	6,500	11.5% (1.6-40.6)	20,000	35.8% (10.9-68.2)	5,900	10.4% (3.9-20.2)	1,500	2.6% (0.4-9.7)	8,000	14.1% (2.0-51.3)	14,000	24.9% (6.4-58.8)
Southern Asia	47,000	5.9% (1.5-17.3)	17,000	2.2% (0.5-6.8)	238,000	30.3% (14.0-54.8	80,000	10.3% (5.8-16.6)	107,000	13.7% (3.3-35.9)	65,000	8.3% (3.3-17.7)	229,000	29.3% (12.2-55.1)
South Eastern Asia	11,000	7.4% (2.8-18.4)	18,000	12.1% (3.2-33.4)	44,000	29.9% (15.2-51.3)	21,000	14.5% (8.4-22.7)	8,100	5.5% (1.8-15.0)	20,000	13.8% (5.6-31.2)	25,000	16.8% (7.8-34.2)
Caucasus and Central Asia	250	4.6% (2.7-8.2)	590	10.9% (6.2-18.2)	1,200	22.8% (17.2-30.3)	790	14.7% (11.6-18.3)	460	8.5% (5.7-13.6)	910	16.8% (12.6-23.2)	1,200	21.8% (16.2-29.9
Oceania	290	7.1% (1.2-22.9)	610	14.8% (1.9-47.6)	1,200	29.5% (8.5-61.7)	560	13.8% (4.9-25·.)	200	5.0% (0.6-18.5)	510	12.4% (2.3-38.7)	710	17.4% (4.7-44.3)

Source: Say Lale et al., "Global Causes of Maternal Death: A WHO Systematic Analysis."[24]

An understanding of causes of maternal deaths enables policy and programme decisions in a targeted manner aiding in the reduction of maternal deaths.[25] (Refer to Table 2). Apart from that, the proportion of sepsis deaths were highest at 13.7% (3.3 – 35.9) in Southern Asia. Based on this systematic analysis, haemorrhage with 27.1% (19.9 – 36.2) remained the leading cause of maternal deaths worldwide and in the Asian regions, with more than two thirds of reported haemorrhage deaths classified as postpartum haemorrhage. Although haemorrhage has been identified as the leading cause of maternal death, it is important for policy and programmatic decision making to unpack haemorrhage related deaths as antepartum, intrapartum, postpartum haemorrhage as we implement maternal mortality reduction measures.

A huge body of evidence suggests that anaemia places women at a higher risk of antepartum and postpartum haemorrhage. Anaemia affects almost half of all pregnant women in low-income and middle-income countries, as a result of iron deficient diets, hemoglobinopathies, micronutrient deficiencies, and infections such as malaria, HIV, and hookworm infestations. The burden of disease and associated maternal mortality, however, are not robustly quantified. Severe anaemia can result in circulatory decompensation, increased cardiac output, an increased risk of haemorrhage, and decreased ability to tolerate, blood loss, leading to circulatory shock and death.[26]

In a recent 2018 study that assessed the association between severe anaemia and maternal death with data from the WHO Multicounty Survey on maternal and newborn health,[27] using multilevel and propensity score regression analyses to establish the relation between severe anaemia and maternal death in 359 health facilities in 29 countries across Latin America, Africa, the Western Pacific, eastern Mediterranean, and southeast Asia, analysed 312,281 women admitted in labour or with ectopic pregnancies, showed that maternal deaths in women with severe anaemia compared with those without severe anaemia were higher, and severe anaemia was also associated with maternal death. The study shows prevention and treatment of anaemia during pregnancy and postpartum should remain a global public health and research priority.[28] These are small sample size multicounty surveys; however, robust evidence of severe anaemia and maternal mortality and morbidity could affect prioritisation of anaemia as an important condition.

Further reviews of observational studies showed a linear association between maternal anaemia and death, with each 10 g/L increase in maternal haemoglobin associated with a 29% reduction in maternal mortality.[29] The WHO global targets call for a 50% reduction in anaemia in women of reproductive age by 2025 relative to 2010, and this should be implemented in the maternal health strategies of countries.[30]

Complications of delivery and obstructed labour were responsible for 2.8% of all maternal deaths worldwide, both reported within 'other direct causes' category, which accounted for 9.6% of maternal deaths worldwide. More than 70% of indirect causes of death were from pre-existing disorders including HIV exacerbated by pregnancy.[31]

Abortion related deaths remain high in South-eastern Asia (7.4%), and Southern Asia (5.9%). A small proportion of deaths, 0.8% (0.2-2.0) as a result of abortion were reported in Eastern Asia, where the grounds on which abortion is permitted are liberal. Deaths attributed to unsafe abortion are predominantly caused by severe infections or bleeding that resulted from the unsafe abortion procedure, or due to organ damage. Some women suffer long-term health consequences including infertility, while many more have a short-term illness.[32]

Embolism accounted for more than the global average in both South-eastern Asia (12.1%) and Eastern Asia (11.5%). Policy and programme direction to improve maternal health in these regions need to examine embolism and its management. Maternal deaths as a result of indirect causes[33] were highest in Southern Asia at 29.3% and emanated from pre-existing disorders.

Gender-based violence, domestic violence and intimate partner violence is also contributing factors to maternal deaths and morbidities in the region. According to an ARROW study in 2010, maternal deaths due to gender-based violence is equal to that of deaths from unsafe abortion in developing countries. it is estimated that the prevalence of violence a woman experiences during pregnancy is 4% to 32%.

From the above, we concur that the causes of maternal deaths are known and interventions need to be implemented strategically. On the ground, gaps exist in the interventions for both direct and indirect causes of maternal deaths and health systems, and governments

and stakeholders including communities need to work in tandem to address the specific causes of maternal deaths in respective countries, in a systematic manner.

2. Interventions To Prevent Maternal Deaths

a. Emergency Obstetric Care (EmOC)

Evidence notes that approximately 15% of all expected births result in life threatening complications during pregnancy, delivery or postpartum period.[34] Universal access to EmOC is essential to reducing maternal mortality and this requires all pregnant women have universal access to well-functioning EmOC facilities including skilled health personnel.

Emergency Obstetric Care (EmOC) services include improving the availability, accessibility, quality and use of services for the treatment of complications that arise during pregnancy and childbirth and is a proven way to reduce maternal mortality. According to the EmOC guidelines published by WHO in 2009, facilities providing EmOC must: exist and function; be geographically and equitably distributed; be used by pregnant women; be used by women with complications; provide sufficient life-saving services; and provide good-quality care.

There are two levels of EmOC services: Basic EmOC that includes administration of antibiotics, uterotonic drugs (used to prevent postpartum haemorrhage) and anticonvulsants, manual removal of placenta or other retained products of pregnancy, and an assisted vaginal delivery as well as perform basic neonatal resuscitation; and a Comprehensive EmOC facility should include all the six interventions of the Basic EmOC, in addition to a caesarean section and safe blood transfusion facilities.[35]

Access to Emergency Obstetric Care (EmOC) services play a pivotal role in saving the lives of women with obstetric complications during pregnancy. Access, availability and use of quality EmOC services go a long way in preventing maternal deaths arising out of obstetric complications.[36] Universal availability and accessibility of EmOC interventions can prevent up to 60% of maternal deaths.

Signal functions for EmOC are the critical interventions to avert maternal mortality. These signal functions assess the readiness of the facilities to provide all the basic and comprehensive EmOC services. A list of clearly defined "signal functions" mentioned below help to assess and monitor the level of care that a facility is actually providing to treat direct obstetric complications. It is

TABLE 3: SIGNAL FUNCTIONS USED TO IDENTIFY BASIC AND COMPREHENSIVE EMERGENCY OBSTETRIC CARE SERVICES

Basic Services		Comprehensive Services	
		Perform Signal Function 1 to 7, Plus:	
1	Administer parenteral antibiotics	8	Perform surgery (e.g. caesarean section)
2	Administer uterotonic drugs (i.e. parenteral oxytocin	9	Perform blood transfusion
3	Administer parenteral anticonvulsants for pre-eclampsia and eclampsia (i.e. magnesium sulfate)		
4	Manually remove the placenta		
5	Remove retained products (e.g. manual vacuum extraction, dilation and curettage)		
6	Perform assisted vaginal delivery (e.g. vacuum extraction, forceps delivery)		
7	Perform basic neonatal resuscitation (e.g. with bag and mask)		

Source: WHO et al., Monitoring Emergency Obstetric Care: A Handbook.[37]

important to note that the signal functions are used to classify facilities on the basis that these functions have been performed in the past 3 months.[38]

Access, availability and use of quality EmOC services go a long way in preventing maternal deaths arising out of obstetric complications. Universal availability and accessibility of EmOC interventions can prevent up to 60% of maternal deaths.

In Bangladesh, an assessment was conducted in all the public and private facilities providing obstetric care to in-patients in 24 districts and data was collected on the performance of signal functions. The assessment looked at the proportion of facilities providing EmOC services by type of facilities and by district. Caesarean section (CS) delivery and blood transfusion (BT) services (the two major components of comprehensive EmOC) were respectively available in 6.4 (0.9 public and 5.5 private) and 5.6 (1.3 public and 4.3 private) facilities per 500,000 population. The signal functions for basic EmOC, except two (parental anticonvulsants and assisted vaginal delivery), were available in a minimum of 5 facilities (public and private sectors combined) per 500,000 population. A major inter-district variation in the availability of signal functions was observed in each public-sector and private-sector facility. Among the various types of facilities, only the public medical college hospitals had all the signal functions. The situation was poor in other public facilities at the district and sub-district levels as well as in private facilities. It needs to be noted that these EmOC interventions need to be placed in all the public and private facilities and governments need to regulate the private facilities to ensure these lifesaving interventions are available.[39]

Over the last 15 years, several international and national programmes have been working to improve access to EmOC, although on an inconsistent basis. JHPIEGO has led a consortia of USAID flagship maternal and newborn health (MNH) programmes—Maternal and Neonatal Health (1998–2004), the Access to Clinical and Community Maternal, Neonatal and Women's Health (ACCESS) Program (2004–2009), and the Maternal and Child Health Integrated Program (MCHIP) (2008–2014). These three programmes have focused on maternal and newborn survival through the implementation of evidence-based interventions in low-resource countries designed to accelerate the reduction of maternal, newborn, and child mortality.[40]

