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SECOND SESSION OF THE SPECIALISED TECHNICAL COMMITTEE ON HEALTH, POPULATION AND DRUG CONTROL (STC-HPDC-2)
ADDIS ABABA, ETHIOPIA
20-24 MARCH 2017

Theme: "Youth, Health and Development: Overcoming the Challenges towards Harnessing the Demographic Dividend"

2017 STATUS REPORT ON MATERNAL NEWBORN CHILD AND ADOLESCENT HEALTH: FOCUSING ON UNFINISHED BUSINESS IN AFRICA

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LIST OF ACRONYMS AND ABBREVIATIONS

Item	Abbreviation	Definition
1	AFR	Adolescent Fertility Rate
2	AU	African Union
3	AUC	African Union Commission
4	AUC DSA	African Union Commission Department of Social Affairs
5	CAR	Central African Republic
6	CARMMA	Campaign on accelerated Reduction of Maternal Mortality in Africa
7	CPR	Contraceptive Prevalence Rate
8	DRC	Democratic Republic of Congo
9	EmONC	Emergency Obstetric and Neonatal Care
10	GDP	Gross Domestic Product
11	HIV	Human Immunodeficiency Syndrome
12	ICPD	International Conference on Population and Development
13	IMCI	Integrated Management of Childhood Illness
14	IMR	Infant Mortality Rate
15	Ipas	International pregnancy advisory Services
16	IPPF	International Planned Parenthood Federation
17	MDG	Millennium Development Goals
18	MDSR	Maternal Death Surveillance and Response
19	MMR	Maternal Mortality Ratio
20	MNCH	Maternal, Neonatal and Child health
21	MNCAH	Maternal, Neonatal, Child and Adolescent health
22	MPoA	Maputo Plan of Action
23	NGO	Non Governmental Organization
24	PAC	Post Abortion Care
25	PMTCT	Prevention of Mother To Child Transmission
26	PRSP	Poverty Reduction Strategy Papers
27	RH	Reproductive Health
28	SDGs	Sustainable Development Goals
29	RMNCH	Reproductive, Maternal, Newborn and Child Health
30	SDP	Service Delivery Points
31	SPSS	Statistical Package for Social Science
32	SRH	Sexual and Reproductive Health
33	STC-HPDC	Specialized Technical Committee on Health, Population and Drug Control
34	SRHR	Sexual and Reproductive Health and Rights
35	STI/HIV /AIDS	Sexually Transmitted Infections/Human Immune Deficiency Virus/Acquired Immune Deficiency Syndrome

36	UN	United Nations
37	U5MR	Under Five Mortality Rate
38	UNFPA	United Nations Population Fund
39	UNICEF	United Nation Children's Fund
40	WHO	World Health Organization

EXECUTIVE SUMMARY

The world saw significant progress in maternal, newborn, child and adolescent health (MNCAH) in the past two decades of the millennium development agenda. Some of the gains occurred thanks to increased political commitments to health and investments in interventions that are known to be cost-effective. Despite the progress made, there is still unfinished business. African countries still face numerous socio-economic difficulties and an unfavourable economic environment. Ending extreme poverty, promoting development and resilience and attaining all the sustainable development goals in Africa will depend mainly on the attainment of the aspirations of Agenda 2063, "The Africa We Want", as well as the well-being and survival of women, newborns, children and adolescents. The Continental Policy Framework on Sexual and Reproductive Health and Rights, the Maputo Plan of Action 2016-2030, the Global Strategy for Women's, Children's and Adolescent's Health 2016-2030, the UNAIDS Strategy 2016-2021, The African Common Position on Ending Child Marriage in Africa, and the 2016 Political Declaration on HIV and AIDS are key instruments for Africa to achieve these. In addition, Campaign on Accelerated Reduction of Maternal, Newborn and Child Mortality in Africa (CARMMA) including the AU Campaign to End Child Marriage in Africa will continue to serve as a critical advocacy platform to solidifying the gains.

Motherhood is often a positive and fulfilling experience, however for too many African women, it is associated with suffering, ill-health and even death. About 830 women die from pregnancy- or childbirth-related complications around the world every day. In Africa and other developing regions, the risk of a woman dying from a maternal cause is about 23 times higher than for a woman living in a developed country. At the start of the SDG period, only five countries in Africa had MMRs below the SDG end line target of 70 per 100,000 live births. These are Libya (9/100,000), Egypt (33/100,000), Cape Verde (42/100,000), Mauritius (53/100,000) and Tunisia (62/100,000) respectively. This implies that over 90% of African countries need to redouble their efforts within the next fifteen years to achieve the set targets. Nearly 75% of all maternal deaths on the continent are attributable to the following complications of pregnancy and childbirth: severe bleeding (mostly postpartum hemorrhage), infections (usually after childbirth), high blood pressure during pregnancy (pre-eclampsia and eclampsia), and other complications from delivery and unsafe abortion. The remaining 25% are caused by or associated with diseases such as malaria, and HIV/AIDS during pregnancy. High impact interventions like basic and comprehensive Emergency Obstetric and Neonatal Care (EmONC) delivered by skilled personnel during childbirth, Ante-Natal Care (ANC) during pregnancy, Intermittent Preventive Treatment (IPT) and treatment with sulphadoxine pyrimethamine (SP) and Artemisin-based Combination Therapy (ACT) for malaria, Antiretroviral treatment (ART) for HIV positive pregnant women and comprehensive condom use and programming are able to prevent or manage the complications and hence prevent deaths.