The Women's Right to Life and Health Project in Nepal contributes to the National Safe Motherhood Program and maternal mortality reduction efforts by working to improve the availability, quality and utilisation of emergency obstetric care services in public health facilities. The project upgraded 8 existing public health facilities through infrastructure, equipment, training, data collection, policy advocacy, and community information activities. In 5 years, 3 comprehensive and 4 basic emergency obstetric care (EmOC) facilities were established in an area where adequate EmOC services were previously lacking. From 2000 to 2004, met need for EmOC improved from 1.9% to 16.9%; the proportion of births in EmOC project facilities increased from 3.8% to 8.3%; and the case fatality rate declined from 2.7% to 0.3%).[41]

Cross sectional data was collected to compare compliance with UN emergency obstetric care recommendations by public health centres in Pakistan's Punjab and Northwest Frontier Province (NWFP) provinces. The study found that out of 170 facilities, only 22 were providing basic and 37 comprehensive EmOC services in the areas studied. Only 5.7% of births occurred in EmOC health facilities. Almost all indicators were below UN recommendations in 2005.[42]

Between 2008 and 2014, through the MaMoni Program, in Bangladesh, CHWs were trained to provide counselling on prevention of PPH and distribution of misoprostol. As a result of support under the MaMoni Health Services Strengthening project, 106 Union Health and Family Welfare Centers are now providing 24/7 delivery services in program areas in Bangladesh.[43]

India Initiated Standards based management and recognition (SBM-R) approach; increased capacity to provide anaesthesia for EmONC.[44] In India, FOGSI with the Government of India, revised the national curriculum for emergency obstetric care (EmOC) training. This was adopted and is being implemented across all 35 EmOC training centres.

In a 2018 study that assessed the association between severe anaemia and maternal death with data from the WHO Multicounty Survey on maternal and new-born health, shows

prevention and treatment of anaemia during pregnancy and postpartum

should remain

a global public health and research priority.

In India, in a study published in BMJ, in 2018,[45] showed that the "overall capacity for basic intrapartum care [care from the onset of labour to the delivery of the placenta] was lower than the basic Indian Public Health Standards (IPHS) standard in both PHCs and CHCs."[46] The data was collected from the 2012–2014 District Level Household and Facility Survey, which includes a census of community health centres (CHC) and sample of primary health centres (PHC) across 30 states and union territories in India. Results showed about 30% of PHCs and 5% of CHCs reported not offering any intrapartum care. Both PHCs and CHCs failed to meet the national standards for basic intrapartum care capacity. Skilled human resources and emergency obstetric services had many gaps. Poor capacity facilities were more concentrated in the more impoverished states of India. Basic intrapartum care capacity in Indian public primary care facilities is weak in both rural and urban areas, especially lacking in the poorest states with worst health outcomes. The study noted that improving maternal and newborn health outcomes will require focused attention to quality measurement, accountability mechanisms and quality improvement. Policies to address deficits in skilled providers and emergency service availability are urgently required.

Governments need to put in place functional health systems as per the WHO criteria and ensure these services are available through primary health care and referral system across countries to ensure maternal mortality reductions as access to EmOC is squarely related to MMR reduction.

Other factors contributing to lack of utilisation of EmOC facilities include out-of-pocket expenditure for women and their families, non-functional referral system and distance, and non-equitable distribution of health facilities. In addition, limited human resources, lack of transportation facilities, and lack of blood transfusion facilities further impede the effective functioning of EmOC services. Women in rural areas and hard to reach places are most vulnerable as they have limited availability of affordable emergency obstetric care (EmOC) within reasonable geographic proximity. Scarcity of obstetricians and anaesthetists in the public sector combined with financial barriers to accessing private sector obstetrician services pose barriers for these women from availing lifesaving functions of comprehensive EmOC such as C-section.[47]

Further challenges, identified as part of implementation of programmes around EmOC education, training, service delivery and care, remain in reaching the poorest, hard to reach and most vulnerable populations and addressing persistent inequities, such as the shortage of Skilled Birth Attendants in the most vulnerable settings. There are also limited opportunities for providers to access supportive supervision and engage in continuing professional development activities; difficulties in keeping up-to-date clinical guidelines based on emerging scientific evidence; weak recordkeeping and monitoring and evaluation systems that limit opportunities to document both successes and challenges to service delivery; and inadequate financing of country programmes, or conversely, excessive donor dependency that stalls sustained progress.[48]

It is important to note that governments need to put in place functional health systems as per the WHO criteria and ensure these services are available through primary health care and referral system across countries to ensure maternal mortality reductions as access to EmOC is squarely related to MMR reduction.

Other factors contributing to lack of utilisation of EmOC facilities include out-of-pocket expenditure for women and their families, non-functional referral system and distance, and non-equitable distribution of health facilities. In addition, limited human resources, lack of transportation facilities, and lack of blood transfusion facilities further impede the effective functioning of EmOC services. Women in rural areas and hard to reach places are most vulnerable as they have limited availability of affordable emergency obstetric care (EmOC) within reasonable geographic proximity.

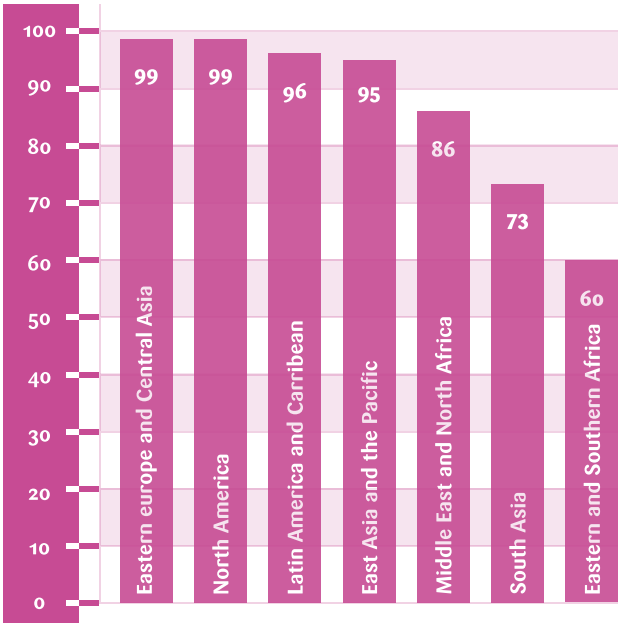
b. Skilled Attendants at Birth

Skilled attendance at birth is critical to the reduction of maternal mortality and morbidity and continues to stay as an indicator in the SDG framework. There is enough evidence to show that the risk of stillbirth or death due to intrapartum–related complication can be reduced by 20% with the presence of a skilled birth attendant.[49] Globally, in 2016, about one in five births (22%) take place without the assistance of a skilled birth attendant although coverage of skilled health attendant at birth has risen from just over 60% in 2000 to nearly 80% in 2016.

It was agreed at the ICPD, that all births should be assisted by trained persons, preferably nurses and midwives, but at least trained birth attendants. Action 64 of the Key Actions for the further Implementation of the ICPD PoA states that by 2010, when maternal mortality was very high, at least 50% of births should have been assisted by skilled attendants and by 2015, at least 60%. The PoA also calls on all governments or countries to make concentrated efforts to achieve the target of 85% of births attended by skilled birth attendants by 2010, and 90% by 2015.

With the 2030 Agenda for Sustainable Development continuing its focus on the reduction of maternal mortality and improving maternal health, and a specific progress indicator focused on "Proportion of births attended by skilled health personnel" (SDG indicator 3.1.2), as well as by the Global Strategy for Women's, Children's and Adolescents' Health, 2016–2030, and by the framework for ending preventable maternal mortality (EPMM), 2015–2030,[51] it is hoped that the global political commitment is translated at the national level, in the countries in the region where SBA continues to lag.

FIGURE 1: COVERAGE OF SKILLED ATTENDANT (SBA) AT DELIVERY BY UNICEF REGION (2011-2016)



Source: "Delivery Care," UNICEF Data.[50]

As shown in Table 4, based on most recent data in 2018, only nine countries out of the 19 ICPD+25 review countries, have met the targets for 2015 of 90%. These countries are China (99.9%) and Mongolia (98.9%) in East Asia; Fiji (99.8%) in the Pacific; Maldives (95.5%) and Sri Lanka (95.6%) in South Asia; and Malaysia (99.5%), Thailand (99.1%), Indonesia (93.6%), and Viet Nam (93.8%) in South-East Asia. It needs to be noted here that trend analysis showed that these countries had a high baseline skilled birth attendance even in 2000, except for Vietnam and Indonesia, which progressed very well in regard to skilled birth attendance from 58.8% in 2000 to 93.8% in 2014.

In South-East Asia, Cambodia (89% in 2014) just misses the target of 90% by 2015. The Philippines (84.4% in 2017), is behind the target for 2015. Myanmar (60.2% in 2015), Lao PDR (64.4% in 2017) accounting for the least progress in South East Asia.

In South Asia, India (81.4% in 2016) has shown progress compared to 42.5% in 2000. Bangladesh (67.8 % in 2017), Pakistan (69.3 % in 2018) and Nepal (58 % in 2016), are way behind the target of 90% SBA by 2015.

Among the countries under review in the Pacific, while Fiji met the target of 90%, Samoa (82.5% in 2014 compared 80% in 1996) and Papua New Guinea (51.3 in 1996 to 53% in 2006) did not make much progress across the years.

Looking at the data in Table 4, we see a direct co-relation between skilled attendance at birth and maternal mortality.

Examining the disparities in coverage around skilled attendance at birth, across countries, and within the countries, large equity gaps existed with rural women, women living in hard to reach areas and regions, poor women, women with less education, and older women left behind without skilled attendance at birth.

TABLE 4: PROPORTION OF BIRTHS ATTENDED BY SKILLED HEALTH PROFESSIONAL

	2000	2010	2015 - 2018	ICPD POA target of 90% by 2015	MMR in 2017
EAST ASIA					
China	96.6	99.6	99.9 (2014)	Yes	29
Mongolia	96.6	98.8	98.9 (2013)	Yes	45
SOUTH ASIA					
Bangladesh	12.1	26.5	67.8 (2017)	No	173
India	42.5	52.3 (2008)	81.4 (2016)	No	145
Maldives	11.9	36 (2011)	58 (2016)	No	186
Nepal	23 (2002)	43 (2011)	69.3 (2018)	No	140
Pakistan	84 (2004)	98.2 (2010)	95.6 (2014)	Yes	53
Sri Lanka	96	98.6(2007)	—	Yes	36
SOUTH EAST ASIA					
Cambodia	31.8	71.0	89 (2014)	No	160
Indonesia	66.3 (2003)	83.1 (2012)	93.6 (2018)	Yes	177
Lao PDR	16.7	40.1 (2012)	64.4 (2017)	No	185
Malaysia	96.6	98.6	99.5 (2016)	Yes	29
Myanmar	57 (2001)	71	60.2 (2016)	No	250
Philippines	58	72.2 (2011)	84.4 (2017)	No	121
Thailand	99.3	99.6 (2012)	99.1 (2016)	Yes	37
Vietnam	58.8	91.9 (2011)	93.8 (2014)	Yes	43
PACIFIC	**(Overall SRHR Intersectionality Analysis)**				
Fiji	96.9	99.7	99.8 (2016)	Yes	34
Papua New Guinea	39 (2004)	53 (2006)	—	No	145
Samoa	80	80.8 (2009)	82.5 (2014)	No	43

Source:
United Nations, "Indicator 3.1.2, Series: Proportion of Births Attended by Skilled Health Personnel (%) SH_STA_BRTC." [52]

Definition of Percentage of births attended by skilled health personnel (generally doctors, nurses or midwives) is the percentage of deliveries attended by health personnel trained in providing lifesaving obstetric care, including giving the necessary supervision, care and advice to women during pregnancy, labour, and the postpartum period, conducting deliveries on their own, and caring for newborns. Traditional birth attendants, even if they receive a short training course, are not included.

From the data available in most recent demographic and health surveys (DHS), in 12 countries of the 19 countries under review, an analysis around the background characteristics of rural-urban, wealth quintiles and education show the following results:

One significant trend across the countries with DHS, shows a lower proportion of births attended by skilled personnel for women age 35-49 years thus, placing these women at greater risk of neglect. In Nepal, a lower proportion of births to women above the age of 35-49 (42%) were delivered by skilled providers.[53] Further to this, only 27% of sixth- and higher-order births were delivered by a skilled provider.

The rural urban gap continues to remain in the region, despite progress in the past 15 years, with approximately 67% of births among rural mothers attended by skilled health personnel, compared to about 90% of births among urban mothers. Mothers residing in urban areas had a higher proportion of births assisted by health professionals (83%) than their counter parts residing in rural areas (64%) in the Philippines.[54]

In Maldives, urban women receive assistance from a trained health professional during childbirth more often than rural women (99% and 93%, respectively).[55] Similarly, in Indonesia, more than 9 in 10 urban births are delivered by a skilled provider compared with 75% of rural births.[56]

In Myanmar, skilled assistance during delivery is much more common in urban areas at 88% compared to 52% in rural areas.[57] Whereas in Cambodia, 98% of women in urban areas are likely to be assisted by skilled health personnel in comparison to 88% in rural areas.[58] This disparity, however, is quite wide in Lao PDR and Pakistan. In Lao PDR, the proportion of urban women assisted by a health professional is at 80% compared to 31% among women in rural areas.[59] In Pakistan, the births in urban areas are more likely to be assisted by a skilled health provider (71%), than the births in rural areas (44%). It is also noted that 9 in 10 (88%) births in ICT Islamabad are attended by a skilled health provider, as compared with 18% in Balochistan.[60]

The number of ANC visits has a significant co-relation with skilled attendance at birth. As a recommendation, it will be important to simultaneously work to improve the number of ANC visits for pregnant women. The percentage of births assisted by a skilled provider is highest among mothers having 4 or more ANC visits (82%) according to the Philippines' DHS of 2013.

Education also plays a significant role in access to skilled attendance at birth. Mothers with at least some college education reported a 90% attendance by skilled health personnel at birth in the Philippines.[61] In Maldives, educated women have higher rates of skilled attendance at birth in comparison to women with no formal education (92-99% compared with 85%, respectively).[62] Women with primary school education (89%) and women with a secondary education or higher (97%) are more likely to receive skilled attendance at birth, than women with no education (72%).[63]

This disparity is highest in Nepal and Myanmar. In Nepal, only 38% skilled birth attendance is reported among women with no education compared to 85% among mothers with an SLC/secondary education or above.[64] In Myanmar, births to women with more than secondary education are three times (95%) more likely to receive skilled assistance at delivery than women with no education (28%).[65]

Wealth is another background characteristic that has a positive association with skilled birth attendance. While globally large disparities in delivery care are observed in women within the richest 20% of their countries' population, as they are about 2 times more likely than women in the poorest quintile to have a skilled birth attendant at delivery (90% versus 46%, respectively).[66] Women belonging to the highest wealth quintile reported a 96% skilled attendance at birth in the Philippines.[67] This disparity is higher in Myanmar and Nepal. In Myanmar, births in the highest wealth quintile are almost three times more likely to be assisted by skilled providers than those in the lowest quintile (97% versus 36%, respectively).[68] In Nepal, births to women in the highest wealth quintile are almost three times more likely to be assisted by a skilled health provider compared to births to women in the lowest wealth quintile (89% and 34%, respectively).[69]

New developments are taking place in defining what constitutes skilled birth attendance, with the 2018 joint statement by the World Health Organization (WHO), the United Nations Population Fund (UNFPA), the United Nations Children's Fund (UNICEF), the International Confederation of Midwives (ICM), the International Council of Nurses (ICN), the International Federation of Gynecology and Obstetrics (FIGO) and the International

Pediatric Association (IPA) presenting the 2018 definition of skilled health personnel providing care during childbirth (also widely known as a "skilled birth attendants" or SBAs). It results from the recent review and revision of the 2004 joint statement by WHO, FIGO and ICM titled: *Making Pregnancy Safe: The Critical Role of the Skilled Attendant*.

According to this joint statement, skilled health personnel, as referenced by SDG indicator 3.1.2, are competent maternal and newborn health (MNH) professionals who are educated, trained and regulated according to the national and international standards. They are competent to:

(i) provide and promote evidence-based, human-rights based, quality, socio-culturally sensitive and dignified care to women and newborns;
(ii) facilitate physiological processes during labour and delivery to ensure a clean and positive childbirth experience; and
(iii) identify and manage or refer women and/or newborns with complications.

In addition, as part of an integrated team of MNH professionals (including midwives, nurses, obstetricians, paediatricians and anaesthetists), they perform all signal functions of emergency maternal and newborn care to optimise the health and well-being of women and newborns.

The main differences between the 2004 and the 2018 definition of skilled health personnel providing care during childbirth are that, under the revised definition, these are personnel who can provide effective, uninterrupted and quality care because they are: (a) competent MNH professionals who hold identified competencies; (b) educated, trained and regulated according to national and international standards; and (c) supported within an enabling environment comprising the six building blocks of the health system.

At this juncture, however, it is important to assess the challenges at the national level to train health professional based on the new international standards and definition (FIGO, ICM, ICN, IPA, WHO, etc) and operationalise skilled birth attendance. This calls for huge investments in capacity strengthening of existing workforce. The new standards of practice may require adaptation to country and context, potentially including revision of curricula and legislation. Household surveys and administrative data collection methods must also be adjusted and strengthened in accordance with the 2018 joint statement and definition, to support meaningful measurement of SDG indicator 3.1.2.

c. Postnatal Care with Focus on Postpartum Care

The postnatal period following childbirth, is a critical phase in the lives of women, as most maternal deaths occur in the first month after birth, with almost half of postnatal maternal deaths occurring within the first 24 hours, and 66% occur during the first week.[70]

"Postnatal" care refers to all issues pertaining to the mother and the baby after birth up to 6 weeks (42 days).

In this report, we focus on postpartum care, which refers to care within the two days of delivery, and this indicator has been chosen as a large proportion of maternal deaths occur in the first 48 hours after delivery.[71] Key elements of postpartum care in this period for the mother include monitoring for blood loss, pain, blood pressure and other warning signs that can lead to maternal death. The single most common cause of maternal mortality continues to be obstetric haemorrhage, as demonstrated by the latest causes of maternal deaths data presented in this report by subregion.

POST NATAL CARE HIGHLIGHTS

- **Provide postnatal care in first 24 hours for every birth:**
  - Delay facility discharge for at least 24 hours
  - Visit women and babies with home births within the first 24 hours
- **Provide every mother and baby a total of four postnatal visits on:**
  - First day (24 hours)
  - Day 3 (48-72 hours)
  - Between days 7-14
  - Six weeks
- **Offer home visits by midwives, other skilled providers or well-trained and supervised community health workers (CHWs)**
- **Use chlorhexidine after home deliveries in high newborn mortality settings**
- **Re-emphasize and support elements of quality postnatal care for mother and newborn, including identification of issues and referrals.**

Source: WHO et al., "Postnatal Care for Mothers and Newborns: Highlights from the World Health Organization 2013 Guidelines."[72]

Data from the available DHS of the countries under review shows the following trends on postpartum care within two days of delivery.

In Cambodia, 90% of women received postpartum care within the crucial first two days of delivery, with 76% receiving care within four hours of delivery.[73] In Indonesia, 80% of women received postpartum care for their last birth within the critical first two days following delivery, with 56% of women receiving postnatal care less than four hours of delivery.[74] In the Philippines, 72% of women had a postnatal check-up in the first two days after giving birth, with 46% having a postnatal check-up within 4 hours after delivery. In Myanmar, 71% of women with a live birth in the 2 years prior to the survey received a postpartum check-up within the first two days after delivery and 24% did not receive any postnatal check-up.[75]

Examining the disparities in postpartum care, this is not uniform across countries, and within the countries. Large equity gaps existed with rural women, women living in hard to reach areas and regions, poor women, women with less education, and older women with high birth orders left behind without skilled attendance at birth.

The 2014 BDHS data shows 39% of women in Bangladesh received postpartum care from a medically trained provider within 42 hours of delivery, however, it needs to be noted here that a high 61% of women did not receive postpartum care from medically trained provider. In addition, 28% of women received postpartum check-up within the first 4 hours of delivery, but 1 in 9 women did not receive any postnatal check-up.