In Africa (excluding North Africa) significant reduction of 54 percent in under-five mortality from 180 deaths per 1,000 live births to 83 deaths per 1,000 live births from 1990 to 2015 was recorded. A higher reduction of 64% in under-five mortality was recorded in North Africa from 73 deaths per 1,000 live births to 23 deaths per 1,000 live births within the same period. The current under-five mortality rate for the continent is 76 deaths per 1,000 live births, which is 67% above the recommended SDG target of 25 deaths per 1,000. This means that if Africa has to reduce under-five mortality rate to meet the SDG target by 2030, the annual rate of reduction of under-five mortality should be 4.5% or more. Currently, only 6 countries in Africa have under-five mortality rates at or below the SDG target of 25 per 1,000 live births. These are Libya, Tunisia, Seychelles, Mauritania, Egypt and Cape Verde. Neonatal mortality rate reduction is a major challenge for African countries. Most are either showing stagnation or are reducing neonatal mortality at very slow rates and therefore still maintain very high neonatal mortality rates compared to countries in other regions. The current neonatal mortality rate in Africa (27 deaths per 1,000 live births) is the highest in the world and contributes nearly 40% to the global burden. The leading causes of deaths among children under five in Africa are diarrhea (18 per cent), pneumonia (15 per cent) and malaria (16 per cent). Neonatal deaths account for 29 percent of under-5 mortality and among neonates the main causes include preterm birth complications, asphyxia, and sepsis. Among the proven, cost-effective and high-impact interventions are: skilled care at birth and quality emergency obstetric and neonatal care; management of pre-term births, including antenatal corticosteroids for lung maturation; basic neonatal care; neonatal resuscitation; early identification and antibiotic treatment of serious infections; inpatient care for small and sick newborns; and prevention of mother-to-child transmission of HIV. Integration of these interventions into the service delivery modalities is also very essential.

The sustainability of global socio-economic development is closely tied to the wellbeing of its young people. When young people realize their sexual and reproductive health and reproductive rights, they are on a path to realizing their full potential as individuals and as actively engaged members of their communities and countries. In the process of enhancing and ensuring their reproductive health and rights, young people need support, empowerment and knowledge of various facets of their cultures and societies via quality education, decent work, positive participation in their communities, human rights protections and access to sexual and reproductive health information and services. In reality, these basic building blocks elude many young people especially those in Africa due to social, legal and economic obstacles. The results of all these obstacles are that: most adolescents and young people are still not getting what they need in the way of SRHR information and services; they are denied comprehensive sexuality education, have low uptake of HIV and STD counseling and testing, poor access to HIV and STD treatment for those who have tested positive, low or no contraceptive uptake, high incidence of child and forced marriages with high rates of adolescent pregnancies and high prevalence of female genital mutilation/excision in many countries. Promising interventions that are likely to help remove the obstacles include bolstering young people's sexual and

reproductive rights, preventing sexual and gender-based violence, promoting gender parity in education, improving employment and earnings ability, and stopping child marriage and other harmful traditional practices.

Sustainable development cannot be achieved without assuring that all women and men, girls and boys, enjoy the dignity and human rights to expand their capabilities, secure their reproductive health and rights, find decent work, and contribute to sustainable economic growth. Realizing the demographic dividend requires building the capabilities of young people, and ensuring their rights and freedoms to achieve their potential. However, the chance to realize their potential is derailed for millions of girls worldwide by child and forced marriage, early and unintended pregnancies, poor access to reproductive health information and care, and limited or no access to education. The fulfillment of sexual and reproductive health and reproductive rights, therefore, is not a side-line to inclusive national growth; it is essential for any society to achieve a demographic dividend. The successful implementation of policies that empower women and girls, promote gender equity in social and economic environments and ensure universal access to sexual and reproductive health and rights are vital to securing the demographic dividend. The focus of policy initiatives should be on expanding employment and increasing the living standards of broad sections of the population especially young people

Several challenges still persist that prevent optimal progress from being made in achieving set SRHR goals and which need to be overcome to ensure accelerated attainment of the SDG goals. Key among them are: Low political commitment in support of SRHR in general and young people's sexual and reproductive health in particular; persistence of harmful socio-cultural practices characterized by; long-term under-investment in the health sector over the years which has led to weak health systems; existence of numerous socio-economic difficulties and an unfavorable economic environment that prevents enactment of policies targeted at expanding employment and increasing the living standards of broad sections of the population especially young people and women; unfavourable legislative and policy environments characterized by poor implementation of laws which perpetuate S-GBV, forced and early marriages and other harmful traditional practices; restrictive abortion laws in some member states and inadequate implementation of existing laws thereby hindering access to abortion services to extent possible in law; lack of innovative health financing mechanisms in several member states and persistence of high out-of pocket payment for health care, the most significant form of health system financing in the region, has led to an overall decline in the utilization of health services, mainly for women as they depend often on men's resources and decisions for a timely access to services; and existence of SRH inequities rooted in gender inequality and unfavourable structural and political factors that place women and young girls at increased risk of adverse SRH outcomes, including gender based violence, which is a result of increased vulnerability due to decreased access to education, employment and economic opportunity

Recommendations to improve the MNCAH landscape include:

- Improving political commitment and leadership through promotion of Campaigns including CARMMA and AU Campaign to End Child Marriage which should be framed around commitment to end preventable maternal, newborn and child deaths by 2030 and holding political leaders accountable for attainment of commitments set out in Agenda 2063, the MPoA 2016-2030, the SDGs, and other international and national development frameworks.