In Nepal, it was reported that 57% of women received a postnatal check in the first 2 days after the birth, with most check-ups occurring within 4 hours of delivery. However, 42% of women did not receive any postnatal check.

In Pakistan, in the two years preceding the survey, 60% of women received postnatal care for their last birth within the first two days following delivery. Overall, 38% of women had no postnatal check-up.[76] In Maldives, 67% received a postnatal check-up within two days of delivery and 6% of women did not receive any postnatal care.[77]

The data collected in Lao PDR around postnatal care relies on the percentage distribution of women aged 15-49 years who gave birth in a health facility in the two years prior to the survey, according to duration of stay in the health facility. Data based on this indicator shows, 65% of women stayed in the health facility for 12 hours or more after their delivery, 44% of women stayed for 1-2 days and 17% stayed for three or more days. The access to postpartum care cannot be ascertained based on the duration of staying in the health facility.[78] At the same time we need to further interrogate what constituted the postpartum care.

Examining the disparities in postpartum care, this is not uniform across countries, and within the countries. Large equity gaps existed with rural women, women living in hard to reach areas and regions, poor women, women with less education, and older women with high birth orders left behind without skilled attendance at birth.

From the data available in most recent DHS, in 12 countries of the 19 countries under review, an analysis around the background characteristics of rural-urban, wealth quintiles and education show the following results:

In Cambodia, urban women were more likely to receive postpartum care (98%) than rural women (89%) during the first two days after delivery.

In Sri Lanka, women living in estate areas are slightly less likely to be examined (82%) than women in urban and rural areas (over 90% for both). In Nepal, 64% of urban women received postpartum care within 2 days after delivery, as compared with 48% of rural women. In Bangladesh, 56% of urban women received postpartum care. In Maldives, there are only slight differences in postnatal care coverage and timing between women in rural and urban areas.[79] In Pakistan, postpartum care varied widely between urban and rural areas within regions, with the widest gap being observed in Khyber Pakhtunkhwa (64% in urban and 33 % in rural areas). Three in four (76%) mothers in Gilgit Baltistan did not receive a postnatal check-up.

In Cambodia, women with a secondary education or higher (94%) were more likely to receive postnatal care within two days of delivery than women with either no schooling (80%) or only a primary school education (90%). In Indonesia, 9 in 10 women with more than a secondary education received postpartum care within 48 hours. In the Philippines, women who attended college (86%) and those belonging to the highest wealth quintile (92%) are more likely to receive postnatal care within 2 days after delivery than other groups of women.

In Bangladesh, 66% of women who have completed a secondary education or higher received postpartum care within two days of delivery. In Maldives, postpartum care coverage increases with women's level of education and 14% of mothers with no formal education had no postnatal care.[80]

In Nepal, women in the highest wealth quintile were more than twice as likely (81%) to receive postpartum care within 2 days of delivery compared to women in the lowest quintile (37%). In Bangladesh, women in the highest wealth quintile (69%) are much more likely to receive the first postnatal check-up from a medically-trained provider in the first two days after delivery. Postnatal coverage increases with women's level of wealth status. 11% of mothers in the lowest wealth quintile had no postnatal care.

The World Health Organization updated global guidelines on postnatal care for mothers and newborns, addressing the timing and content of postnatal care for mothers and newborns with a special focus on resource-limited settings in low-income and middle-income countries.

In Sri Lanka, no strong differentials are evident for other background characteristics, except education. Postnatal checks by a skilled provider increases as the level of education goes up. Women with primary or no education lack a check-up after their delivery, which is slightly more often than women with at least some secondary education.

In Indonesia, women with higher-order births were less likely to receive postnatal care than those with lower-order births.[81]

Younger women have higher rates of check-up after delivery than older women in Maldives.

Postpartum haemorrhage is one of the main causes of maternal deaths in the region as it accounts for about 22% to 35% of deaths across sub-regions in the region. Despite the realisation of the importance of postpartum care in the overall picture of maternal health, it is not highlighted in the SDG official indicators.

While regional differences exist in access to postpartum care across countries, this is plainly seen in Myanmar with the proportion of women receiving postpartum care in the 2 days after delivery varying from a low of 21% in Chin State to a high of 92% in Magway Region. Similarly, the percentage meeting the recommended timing for the first postnatal check-up varies across regions in the Philippines, from 20% in ARMM to 88% in NCR.

The World Health Organization (WHO) updated global guidelines on postnatal care for mothers and newborns, addressing the timing and content of postnatal care for mothers and newborns with a special focus on resource-limited settings in low-income and middle-income countries. Postpartum haemorrhage is one of the main causes of maternal deaths in the region as it accounts for about 22% to 35% of deaths across sub-regions in the region. Despite the realisation of the importance of postpartum care in the overall picture of maternal health, it is not highlighted in the SDG official indicators.

Overall, post-natal visits have improved across the countries in the region, although it needs to be noted that it is crucial to ensure the quality of the postpartum care provided.

3. Promotion of Maternal Health

This section examines maternal health promotion with regards to antenatal care.

a. Antenatal Care

Many of the negative outcomes of pregnancy can be averted by quality healthcare during pregnancy and childbirth. Antenatal care provides a platform for critical healthcare functions including health promotion, prevention, screening, and diagnosis of diseases. Implementing evidence-based practices during ANC can improve maternal and foetal health outcomes.[82]

The antenatal care coverage (at least four visits) is defined as the percentage of women aged 15-49 with a live birth in a given time period who received antenatal care four or more time.

Although antenatal care remains an important indicator of universal reproductive health service coverage. Antenatal care services can be the avenue for other reproductive health related services, such as screening for hypertension and gestational diabetes, screening for anaemia, provision of information on the danger signs of pregnancy and the benefits of birth preparedness, and provision of information on postpartum contraception.

Monitoring of data in the 19 countries under the ICPD+25 review in the region on the indicators of minimum of four antenatal visit, points to the following results. Table 5 shows that 8 countries out of the 19 surveyed have a 75% and above rate of antenatal care coverage for at least four visits, which means that 75% and more of women have made at least four visits to obtain antenatal care services. These countries are Mongolia (89.6%); Cambodia (75.6%); Indonesia (83.5%); Philippines (84.3%); Thailand (90.8%); Maldives (85.1%); Sri Lanka (92.5%); and Fiji (93.6%).

Data was unavailable on 3 countries, which are China, Malaysia, and Samoa. Information on the quality of care is not available, across all countries.

Lao PDR (36.9%) has the lowest antenatal care coverage in South-East Asia and Pakistan (36.6%), Bangladesh (37.2%) and India (51.2%) have the lowest antenatal care coverage in South Asia, respectively. These countries have higher MMR. It is interesting to note that Nepal (69.4%) and PNG (54.9%) with improved ANC over the years, continue to have high MMR in the region, which is above 215/100,000 live births, thus, pointing to the need for quality antenatal care.

TABLE 5: ANTENATAL CARE COVERAGE (At Least 4 Visits)

	2010 - 2018	MMR in 2017
EAST ASIA		
China	—	29
Mongolia (2011-13)	89.6	45
SOUTH ASIA		
Bangladesh (2013-16)	37.2	173
India (2010-16)	51.2	145
Maldives (2004-09)	85.1	53
Nepal (2011-16)	69.4	186
Pakistan (2007-13)	36.6	140
Sri Lanka (2001-07)	92.5	36
SOUTH EAST ASIA		
Cambodia (2009-14)	75.6	160
Indonesia (2010-13)	83.5	177
Lao PDR (2009-12)	36.9	185
Malaysia	—	29
Myanmar (2010-16)	58.6	250
Philippines (2008-13)	84.3	121
Thailand (2013-16)	90.8	37
Vietnam (2011-14)	73.7	43
PACIFIC		
Fiji	93.6	34
Papua New Guinea (2003-06)	54.9	145
Samoa	—	43

Source:
WHO, "Antenatal Care Coverage Data by Country." [83]

The World Health Organisation (WHO) released comprehensive recommendations in 2016 on routine ANC for pregnant women and adolescent girls, in accordance with the human rights approach. The guide prioritises person-centred care and well-being and not only the prevention of death and disability. These guidelines include recommendations on ante-natal nutrition, maternal and foetal assessment, preventative measures, interventions for common physiological symptoms (e.g. nausea, heartburn, constipation), as well as health system interventions to improve ANC utilisation and quality of care.

The new guide recommends a minimum of eight contacts between the pregnant woman and the healthcare providers providing quality care including medical care, support, and timely and relevant information throughout pregnancy, increasing maternal and foetal assessments to detect complications, and improving support and communication between healthcare providers and pregnant women, which will increase the likelihood of positive pregnancy outcomes. The new model recommends pregnant women to have their first contact during the first 12 weeks of gestation, with following contacts taking place at 20, 26, 30, 34, 36, 38 and 40 weeks of gestation. In addition, health system interventions such as midwife-led continuity of care, community-based interventions to improve communication and support, and task-shifting components of antenatal care delivery are intended to inform the implementation of quality ANC programmes. This also means health systems should ensure that all providers are empowered and equipped with the necessary skills and supplies.

The new recommendations with increased contact will also facilitate the integrated delivery of key maternal, immunisation, antimalarial, tuberculosis and HIV interventions using an ANC platform, thus strengthening the health systems. Through this integrated service delivery approach, the guideline aims to create a momentum for countries to re-think and re-design their health systems to provide women with respectful, individualised, person-centred care at every contact by practitioners with good clinical and interpersonal skills. However huge investments are required to deliver ANC as envisaged in the new ANC guide.

4. Maternal Morbidity

While the reduction in maternal deaths is a key impact we are aiming as part of improving maternal health, it needs to be underscored that the burden of maternal mortality is a small fraction of the overall maternal illness and morbidity associated with pregnancy, childbirth and postnatal period. For every woman who dies of pregnancy related causes, 20-30 others experience acute or chronic morbidity, often with long term disabilities and poor quality of life affecting women's physical, mental and sexual health, body image, social and economic status.[84] High maternal morbidity is a reflection of failure of health systems to achieve maternal health and well-being.

These consequences of maternal morbidity and disabilities are estimated to affect 15-20 million women worldwide each year. The conditions include uterine prolapse, stress inconsistence, hypertension, haemorrhoids, perineal tears, urinary tract infections, severe anaemia, depression, fistula, and ectopic pregnancy. In addition, social consequences such as violence and exclusion as a result of dilapidating morbidity consequences are yet to be measured.[85] These conditions pose severe equality challenges as maternal morbidity is estimated to be highest in low-income and middle-income countries and especially among poorer women.