- Financing health and MNCAH by increasing government expenditure on health in line with agreed Abuja target of allocating at least 15% or more of their budget resources to health according to growth of the economy and exploring innovative ways to improve domestic resource mobilization such as increasing taxes on alcohol and tobacco, debt/equity swaps, floating of health bonds, especially to diaspora communities and encouraging domestic savings and leveraging funds from existing innovative funding sources such as GAVI, Global fund for AIDS, Malaria and Tuberculosis; and Vaccine alliance to support MNCAH.

- Health legislation and promotion of social norms by removal of legal, regulatory and policy barriers limiting adolescent and young people's access to SRH services and information and enacting and enforcing laws to prevent child marriages, gender – based violence and harmful traditional practices

- Ensuring health systems resilience through investment in health workers, particularly mid-level cadres such as midwives and community health workers by improving their competencies, numbers, working conditions and rewards to enable them provide quality services, especially at the lower levels of health care, prioritizing evidence-based, high-impact interventions and services for women, children and adolescents in efforts to ensure universal health coverage and making available the widest range of technologies, commodities and supplies for SRHR.

- Ensuring gender equality, empowerment and Human Rights by protecting the rights of women, men, adolescents and youth so that they can have control over and decide freely and responsibly on matters related to their sexuality, including access to sexual and reproductive health, free from coercion, discrimination and violence and targeting adolescents and youth both in and out of school, for comprehensive sexuality education that emphasizes gender equality and human rights including attention to gender norms, power and social values of equality, non-discrimination, and non-violent conflict resolution.

- Investing in child and adolescent health and development that involve multisector efforts across health, education, nutrition, water, sanitation and hygiene, responsive caregiving, social and mental stimulation, environment, employment and economic development programmes. Involvement of the private sector, civil society organizations and development partners will be required in this effort.

1 BACKGROUND

Within the past two decades of the millennium development agenda, the world saw significant progress in maternal, newborn, child and adolescent health. Some of the gains occurred thanks to increased political commitments to health and investments in interventions that are known to be cost-effective. Despite the progress made, developing countries still face numerous socio-economic difficulties and an unfavourable economic environment. Ending extreme poverty, promoting development and resilience and attaining all the sustainable development goals in Africa will depend mainly on the attainment of the aspirations of Agenda 2063, "The Africa We Want", as well as the well-being and survival of women, newborns, children and adolescents. The Continental Policy Framework on Sexual and Reproductive Health and Rights, the Maputo Plan of Action 2016-2030, the Global Strategy for Women's, Children's and Adolescent's Health 2016-2030, the UNAIDS Strategy 2016-2021, The African Common Position on Ending Child Marriage in Africa and the 2016 Political Declaration on HIV and AIDS are key instruments for Africa to achieve these. In addition, Campaign on Accelerated Reduction of Maternal, Newborn and Child Mortality in Africa (CARMMA) including the AU Campaign to End Child Marriage in Africa, will continue to serve as a critical advocacy platform to solidifying the gains made and focus the continent's efforts towards ending preventable maternal, newborn and child deaths within the sustainable development period.

From 2010 to 2015, the African Union Commission (AUC) was mandated to report annually on the status of maternal, newborn and child health by the 15th Ordinary Session of the AU Assembly in Kampala, Uganda in 2010. Following the review of the MPoA in 2015, the 1st session of the Specialized Technical Committee on Health, Population and Drug Control (STC-HPDC) mindful of the 15th session of the African Union Assembly decision (Assembly/AU/Decl.1{XV}), recommended that the MNCAH taskforce prepare a biennial MNCH status report up to 2030 in order to ensure political support after 2015, because of the unfinished business in MNCAH. The STC-HPDC further mandated the MNCAH taskforce to ensure that adolescent health is given more prominence in subsequent MNCAH status reports.

In light of the above, the AUC in collaboration with partners have prepared the 1st Biennial MNCAH Status Report for 2017, with the theme "MNCAH Status Report: Focusing on Unfinished Business in Africa". This report is an update of the 2013 and 2014 reports but gives more prominence to adolescent health issues. It reviews the situation with regards to MNCH and adolescent health on the continent, focuses on actions to fast track the unfinished MNCH and adolescent health business, details what needs to be done for sexual reproductive health to contribute to harnessing the demographic dividend through investment in the youth, provides tangible solutions to refocus attention to underserved areas and address social determinants of health, and makes concrete and targeted recommendations towards ending preventable maternal, newborn and child deaths.