Addressing maternal morbidity relies also on the difficulty in measuring maternal morbidity in the absence of a common definition, and standard identification criteria, inaccuracy of vital records and inadequate health information systems.[86]

In 2014, the WHO Maternal Morbidity Working Group, achieved consensus from relevant stakeholders at a meeting held in Istanbul, Turkey for the following definition: "Any health condition attributed to and/or complicating pregnancy and childbirth that has a negative impact on the woman's well-being and/or functioning. *Maternal morbidity can be conceptualized as a spectrum ranging, at its most severe, from a "maternal near miss" – defined by the World Health Organization (WHO) as the near death of a woman who has survived a complication occurring during pregnancy or childbirth or within 42 days of the termination of pregnancy – to non-life-threatening morbidity, which is more common by far."* In 2011, WHO published guidelines for defining and identifying a maternal near miss on the basis of clinical

criteria, laboratory markers and management proxies. However, varying definitions of non-severe or non-life-threatening maternal morbidity continue to exist.[87]

The ICPD Programme of Action calls for achieving a rapid and substantial reduction in maternal morbidity and mortality (ICPD PoA para 8.20). The ICPD PoA envisages women who can lead a healthy reproductive and sexual life and remain free from morbidity, disability, fear, and pain. It is important that the current SDG agenda focuses on maternal morbidity in the SRHR targets and indicators as part of universal access to sexual and reproductive health and reproductive rights.

Maternal morbidity requires a global response and it is important to move beyond the mortality framework to include maternal health and well-being as the overarching area of work. The ICPD Programme of Action calls for achieving a rapid and substantial reduction in maternal morbidity and mortality (ICPD PoA para 8.20). The ICPD PoA envisages women who can lead a healthy reproductive and sexual life and remain free from morbidity, disability, fear, and pain. It is important that the current SDG agenda focuses on maternal morbidity in the SRHR targets and indicators as part of universal access to sexual and reproductive health and reproductive rights.

While we acknowledge various maternal morbidity conditions, this ICPD+25 review primarily focuses on obstetric fistula and pelvic organ prolapse. Evidence points to these two morbidity conditions affecting women in the Asia Pacific region.

a. Obstetric Fistula

Worldwide 50,000 to 100,000 women are affected by obstetric fistula, a delipidating condition where an abnormal opening occurs between a woman's genital tract and her urinary tract or rectum. This condition is directly linked to one of the major causes of maternal mortality, which is obstructed labour. The suffering from obstetric fistula extends to constant incontinence, shame, social segregation, and health problems. It is estimated that more than 2 million young women live with untreated obstetric fistula in Asia and sub-Saharan Africa.[88]

Obstetric fistula is preventable and can be avoided by delaying the age of the first pregnancy; the cessation of harmful traditional practices; and timely access to obstetric care. Preventing and managing obstetric fistula contributes to improving maternal health.

The lack of data on this condition, including cross comparable data in the 19 countries, in many ways, reflects the extent to which it is neglected. Fistula persists particularly in areas where the rates of maternal mortality are highest, which includes areas with poor emergency obstetric care, referral systems, and infrastructure, among others.

Obstetric fistula can be explained to result from different causes. These holes in the tissue wall between the vagina and bladder and/or rectum are most prevalent in resource-poor countries, attributable to prolonged obstructed labour and absent or inaccessible remedial prenatal services. Obstructed labour is often due to small pelvic size, resulting from women's youth and premature childbearing and/or malnutrition. Poverty at national health-service and family levels often predisposes pregnant populations to suffer high rates of fistula.

The lack of data on this condition, including cross comparable data in the 19 countries, in many ways, reflects the extent to which it is neglected. Fistula persists particularly in areas where the rates of maternal mortality are highest, which includes areas with poor emergency obstetric care, referral systems, and infrastructure, among others.

Global estimates show an increase of up to 100,000 new cases each year and 2 million affected girls and women. These are probably gross underestimates. Fistula devastates lives of sufferers, who are often expelled by husbands and become isolated from their families

and communities. Failures of states to provide prenatal preventive care (including medically indicated caesarean deliveries) and timely fistula repair, violate women internationally recognised human rights, especially to healthcare, in general and reproductive healthcare, in particular.[89]

In Pakistan, in a study examining the socio-demographic profile of women experiencing signs of obstetric fistula and factors contributing to the development of this condition, using secondary data analysis from Pakistan Demographic and Health Survey 2006-07 shows women of reproductive age (15–49 years), some 3.0%, experienced obstetric fistula signs, whereas, 1.1% were still experiencing the condition at the time of survey. Women from the Punjab region, who delivered by caesarean section, and reported having complications during pregnancy were more likely to develop obstetric fistula. The study concluded for the need for better emergency obstetric care facilities and the availability of a fistula repair service throughout the country.[90]

Examples[91] of mobilising resources for treatment of fistula have shown positive results in Bangladesh. In Cox's Bazaar, Bangladesh, there is an estimated 5,000 women living with vesico-/recto-vaginal fistula. With a global volunteering programme from the UK to identify, treat and manage fistula patients in Cox's Bazaar, where patients were screened, and operated at no cost to the patients in community hospital, results showed that the main themes that influenced fistula patients' health-seeking behaviour included: 1) the patients' knowledge of, family attitudes to, and societal support in accessing maternal health services; 2) the lack of financial means to pay for relevant treatment; and 3) geographical location and navigation of the healthcare system. This intervention successfully demonstrates the impact of international collaboration in raising awareness and treatment of obstetric fistula in LMICs.[92, 93]

b. Pelvic Organ Prolapse

In a study that interviewed twenty-one women on factors enabling women with pelvic organ prolapse (POP) to seek surgery at mobile surgical camps in two remote districts in Nepal, the study highlighted key barriers to seeking care, including long distances to urban areas for appropriate treatment, unaffordable costs, not only because the treatment is expensive, but because of the high costs (direct, indirect and opportunity costs) associated with travelling and undergoing the treatment. Poverty and geographical inaccessibility of health services limit the treatment options available to women.[94] In addition, complex sociocultural norms have an impact on women seeking treatment. Women's inferior status in the society, inequalities in gender roles, and lack of autonomy to make decisions over their bodies, son preference leading to delay in treatment, fear of discrimination, stigma and shame further complicate seeking treatment.[95]

Currently, many of the interventions around morbidity are focused on dealing with the physical well-being of the body. There is still a long way to go to create a holistic perspective within service interventions, which cater for the mental health well-being of women.

Nepal's Supreme Court declared uterine prolapse a human rights issue in 2008, and in response, the government pledged support for hysterectomies, free of charge. According to government data, more than 4,000 women underwent hysterectomies in a twelve-month period from 2012 to 2013. But this focus on surgeries has distracted attention from education, prevention and treatment.[96] When examined more closely, hysterectomies is not the only solution, as drastic low-cost interventions including the pessary ring can provide treatment and care, and prevent prolapses from progressing to surgical necessity.

Currently, many of the interventions around morbidity are focused on dealing with the physical well-being of the body. There is still a long way to go to create a holistic perspective within service interventions, which cater for the mental health well-being of women. Sufferers of uterine prolapse, fistula, and infertility need support services beyond the medical treatment of the actual condition. Counselling and support services for these groups of women are needed. Other groups of women such as those who may also experience stillbirth, miscarriages and post-natal depression, also require appropriate attention, treatment and care.

Summary

Despite considerable moderate progress of MMR (100-299) estimated in Oceania (excluding Australia and New Zealand), Southern Asia accounted for approximately 20% of the global maternal deaths at 58,000 maternal deaths and South Eastern Asia accounted for over 5% at 16,000 maternal deaths. A country level breakdown of MMR points to a very high MMR in Afghanistan (638 MMR Point prevalence in 2017). India reported second highest estimated maternal deaths after Nigeria at 35,000, contributing to 12% of global maternal deaths.

Among the other countries in the region, Bangladesh (173), Cambodia (160), India (145), Indonesia (177), Lao PDR (185), Myanmar (250), Nepal (186), Pakistan (140), Papua New Guinea (145), and the Philippines (121) all have particularly high maternal mortality ratios based on point prevalence estimates in 2017, of over 100 deaths per 100,000 live births. Bangladesh, Indonesia, and Lao PDR according to certain projections will be able to meet the target of SDGs, however the rest of the countries above might take another 26 years to reach the targets. Universal reduction of maternal mortality to 70/100,000 live births as per the SDG target will remain unachievable in many countries in the region.

Access to Emergency Obstetric Care services go a long way in reducing maternal mortality and morbidity. Such facilities providing EmOC must exist and function, be geographically and equitably distributed, be used by pregnant women, be used by women with complications, provide sufficient life-saving services, and provide good-quality care and embedded in primary health care and referral services within the public health systems at the country level. The presence of skilled attendance at birth and postnatal care also go hand-in-hand to robustly reduce maternal mortality and morbidity in the region.

The new guidelines on skilled attendance at birth and antenatal care call for more rigorous health systems support and training of health personnel to provide continuum of quality care on a consistent basis, however many countries in the region are not well equipped to provide these essential maternal health services in functional health systems. Governments in the region need to prioritise spending in the health sector to ensure functional health systems exists and provide quality care. Universal health coverage needs to accommodate a range of sexual and reproductive health services, including contraception, maternal and newborn health services, safe abortion services, treatment of sexually transmitted diseases, including HIV and reproductive tract infections for all women and prioritise all women especially marginalised women.

Addressing disparity in all maternal mortality and morbidity prevention remains key to reducing maternal deaths and improving maternal health and well-being. The ICPD+25 review points to large equity gaps across background characteristics of women—women in rural areas, women living in hard to reach areas and regions, poor women, women with less education, and older women with high birth orders left behind without maternal health services, adolescent and younger women.

Further to this, maternal morbidity remains much more prevalent. Fistula persists particularly in areas where the rates of maternal mortality are highest, which include areas with poor emergency obstetric care, referral systems, and infrastructure, among others. Early marriage, unattended home deliveries, heavy work after childbirth, improper nutrition, poverty and geographical inaccessibility of health services limit the prevention and treatment options available to women around maternal health and well-being. In addition, complex sociocultural norms have an impact on women seeking treatment. Women's inferior status in the society, inequalities in gender roles, and lack of autonomy to make decisions over their bodies, son preference leading to delay in treatment, fear of discrimination, stigma and shame further complicate seeking treatment for women suffering from maternal morbidity conditions. Currently, most of the intervention around morbidity is focused on dealing with the physical well-being of the body. There is still a long way to go to create a holistic perspective within service interventions, which cater for the mental health well-being of women.

Maternal mortality and morbidity continue to remain the unfinished agenda in the region and need to be addressed head on as we implement the ICPD, APPC, and SDG commitments.

Recommendations

The human right to health and Sexual and reproductive rights underpin sexual and reproductive health outcomes including maternal health outcomes

The human right to health means that everyone has the right to the highest attainable standard of physical and mental health, which includes access to all medical services, sanitation, adequate food, decent housing, healthy working conditions, and a clean environment. This right must be guaranteed ensuring universal access to health services on an equitable basis, such services should be available, accessible, acceptable, of quality and provided without stigma, discrimination or violence. Further to this, sexual and reproductive rights must be protected, respected and fulfilled by the state.

A holistic perspective within service interventions, which cater for the mental health well-being of women should also be prioritised.

Strengthen health systems and provide integrated services including maternal health and well-being services through the primary health care system and Universal Health Care mechanisms.

The 2018 Declaration of Astana repositioned primary health care as the most cost effective and inclusive means of delivering health services and primary health care is foundational to achieve universal health coverage. It is important that recommendation 7.6 of the ICPD PoA is fully implemented *where all countries should strive to make accessible through the primary health-care system, reproductive health (and sexual health) to all individuals of appropriate ages as soon as possible. Reproductive health care in the context of primary health care should, inter alia, include: family-planning counselling, information, education, communication and services; education and services for prenatal care, safe delivery and postnatal care, especially breast-feeding and infant and women's health care; prevention and appropriate treatment of infertility; abortion... including prevention of abortion and the management of the consequences of abortion; treatment of reproductive tract infections; sexually transmitted diseases and other reproductive health conditions; and information, education and counselling, as appropriate, on human sexuality, reproductive health and responsible parenthood. Referral for family-planning services and further diagnosis and treatment for complications of pregnancy, delivery and abortion, infertility, reproductive tract infections, breast cancer and cancers of the reproductive system, sexually transmitted diseases, including HIV/AIDS should always be available, as required. Active discouragement of harmful practices, such as female genital mutilation, should also be an integral component of primary health care, including reproductive health-care programmes.*

All efforts should be geared to providing universal access to quality EmoC services at all levels to all women who need these services across geographic regions in respective countries.

Countries should prioritise increasing the number of skilled birth attendants who will provide these high-impact interventions including EmOC services, skilled attendance at birth, and postpartum and antenatal services in all geographic areas within countries. EmOC services should be located universally, including in hard to reach areas. Such facilities must exist and function, be geographically and equitably distributed, be used by pregnant women, be used by women with complications, provide sufficient life-saving services; and provide good-quality care.

Task shifting or task sharing policies at the national level provide opportunities for capacity strengthening of lower level cadres of staff to provide effective EmOC interventions including staff training in community distribution of misoprostol and providing magnesium sulfate before referral of eclamptic patients to higher level facilities.

Investments have to also be made to improve basic infrastructure in maternity units including electricity and water supply, blood transfusion facilities, logistic management of life-saving commodities and consumable supplies, record-keeping, and use of data for decision-making.

Universal access to emergency obstetric care services also needs to take into account the need to strengthen procurement and distribution chains for basic drugs and equipment. Legal barriers also need to be addressed to allow trained midwives to perform MVA, and other procedures given the shortage of skilled medical professionals especially in remote geographical settings. Mass fortification, home fortification, iron and folic acid supplementation, and comprehensive strategies that address diverse causes of anaemias across contexts are important to reduce anaemia among pregnant women.

Address data gaps

Countries should make every effort to implement vital registrations of births and deaths, and institutionalise community maternal and perinatal death reviews. Health service records, household surveys, and census need to be optimally utilised to record maternal deaths accurately. Maternal death audits have to be institutionalised.

Monitoring and evaluation data needs to be collected in regard to sexual and reproductive health including maternal health service provision especially for women who suffer a variety of political, social and special exclusions—those who are poor, young, older, less educated, migrants, displaced populations due to conflict and disasters, asylum seekers and refugees, from ethnic and religious minorities, and indigenous populations, from lower castes, and those who live in conflict and disaster areas, and data must be collected for these groups to ensure no one is left behind in provision of services to these groups. Such data should inform policy priorities to ensure services reach marginalised groups with respect and dignity.

Allocate sufficient resources and budgets to meet the sexual and reproductive health including maternal health and well-being services

Financial commitments by both donors and national governments to sexual and reproductive health including maternal health must be prioritised and executed. Domestic resource mobilisation and increased government expenditure on health remain a priority. Public spending on health is central to universal health coverage, but there is no clear trend of increased government priority for health especially in low-income countries.


All pregnant woman are at risk
of developing complications
at any time during pregnancy,
at delivery, or in the postpartum period,
and hence, **skilled attendance,**
functional health systems,
and **community support**
remain fundamental
to reduction of maternal mortality
and morbidity in the region.

ANALYSING DATA AND POLICY TRENDS IN ADOLESCENT PREGNANCY AND CONTRACEPTION IN THE PHILIPPINES

PARTNER:

Likhaan Center for Women's Health, Inc. (Likhaan) – Philippines

CONTEXT

Adolescent reproductive health (ARH) was one of 10 elements in the RH program established by the DOH in 1998 following the ICPD. ARH services included gender and sexuality education for adolescent girls and boys; the provision of integrated RH services including contraceptive services and supplies; the training of peer counselors; and advocacy for the RH Bill and ARH. In 2012, the National Youth Commission shared that the Philippines had the highest adolescent birth rate in Southeast Asia, at 53 per 1,000. Over the years, the national adolescent reproductive health programme changed from "adolescent reproductive health" to "adolescent and youth reproductive health guidance and counseling" reflecting resistance to adolescent sexuality and use of contraceptives, particularly by the Catholic Church, which has immense influence in policy-making in the Philippines.

The conservative legislators in the country were also successful at ensuring the need for written consent in government facilities—young people below the age of 18 are required by law to provide parental consent when seeking contraception at Government health facilities. The Supreme Court has also passed a law that restricts access to contraceptive products and services, though not access to RH IEC materials. All of this has resulted in slow improvements in ARH outcomes, including adolescent birth rate.

KEY FINDINGS

The goal of this study was to assess the ICPD Progamme of Action's (PoA) objectives and recommendations that address adolescent SRH issues through the promotion of responsible sexual and reproductive behavior and the substantial reduction of adolescent pregnancy. This study finds that the Philippines did not meet the ICPD PoA objectives of addressing adolescents' sexual reproductive health (SRH) needs and reducing the adolescent birth rate. This is because the Government did not adopt a special programme for sexually active adolescents, including information, counseling, and services that guaranteed their right to privacy and confidentiality.

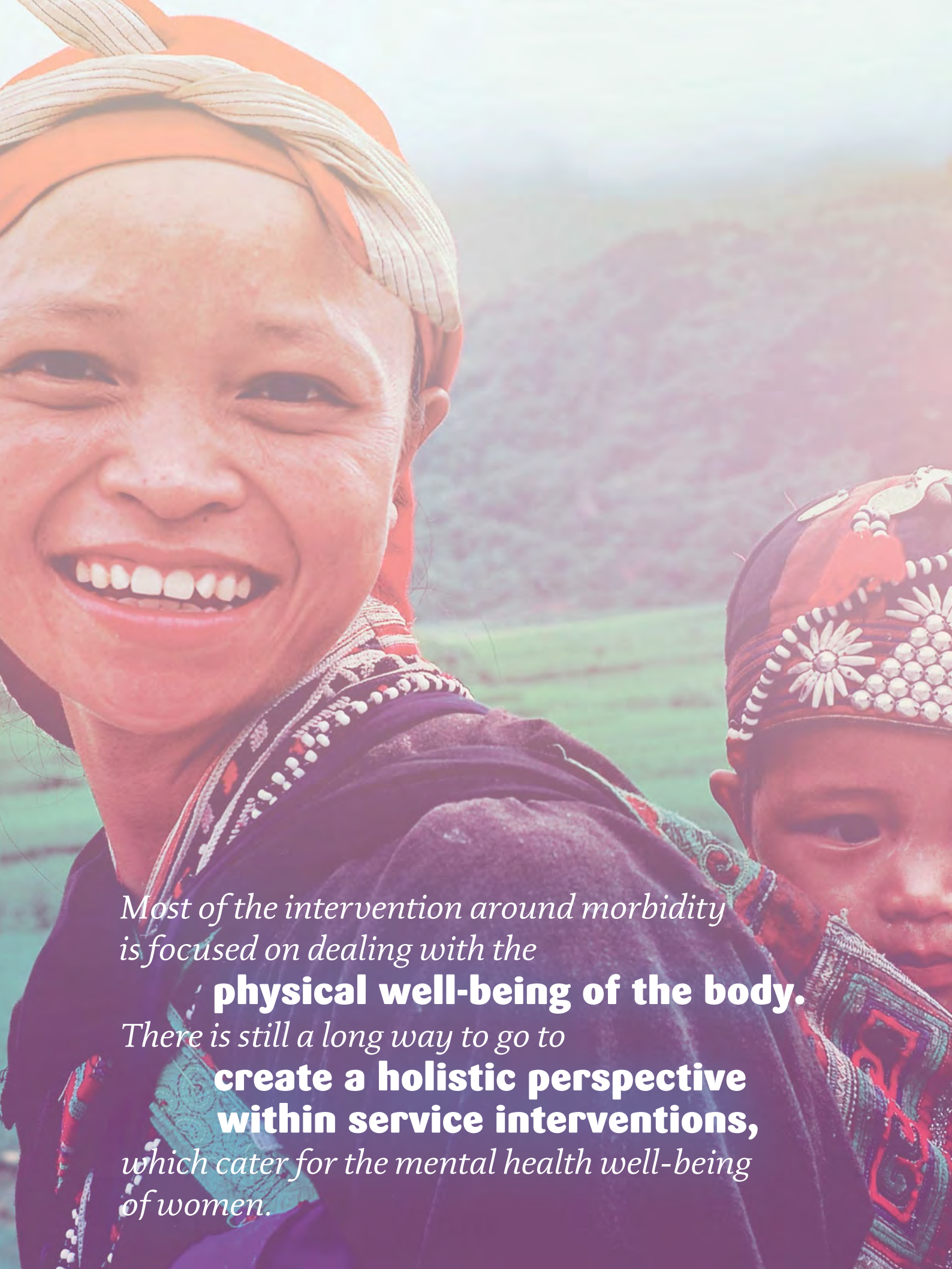
The adolescent birth rate (ABR) is high and has remained virtually unchanged since 1993. The rate of 47 per 1,000 translates to over 235,000 births yearly among young women 15 to 19 years of age. The rate of decline in ABR is very slow compared to other age groups, and while recent data shows that the decline in ABR is noticeable, it is the same as the rate recorded in other age groups. Declines in ABR was higher in rural areas and in the two poorest wealth quintiles. It is also notable that higher levels of wealth, education, or urbanization did not result in accelerated ABR reduction. Adolescents also had much slower declines in the proportion of births that are unintended.