2 The Current Status of Maternal Newborn Child and Adolescent Health in Africa

2.1 Introduction

Reproductive, maternal, neonatal, child and adolescent health (RMNCAH) issues remain major challenges for health systems globally and especially in Africa. Since the 1990s, several efforts have been made to improve the RMNCAH situation on the continent, but gaps still exist. Between 1990 and 2013, maternal mortality ratio reduced by about 50% from 575 deaths per 100,000 live births to 289 deaths per 100,000 live births[1]. Factors influencing the slow progress on the continent include low skilled attendance at delivery, low prevalence and uptake of modern contraceptives and high unmet needs for family planning, low met need for emergency obstetric and neonatal care (EmONC), persistence of sexual and gender-based violence and high adolescent fertility rates. In the Southern Africa region, HIV/AIDS also remains a major cause of maternal deaths[1].

Mortality rate among children under-five in Africa is the highest globally, despite the significant progress made since the 1990s. The rate of under 5 mortality reduced by 55.5 percent from 146 to 65 deaths per 1,000 live births between 1990 and 2012 compared to the expected 2/3rd reduction. Among the regions in Africa, North Africa made the most progress in reducing under-five mortality rate within the same period.[1]. Neonatal mortality has been the major contributor to under-five mortality in Africa; contributing about 30%. Globally, neonatal mortality rate in Africa remains the highest at 32 deaths per 1,000, contributing 38% to the global neonatal mortality rate and 30% to the continental burden of under-five mortality. In several countries on the continent, neonatal mortality has stagnated or shown very slow reduction[2]. Concerted efforts should be focused on social determinants of health (education, income, gender orientation, household food security, water and sanitation among others) in addition to social protection mechanisms such as health insurance to improve access to high-impact interventions required to tackle the major causes of child death such as pneumonia, diarrhea, sepsis, neonatal HIV infection and prematurity.

The attainment of developmental goals on the continent will depend partly on healthy and well resourced adolescent population that are primed to achieve their full potential. This implies that incidence and prevalence of child marriages, adolescent births and adolescent HIV infections need to be at very low rates among this group. In Africa, child marriage still persists, with its consequent early childbearing, which is associated not only with health risks to both the young mother and her child, but also with missed opportunities at school and work, and the consequent intergenerational transmission of poverty[3].

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[1] MDG Report 2015

[2] UNICEF, 2013

[3] UNSD, 2014

2.2 Maternal Health

Motherhood is often a positive and fulfilling experience, however for too many women, it is associated with suffering, ill-health and even death[4]. About 830 women die from pregnancy or childbirth-related complications around the world every day. In Africa and other developing regions, the risk of a woman dying from a maternal cause is about 23 times higher than for a woman living in a developed country[5]. These are attributed to other factors earlier stated and three kinds of delays in the childbearing process – delays in seeking health care, delays in reaching caregivers, and delays in receiving care[6]

2.2.1 Maternal Mortality

At the start of the SDG period, only five countries in Africa had MMRs below the SDG end line target of 70 per 100,000 live births. These are Libya (9/100,000)*, Egypt (33/100,000), Cape Verde (42/100,000), Mauritius (53/100,000) and Tunisia (62/100,000) respectively. Sierra Leone had the highest MMR of 1,360 deaths per 100,000 live births on the continent (Figure 1). This implies that over 90% of African countries need to redouble their efforts within the next fifteen years to achieve the set SDG target. As figure 2 depicts, the maternal mortality situation generally showed signs of improvement from 2013 to 2015 in all countries on the continent except Zimbabwe and Central Africa Republic (CAR) that showed increases in MMRs (+20% and +1% respectively). The highest percentage declines in MMR were seen in Ethiopia (-13.9%), Tanzania (-9.1%) and Rwanda (-8.8%). Other countries that showed appreciable declines in MMRs include Cape Verde (-8.7%), Lesotho (-8.5%), Mauritania and Madagascar (-8.1%) and Uganda (-7.8%) [Table1]. Overall, Africa's maternal mortality ratio improved by nearly 5% (4.7%) from 2013 to 2015, despite the slow annual rate of decline of 2.4% compared to the expected global rate of 7.3% per annum. At this rate, Africa may not be able achieve the SDG target of reducing maternal mortality rate to below 70 per 100,000 live [Table 1].

Central Africa Republic's worsening maternal mortality situation from 2013 to 2015 may be attributable mainly to the ongoing conflict which has destroyed the already fragile health system. A recent nationwide assessment revealed that 50 per cent of health facilities outside the capital, Bangui, are no longer operational. In some areas, more than 75 percent of health centres are unable to offer even the most basic services such as nutritional support, prenatal consultations, or

[4] http://www.who.int/topics/maternal_health/en/
[5] WHO 2014a
[6] MDG Report 2015b
*The actual MMR for Libya in 2010 is estimated at 58 deaths per 100,000 live births (2015 UNDP Human Index Report)

treatments for infections[7]. In Zimbabwe, the worsening MMR despite high CPR and low unmet need for family planning is largely attributed to the HIV/AIDS epidemic[8].

In Ethiopia, where the highest percentage decline in MMR was recorded, some innovative practices are yielding results. These include task-sharing for MNCAH and family planning which is improving critical services to lower levels of care; increased political will, strong collaboration and partnerships between government and partners in improving skilled birth attendance through capacity building of midwives, improved midwifery education and database for monitoring the midwifery workforce; and reformed laws on abortion and expanded access to safe abortion services[6,8.] In Tanzania, institution of task-sharing mechanisms are ensuring delivery of critical MNCAH and family planning services to lower levels of care. Rwanda has also shown that, strong political leadership, government ownership and strong commitment to MNCAH programme improves maternal health[6]. In addition, the institution of a compulsory community based health insurance (CBHI) scheme as the main source of health financing and performance-based financing where community health workers are given basic training in MNCAH and given monetary incentives (apart from basic salary) for improved performance in improving access to RH services at lower levels of care, are impacting on the maternal death situation in the country [6, 8].