Increases in sexual activity did not result in an increase in annual birth rates, and there is strong evidence that the level of unprotected sex is a better predictor of adolescent birth rates than sexual activity. Adolescents use of modern contraception has increased slowly and as a result, less than half of sexually active adolescents currently use modern contraception. This corresponds with the evidence that adolescents have lower basic knowledge about modern contraceptives than other age groups.

Policies around adolescent reproductive health has been regressive—in 1998 adolescent reproductive health was included as one of the 10 components of the Department of Health's Reproductive Health Programme, whereas in 2014, the Reproductive Health Law explicitly disallowed family planning provision to minors in public facilities unless they had parental or guardian consent. These constraints are compounded the restriction on purchase of emergency contraceptives and the criminalization of abortion. With the exception of the Standards on Family Planning, the Department of Health technical guidelines promote mainly abstinence or do not mention contraceptives at all. These Government policies and decisions around adolescent sexual reproductive health are heavily influenced by the Catholic Church, which is not in favor of sex before marriage. According to the Church, there is no need to provide reproductive health services to adolescents because by definition they are not sexually active. This value-laden reasoning influences policy makers to make marital status the determining factor on access to contraception by adolescents.

RECOMMENDATIONS

- Raise public awareness around teenage pregnancy, its health and social impact, and the importance of the role of pregnancy prevention, including use of modern contraceptives, using different mediums and communication means.
- Raise awareness among all stakeholders, i.e. adolescents, parents, teachers, health providers, and policy makers on the RH Law, including clarification of the restrictions.
- Strengthen capacities of NGOs and Government facilities to provide ARH information and services, especially around culturally sensitive issues, such as contraception.
- Advocate with the Department of Health and Department of Education to ensure that their policies and guidelines provide the full information on contraception.
- Develop, document, and disseminate information on effective adolescent health programmes whereby adolescents can access their rights, including privacy and confidentiality.
- Conduct values clarification training among health and education policymakers and implementers on issues such as adolescent rights.
- Advocate for rights-based adolescent health policies and programmes.



Most of the intervention around morbidity is focused on dealing with the

physical well-being of the body.

There is still a long way to go to

create a holistic perspective within service interventions,

which cater for the mental health well-being of women.

Endnotes

1. World Health Organization (WHO) et al., *Trends in Maternal Mortality 2000 to 2017: Estimates by WHO, UNICEF, UNFPA, World Bank Group and the United Nations Population Division* (Geneva: WHO, 2019), http://documents.worldbank.org/curated/en/793971568908763231/pdf/Trends-in-maternal-mortality-2000-to-2017-Estimates-by-WHO-UNICEF-UNFPA-World-Bank-Group-and-the-United-Nations-Population-Division.pdf.
2. "Maternal Mortality," WHO (Fact sheet), September 19, 2019, https://www.who.int/news-room/fact-sheets/detail/maternal-mortality.
3. WHO et al., *Trends in Maternal Mortality*.
4. WHO et al., *Trends in Maternal Mortality*.
5. Paul Hunt and Tony Gray (eds.). *Maternal Mortality, Human Rights and Accountability* (London: Routledge, 2015).
6. United Nations Human Rights Council (UNHRC), General Assembly, *Resolution 11/8. Preventable Maternal Mortality and Morbidity and Human Rights (17 June 2009)*, accessed June 20, 2018, http://ap.ohchr.org/documents/E/HRC/resolutions/A_HRC_RES_11_8.pdf.
7. UNHRC, General Assembly, *Resolution Adopted by the Human Rights Council, 15/17 Preventable Maternal Mortality and Morbidity and Human Rights: Follow-up to Council Resolution 11/8*, A/HR/RES/15/17 (7 October 2010), accessed June 20, 2018, https://documents-dds-ny.un.org/doc/UNDOC/GEN/G10/167/35/PDF/G1016735.pdf?OpenElement
8. UNHRC, General Assembly, 15/...*Preventable Maternal Mortality and Morbidity and Human Rights: Follow-up to Council Resolution 11/8*, A/HRC/15/L.27 (27 September 2010), accessed June 20, 2018, http://www.who.int/pmnch/topics/maternal/20100927_hrcmaternalhealth.pdf
9. Hunt and Gray, *Maternal Mortality*.
10. UNHRC, 15/... Preventable Maternal Mortality and Morbidity.
11. "Sexual and Reproductive Health and Rights," UN Human Rights Office of the High Commissioner, accessed June 21, 2018, http://www.ohchr.org/EN/Issues/Women/WRGS/Pages/HealthRights.aspx.
12. Judith Bueno de Mesquita and Eszter Kismödi, "Maternal Mortality and Human Rights: Landmark Decision by United Nations Human Rights Body," B*ulletin of the World Health Organization* 90 (2012): 79-79A, doi: 10.2471/BLT.11.101210.
13. See Priority Action 118 - United Nations Economic and Social Commission for Asia and the Pacific (ESCAP) and United Nations International Conference on Population and Development Beyond (ICPD) 2014, "Priority Actions," in *Report of the Sixth Asian and Pacific Population Conference* (Bangkok: UNESCAP, 2014), 24, https://www.unescap.org/sites/default/files/SDD_PUB_APPC6-Report-20140403.pdf.
14. WHO et al., *Trends in Maternal Mortality*.
15. WHO et al., *Trends in Maternal Mortality*.
16. WHO et al., *Trends in Maternal Mortality*.
17. WHO et al., *Trends in Maternal Mortality*.
18. WHO et al., *Trends in Maternal Mortality*.
19. These are states where economic and development indicators are a particular concern, like Bihar, Chhattisgarh, Jharkhand, Madhya Pradesh, Odisha, Rajasthan, Uttarakhand and Uttar Pradesh.
20. Sameeksha Karee, "South Better Than North in Maternal and Child Health in India," *The Quint*, updated June 22, 2018, https://fit.thequint.com/health-news/maternal-health-and-child-health-in-india.
21. WHO et al., *Trends in Maternal Mortality*.
22. WHO et al., *Trends in Maternal Mortality*.
23. Say Lale et al., "Global Causes of Maternal Death: A WHO Systematic Analysis," *The Lancet* 2, no. 6 (2014): 323-333, https://doi.org/10.1016/S2214-109X(14)70227-X.
24. Lale et al., "Global Causes of Maternal Death," 323-333.
25. Lale et al., "Global Causes of Maternal Death," 323-333.
26. Mellissa F. Young, "Maternal Anaemia and Risk of Mortality: A Call for Action," *The Lancet* 6, no. 5 (2018): 479-480, https://doi.org/10.1016/S2214-109X(18)30185-2.
27. Jahnavi Daru et al., "Risk of Maternal Mortality in Women with Severe Anaemia During Pregnancy and Post Partum: A Multilevel Analysis," *The Lancet* 6, no. 5 (2018): 548-554, https://doi.org/10.1016/S2214-109X(18)30078-0.
28. Daru et al., "Risk of Maternal Mortality," 548-554.
29. Young, "Maternal Anaemia and Risk of Mortality," 479-480.
30. Young, "Maternal Anaemia and Risk of Mortality," 479-480.
31. Lale et al., "Global Causes of Maternal Death," 323-333.
32. Sivananthi Thanenthiran, Sai Jyothis Mai Racherla, and Suloshini Jayanath, *Reclaiming & Redefining Rights. ICPD + 20: Status of Sexual and Reproductive Health and Rights in Asia Pacific* (Kuala Lumpur: Asian-Pacific Resource and Research Centre for Women (ARROW), 2013), accessed June 23, 2018, https://arrow.org.my/wp-content/uploads/2015/04/ICPD-20-Asia-Pacific_Monitoring-Report_2013.pdf.
33. Indirect causes of death classification include HIV, Malaria, non-communicable diseases such as cardio vascular diseases, cancers, diabetes, and chronic respiratory diseases.
34. WHO et al., *Trends in Maternal Mortality*.