Nearly 75% of all maternal deaths on the continent are attributable to the following complications of pregnancy and childbirth[9]: severe bleeding (mostly postpartum), infections (usually after childbirth), high blood pressure during pregnancy (pre-eclampsia and eclampsia), and complications from delivery and unsafe abortion. The remaining 25% are caused by or associated with diseases such as malaria, and HIV/AIDS during pregnancy. High impact interventions like basic and comprehensive EmONC delivered by skilled personnel during pregnancy and childbirth, intermittent preventive treatment and treatment with sulphadoxine pyrimethamine (SP) and Artemisin-based Combination Therapy (ACT) for malaria, Antiretroviral treatment (ART) for HIV positive pregnant women and comprehensive condom use and programming are able to prevent or manage the complications and hence prevent deaths. However, met need for EmONC, skilled attendance at birth and ART uptake on the continent still remain low despite significant improvements over the past two decades.[10,11,12].

[7] OCHA, 2015. https://unocha.exposure.co/healing-health-care.

[8] African Union, Economic Commission for Africa; African Development Bank and United Nations Development Programme, 2016. Transition report 2016: MDGs to Agenda 2063/SDGs (a)

[9] Say L, Chou D, Gemmill A, Tunçalp Ö, Moller AB, Daniels JD, et al. Global Causes of Maternal Death: A WHO Systematic Analysis. Lancet Global Health. 2014;2(6): e323-e333.

[10] AMREF _SU4AM _roadmap 2011-2015a

[11] African Union, Economic Commission for Africa; African Development Bank and United Nations Development Programme, 2016. Transition report 2016: MDGs to Agenda 2063/SDGs (b)

[12] MDG Report 2015c

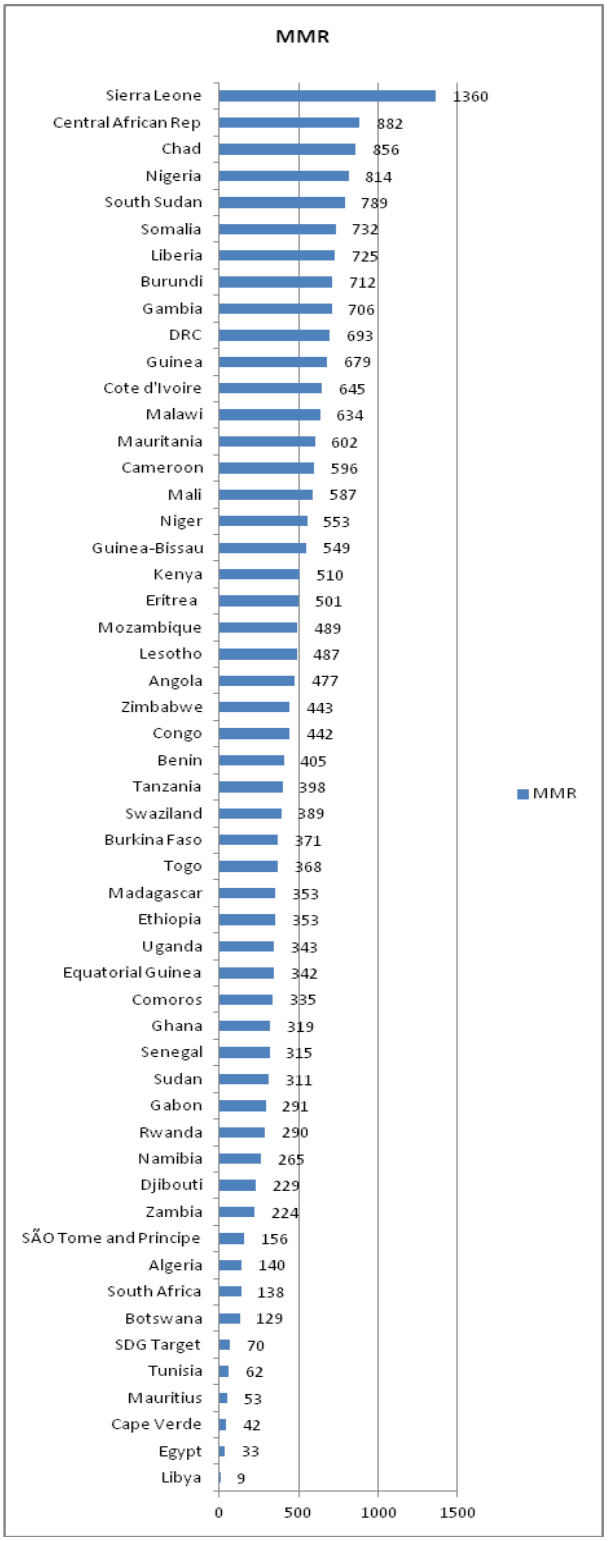

Figure 1: Current MMRs for Africa
Source: African Health Statistics

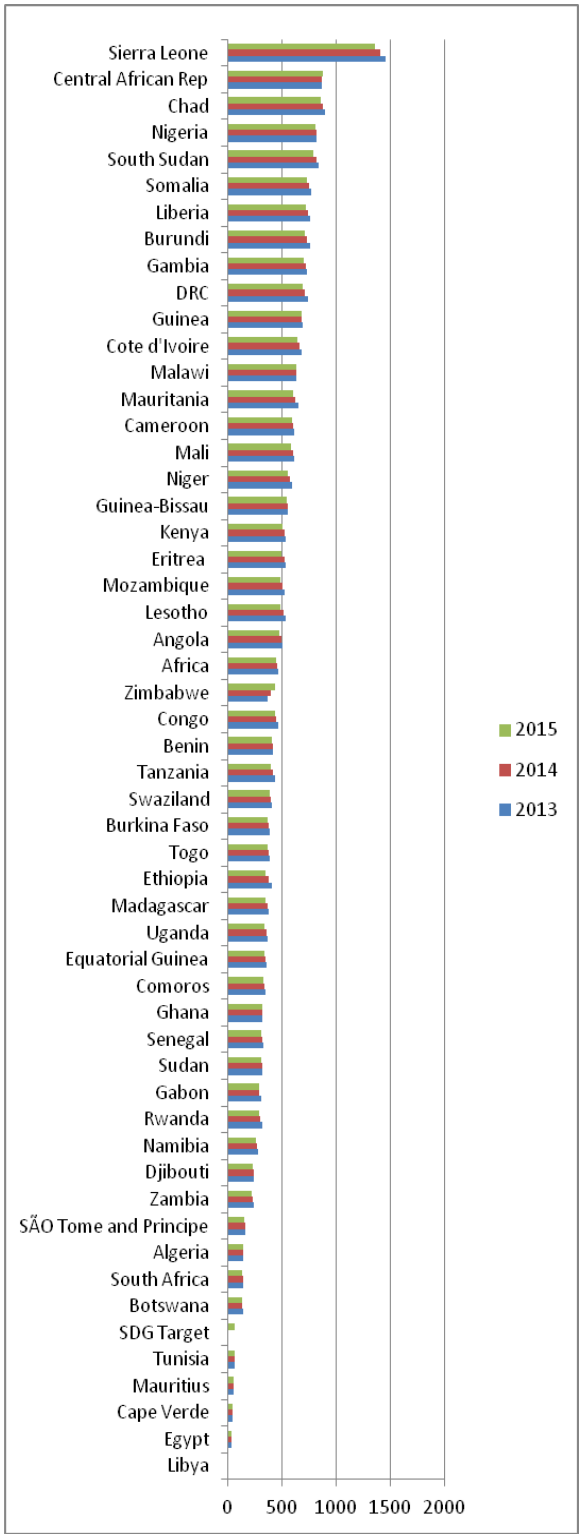

Figure 2 : Trends in MMRs in Africa 2013-2015
Source: African Health Statistic

Table 1: Trends and Percentage change in MMRs in Africa from 2013 to 2015

Country	MMR 2013 -2015			Percent change in MMR
	2013	2014	2015	
Libya	9	9	9	0.0
Egypt	35	34	33	-5.7
Cape Verde	46	44	42	-8.7
Mauritius	54	54	53	-1.9
Tunisia	64	63	62	-3.1
SDG Target			70	
Botswana	139	134	129	-7.2
South Africa	145	143	138	-4.8
Algeria	144	141	140	-2.8
SÃO Tome and Principe	161	159	156	-3.1
Zambia	237	231	224	-5.5
Djibouti	243	237	229	-5.8
Namibia	283	273	265	-6.4
Rwanda	318	304	290	-8.8
Gabon	308	295	291	-5.5
Sudan	325	318	311	-4.3
Senegal	335	323	315	-6.0
Ghana	321	322	319	-0.6
Comoros	354	344	335	-5.4
Equatorial Guinea	356	351	342	-3.9
Uganda	372	356	343	-7.8
Madagascar	384	369	353	-8.1
Ethiopia	410	378	353	-13.9
Togo	386	378	368	-4.7
Burkina Faso	389	379	371	-4.6
Swaziland	413	400	389	-5.8
Tanzania	438	418	398	-9.1
Benin	422	414	405	-4.0
Congo	469	452	442	-5.8
Zimbabwe	369	401	443	20.1
Africa	467	456	445	-4.7
Angola	509	493	477	-6.3
Lesotho	532	513	487	-8.5
Mozambique	528	506	489	-7.4
Eritrea	533	524	501	-6.0
Kenya	540	525	510	-5.6

Table 1 Continued

Guinea-Bissau	554	553	549	-0.9
Niger	596	574	553	-7.2
Mali	610	601	587	-3.8
Cameroon	619	609	596	-3.7
Mauritania	655	629	602	-8.1
Malawi	636	638	634	-0.3
Cote d'Ivoire	688	665	645	-6.3
Guinea	695	688	679	-2.3
DRC	746	717	693	-7.1
Gambia	730	719	706	-3.3
Burundi	760	737	712	-6.3
Liberia	762	741	725	-4.9
Somalia	775	753	732	-5.5
South Sudan	841	823	789	-6.2
Nigeria	821	820	814	-0.9
Chad	901	881	856	-5.0
Central African Rep	873	872	882	1.0
Sierra Leone	1460	1410	1360	-6.8