35. WHO et al., *Monitoring Emergency Obstetric Care: A Handbook* (Geneva: WHO, 2009), accessed June 22, 2018, https://www.who.int/reproductivehealth/publications/monitoring/9789241547734/en/.
36. WHO et al., *Monitoring Emergency Obstetric Care*.
37. WHO et al., *Monitoring Emergency Obstetric Care*.
38. WHO et al., *Monitoring Emergency Obstetric Care*.
39. Lumbini Roy, Taposh Kumar Biswas, and Mahbub Elahi Chowdhury, "Emergency Obstetric and Newborn Care Signal Functions in Public and Private Facilities in Bangladesh," *PLoS One* 12, no. 11 (2017): e0187238, doi: 10.1371/journal.pone.0187238.
40. Emmanuel Olapido Ololorin et al., "Essential Basic and Emergency Obstetric and Newborn Care: From Education and Training to Service Delivery and Quality of Care," *International Journal of Gynecology & Obstetrics* 130, no. 2 (2015): 46-53, https://doi.org/10.1016/j.ijgo.2015.03.007.
41. Otolorin et al., "Essential Basic and Emergency Obstetric," 46-53.
42. Moazzam Ali et al., "Emergency Obstetric Care in Pakistan: Potential for Reduced Maternal Mortality through Improved Basic EmOC Facilities, Services and Access," *International Journal of Gynecology & Obstetrics* 91, no. 1 (2005): 105-12, doi: 10.1016j.jigo.2005.03.034.
43. "Countries We Support: Bangladesh," Jhpiego Corporation, accessed October 2, https://www.jhpiego.org/countries-we-support/bangladesh/.
44. Otolorin et al., "Essential Basic and Emergency Obstetric," 46-53.
45. Jigyasa Sharma et al., "Can India's Primary Care Facilities Deliver? A Cross-sectional Assessment of the Indian Public Health System's Capacity for Basic Delivery and Newborn Services," *BMJ Open* 8 (2012): e020532, oi: 10.1136/bmjopen-2017-020532.
46. Aradna Wal, "Despite More Deliveries at Health Facilities, India's Healthcare is Failing its Own Standards: Study," *NEWS18*, updated June 6, 2018, https://www.news18.com/news/india/despite-more-deliveries-at-health-facilities-indias-healthcare-is-failing-its-own-standards-study-1770115.html.
47. Kranti Suresh Vora et al., "Has Chiranjeevi Yojana Changed the Geographic Availability of Free Comprehensive Emergency Obstetric Care Services in Gujarat, India?" *Global Health Action* 8, no.1 (2015): 28977, doi: 10.3402/gha.v8.28977.
48. Otolorin et al., "Essential Basic and Emergency Obstetric," 46-53.
49. "Delivery Care," UNICEF Data, accessed June 24, 2018, https://data.unicef.org/topic/maternal-health/delivery-care/#.
50. "Delivery Care," UNICEF Data, accessed June 24, 2018, https://data.unicef.org/topic/maternal-health/delivery-care/#.
51. WHO, *Definition of Skilled Health Personnel Providing Care During Childbirth: The 2018 Joint Statement by WHO, UNFPA, UNICEF, ICM, ICN, FIGO and IPA* (Geneva: WHO, 2018), accessed June 24, 2018, http://apps.who.int/iris/bitstream/handle/10665/272818/WHO-RHR-18.14-eng.pdf?ua=1.
52. United Nations, "Indicator 3.1.2, Series: Proportion of Births Attended by Skilled Health Personnel (%) SH_STA_BRTC," SDG Indicators Database, accessed October 2, 2019, https://unstats.un.org/sdgs/indicators/database/.
53. Ministry of Health Nepal, New ERA, and ICF International, *Nepal Demographic and Health Survey (DHS) 2016* (Kathmandu: Ministry of Health Nepal, 2017), accessed June 24, 2018, https://dhsprogram.com/pubs/pdf/FR336/FR336.pdf.
54. Philippine Statistics Authority (PSA) and ICF International, *Philippines National Demographic and Health Survey (NDHS) 2013* (Manila & Maryland: PSA & ICF International, 2014), accessed June 24, 2018, https://www.dhsprogram.com/pubs/pdf/FR294/FR294.pdf.
55. Ministry of Health and Family (MOHF) Maldives and ICF Macro, *Maldives Demographic and Health Survey (DHS) 2009* (Maryland: MOHF and ICF Macro, 2010), accessed June 24, 2018, https://dhsprogram.com/pubs/pdf/FR237/FR237.pdf.
56. Statistics Indonesia (Badan Pusat Statistik—BPS), National Population and Family Planning Board (BKKBN), and Kementerian Kesehatan (Kemenkes—MOH), and ICF International, *Indonesia Demographic and Health Survey (DHS) 2012* (Jakarta: BPS, BKKBN, Kemenkes, and ICF International, 2013), accessed June 24, 2018, https://dhsprogram.com/pubs/pdf/fr275/fr275.pdf.
57. Ministry of Health and Sports (MoHS) Myanmar and ICF International, *Myanmar Demographic and Health Survey (DHS) 2015-16* (Pyi Taw and Maryland: MoHS and ICF International, 2017), accessed June 24, 2018, https://dhsprogram.com/pubs/pdf/FR324/FR324.pdf.
58. National Institute of Statistics, Directorate General for Health, and ICF International, *Cambodia Demographic and Health Survey (DHS) 2014* (Phnom Penh and Maryland: National Institute of Statistics, Directorate General for Health, and ICF International, 2015), accessed June 24, 2018, https://dhsprogram.com/pubs/pdf/FR312/FR312.pdf.
59. Ministry of Health and Lao Statistics Bureau, *Lao Social Indicator Survey (LSIS) 2011 – 12 (Multiple Indicator Cluster Survey)* (Vientiane: Ministry of Health and Lao Statistics Bureau, 2012), accessed June 24, 2018, https://dhsprogram.com/pubs/pdf/FR268/FR268.pdf.

60. National Institute of Population Studies (NIPS) Pakistan and ICF International, *Pakistan Demographic and Health Survey (DHS) 2012-13* (Islamabad and Maryland: NIPS and ICF International, 2013), accessed June 24, 2018, https://dhsprogram.com/pubs/pdf/FR290/FR290.pdf.
61. PSA and ICF International, *Philippines NDHS 2013*.
62. MOHF Maldives and ICF Macro, *Maldives DHS 2009*.
63. National Institute of Statistics, Directorate General for Health, and ICF International, *Cambodia DHS 2014*.
64. Ministry of Health Nepal, New ERA, and ICF International, *Nepal DHS 2016*.
65. MoHS Myanmar and ICF International, *Myanmar DHS 2015-16*.
66. "Delivery Care," UNICEF Data.
67. PSA and ICF International, *Philippines NDHS 2013*.
68. MoHS Myanmar and ICF International, *Myanmar DHS 2015-16*.
69. Ministry of Health Nepal, New ERA, and ICF International, *Nepal DHS 2016*.
70. WHO et al., *Postnatal Care for Mothers and Newborns. Highlights from the World Health Organization 2013 Guidelines* (Geneva: WHO and Jhpiego, 2015), accessed June 24, 2018, http://www.who.int/maternal_child_adolescent/publications/WHO-MCA-PNC-2014-Briefer_A4.pdf.
71. WHO et al. *Postnatal Care for Mothers and Newborns*.
72. WHO et al., *Postnatal Care for Mothers and Newborns.*
73. National Institute of Statistics, Directorate General for Health, and ICF International, *Cambodia DHS 2014*.
74. BPS et al., *Indonesia DHS 2012*.
75. MoHS Myanmar and ICF International, *Myanmar DHS 2015-16*.
76. NIPS Pakistan and ICF International, *Pakistan DHS 2012-13*.
77. MOHF Maldives and ICF Macro, *Maldives DHS 2009*.
78. Ministry of Health and Lao Statistics Bureau, *LSIS 2011-12*.
79. MOHF Maldives and ICF Macro, *Maldives DHS 2009*.
80. MOHF Maldives and ICF Macro, *Maldives DHS 2009*.
81. BPS et al., *Indonesia DHS 2012*.
82. Özge Tunçalp et al., "WHO Recommendations on Antenatal Care for a Positive Pregnancy Experience - Going Beyond Survival," *BJOG An International Journal of Obstetrics and Gynaecology* 126, no. 6 (2017): 860-862, doi: 10.1111/1471-0528.14599.
83. WHO, "Antenatal Care Coverage Data by Country," Global Health Observatory Data Repository, accessed October 2, 2019, https://apps.who.int/gho/data/node.main.ANTENATALCARECOVERAGE4?lang=en.
84. Tabassum Firoz et al., "Measuring Maternal Health: Focus on Maternal Morbidity," *Bulletin of the World Health Organisation* 91, no.10 (2013): 794-796, doi: http://dx.doi.org/10.2471/BLT.13.117564.
85. Marge Koblinsky et al., "Maternal Morbidity and Disability and Their Consequences: Neglected Agenda in Maternal Health," *Journal of Health, Population and Nutrition* 30, no.2 (2012): 124-130, doi: 10.3329/jhpn.v30i2.11294.
86. Firoz et al., "Measuring Maternal Health," 794-796.
87. Firoz et al., "Measuring Maternal Health," 794-796.
88. "10 Facts on Obstetric Fistula," WHO, accessed June 25, 2018, http://www.who.int/features/factfiles/obstetric_fistula/en/.
89. R. J. Cook, Bernard Morris Dickens, and S. Syed, "Obstetric Fistula: The Challenge to Human Rights," *International Journal of Gynaecology & Obstetrics* 87, no. 1 (2004): 72-77, doi: 10.1016/j.ijgo.2004.07.005.
90. Sadaf Khan and Sidra Zaheer, "Socio-Demographic and Reproductive Health Profile of Women Who Experienced Signs of Obstetric Fistula: Results from Pakistan Demographic and Health Survey (PDHS) 2006-2007," *Midwifery* 54 (2017): 61-66, doi: 10.1016/j.midw.2017.08.002.
91. F. Ahmed et al., "Working towards the SDGs: Low-Cost Surgical Interventions for Obstetric Fistula in Bangladesh," *International Journal of Surgery* 47, No. 1 (2017): 11-12, https://doi.org/10.1016/j.ijsu.2017.08.078.
92. F. Ahmed et al., "Working towards the SDGs," 11-12.
93. LMIC represents Low-Middle Income Countries.
94. Mala Chalise, Malinda Steenkamp, and Binaya Chalise, "Factors Enabling Women with Pelvic Organ Prolapse to Seek Surgery at Mobile Surgical Camps in Two Remote Districts in Nepal: A Qualitative Study," *WHO South-East Asia Journal of Public Health* 5, no.2 (2016): 141-48, doi: 10.4103/2224-3151.206251.
95. Chalise, Steenkamp, and Chalise, "Factors Enabling Women," 41-48.
96. Amnesty International, *Amnesty International Report 2014/15 The State of the World's Human Rights* (Easton Street: Amnesty International, 2015), accessed June 29, 2018, https://www.amnesty.org/download/Documents/POL1000012015ENGLISH.PDF.

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Asian-Pacific Resource & Research Centre for Women (ARROW)
1 & 2 Jalan Scott, Brickfields 50470, Kuala Lumpur Malaysia

Telephone	(603) 2273 9913/9914/9915
Fax	(603) 2273 9916
E-mail	arrow@arrow.org.my
Web	www.arrow.org.my
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