Source: African Health Statistics

2.2.2 Births Attended by Skilled Personnel

"Having a health worker with midwifery skills present at childbirth, backed-up by transport in case emergency referral is required, is perhaps the most critical intervention for making motherhood safer" [13]. According to AbouZahr & Wardlaw (2000), it is arguably one of the most influential statements to emerge from the 1997 Technical Consultation on Safe Motherhood[14]. The presence of a skilled health professional (doctor, nurse or midwife) during delivery is crucial in reducing maternal and child deaths. In 2013, approximately 289,000 women died while pregnant or giving birth and 2.7 million newborns died in the neonatal period in 2015 because of low coverage of skilled birth attendance, especially in Africa [15]

All women should have skilled care during pregnancy and childbirth because the provision of skilled care at every birth significantly reduces the risk of maternal and newborn mortality.

[13] Starrs A (1997). The Safe Motherhood Action Agenda: Priorities for the Next Decade. New York: Inter-Agency Group for Safe Motherhood and Family Care International.

[14] AbouZahr C, Wardlaw T (2000). Maternal mortality at the end of the decade: what signs of progress. Bulletin of the World Health Organization.

[15]http://www.who.int/reproductivehealth/topics/mdgs/target_5a/en/

Evidence shows that delivery by a skilled birth attendant (SBA) serves as an indicator of progress towards maternal mortality worldwide as it is estimated that between 13% and 33% of maternal deaths could be averted by the presence of a skilled birth attendant[16].

Globally, the United Nations called on countries to increase their efforts toward skilled attendance and set a target of 80% coverage by 2005, 85% by 2010 and 90% by 2015. All things being equal, these targets would have been set at 100% by 2030. It was observed that births attended by skilled personnel was 73% globally and 60% in Africa by the end of 2013[17]. However, skilled birth attendance has increased in Africa to 71% by 2014, an improvement from the 1990 levels of 45%[18]. As shown in Table 2, 40.4% of countries in Africa still do not have SBA coverage of 60%. Among these countries, Ethiopia, South Sudan, Chad, Sudan and Niger had the least coverage ranging from 16% to 29%.

Table 2: Color-coded table showing performance of African countries in skilled birth attendance coverage

SBA coverage Target (%)	Member Country	Total	% of All Countries
>90	Libya, Tunisia, Mauritius, Algeria, Botswana, South Africa, Congo, Egypt, Rwanda	9	17.3
80-90	Gabon, Djibouti, Malawi, Swaziland, SÃO Tome and Principe, Comoros, Namibia, Zimbabwe, DRC	9	17.3
60-80	Lesotho, Cape Verde, Benin, Ghana, Equatorial Guinea, Burkina Faso, Mauritania, Zambia, Cameroon, Kenya, Sierra Leone, Burundi,	13	25.0
<60	Senegal, Togo, Cote D'Ivoire, Uganda, Gambia, Mali, CAR, Mozambique, Nigeria, Tanzania, Angola, Liberia, Guinea-Bissau, Guinea, Madagascar, Eritrea, Somalia, Niger, Sudan, Chad, South Sudan, Ethiopia	21	40.4

*No data from SADR and Seychelles; Data from 2003-2015 depending on country
Source: African Health Statistic

[16] Graham, W. Bell, JS. Bullough, W. (2001). *Can skilled attendance reduce maternal mortality in developing countries*. Stud HSO&P. 17 (97-129).

[17] World health Statistics 2016

[18] African Union, Economic Commission for Africa; African Development Bank and United Nations Development Programme, 2016. Transition report 2016: MDGs to Agenda 2063/SDGs (c)

Only 9 countries (17.3%) had SBA coverage of over 90%. Among these countries are Libya Tunisia, Mauritius, Algeria, Botswana, South Africa, Congo, Egypt and Rwanda (Table 3). This implies efforts need to be re-doubled in over 80% of African countries in order to attain the recommended 90% target. Factors implicated in the low skilled birth attendance in Africa include delays in seeking skilled medical care, home deliveries, poor antenatal surveillance, and complex ancestral traditions. Some other factors are low educational status of women, long distances from health facilities, poor financial accessibility, lower wealth status and living in rural settings[19,20,21] . Studies have shown that in Africa higher per capita incomes and improved maternal education have been associated with improved child and maternal outcomes[22]. Similarly cost-effective interventions like the deployment of health extension workers in Ethiopia and community health workers and volunteers in Rwanda to address immediate and urgent health needs of women in rural areas and at lower levels of care have gone a long way to improve access to MNCH care[23,24] . Furthermore, in Rwanda, there was huge investment in the continuous development and training of a professional health workforce within and outside the country. These programmes backed by strong leadership, commitment, partnerships and financial motivations of the health workforce have succeeded in bringing services closer to the people, particularly rural dwellers who historically have had challenges in accessing health services[25].

2.2.3 Family Planning

Family planning involves the promotion of maternal and child health by helping individuals and couples attain the desired number and composition of their children and empowering them to decide, if and when to become pregnant, thus preventing unintended pregnancies and reducing

[19] Anne Gitimu, Christine Herr, Happiness Oruko, Evalin Karijo, Richard Gichuki, Peter Ofware, Alice Lakati, and Josephat Nyagero, 2015.

[20] Mary Amoakoh-Coleman, Evelyn K Ansah, Irene Akua Agyepong, Diederick E Grobbee, Gbenga A Kayode, Kerstin Klipstein-Grobusch, 2015.

[21] MDG Report 2015(d)

[22] MDG Report 2015(e)

[23] ECA (Economic Commission for Africa) and OECD (Organisation for Economic Co-operation and Development). 2014. The Mutual Review of Development Effectiveness in Africa: Promise & Performance. 2014. Addis Ababa, Ethiopia.

[24] Basinga, P., Gertler P.J., Binagwaho, A., Soucat, A.L.B., Sturdy, J., Vermeersch, C.M.J. 2011. "Effect on maternal and child health services in Rwanda of payment to primary health-care providers for performance: an impact evaluation." Lancet 377(9775): 1421-1428. 2014. "Global, regional, and national causes of child mortality in 2000-13, with projections to inform post-2015 priorities: an updated systematic analysis." Lancet 385 (9966): 430–440.

[25] WHO (World Health Organizaation) 2013. Women's and children's health: evidence of impact of human rights. Geneva, Switzerland.

the need for unsafe abortions[26]. Implicit in this is the right of men and women to have access to safe, effective, affordable and acceptable methods of contraception of their choice, as well as other methods to regulate fertility which are not against the law[27]. Global estimates indicate that about 12% of women aged 15-49 years who want to avoid pregnancy are not practicing any modern family planning or are practicing traditional methods of family planning which are considered ineffective[28]. These women are likely to be from poorer households, have low educational status, be younger (15-19 years) and be from Africa and/or Southern Asia[29].

Evidence shows that over 4 in 10 women aged 15 to 49 years in Africa (without North Africa) wanted to avoid a pregnancy, but over half of them (55 million) were not using an effective contraceptive method[30]. These women accounted for a disproportionate 93% of unintended pregnancies. In addition, given that one in three girls in the developing world today is married before turning 18, it is likely that many of today's 10-year-olds will soon also face risks of early pregnancy including violence, HIV/AIDS, and consequences of unintended pregnancy. As a result, effectively anticipating and planning for the future family planning needs of current 10-year-olds is critical now, particularly given the strong positive correlation between the proportion of the population represented by 10-year-olds, the current unmet need for contraception at the national level and current adolescent birth rates[31]

If all unmet needs for family planning were satisfied, unintended pregnancies would drop by 83%, from 18 million to three million per year; and unsafe abortions would decline by 84%, from 5.7 million to 0.9 million[32]. If full provision of modern contraception were combined with integrated and improved care, including HIV-related service for all pregnant women and newborns, maternal deaths would drop by 69%, from 183,000 to 58,000 per year; newborn deaths would drop by 82%, from 1.2 million to 213,000, and HIV infections among newborns would decline by 93%, from 115,000 to 8,000. Other long-term gains from meeting women's sexual and reproductive health needs include improvements in women's educational attainment, labor-force participation, productivity and earnings, as well as higher household savings and assets[32]. Governments must make strong efforts at investing in family planning and other

[26] World Health Organization 2013. Programming strategies for postpartum family planning (a)

[27] Krishnamurty, J (2000). Population Policy Development and the ICPD Programme of Action. Low Fertility aand Policy Responses to Issues of Ageing and Welfare, 24

[28] UNFPA 2016. State of the World Population 2016: How our Future Depends on a Girl at this Decisive Age of 10years (a)

[29] World Health Organization 2013. Programming strategies for postpartum family planning (b)

[30] Singh S, Darroch JE and Ashford LS, Adding It Up: The Costs and Benefits of Investing in Sexual and Reproductive Health—2014, New York: Guttmacher Institute, 2014. *a*

[31] UNFPA 2016. State of the World Population 2016: How our Future Depends on a Girl at this Decisive Age of 10years (b)

[32] Singh S, Darroch JE and Ashford LS, Adding It Up: The Costs and Benefits of Investing in Sexual and Reproductive Health—2014, New York: Guttmacher Institute, 2014.*b*

reproductive health services going forward, as they are cost-effective, save lives and are cornerstones of sustainable development.

2.2.4 Levels and Trends in Fertility

Over the last few decades, global fertility patterns have changed greatly. Fertility rate has reached unprecedented low level globally at 2.5 children per woman, although differences persist in its patterns across countries and regions. The population and development implications of these diverse fertility patterns are directly relevant for the implementation of the 2030 Agenda for Sustainable Development and policymaking and planning in all countries[33]. Africa has the world's highest fertility rates, with an average of about 5 children per woman over their reproductive lifetime. Evidence shows that the demographic transition in Africa has proceeded differently from other regions in the world: Pre-transition fertility levels were relatively higher; onset of transition were delayed; progress of transition were much slower and transition started at lower levels of socio-economic development characterized by poor child survival, low educational levels of women and low GDP per capita[34]. Persistently high fertility rates have been associated with poor economic development, low living standards, low educational attainment, and high disease burden – all areas in which countries in Africa generally lag behind the rest of the world[35]

Currently, the total fertility rate for Africa is 4.5 children per woman and is projected to be 3.6 by 2030 (Figure 3). As depicted, 21 countries have high fertility (>5 per woman), whilst another 32 countries are in the intermediate fertility range (2.1-5 per woman). Although, Tunisia, SADR, Seychelles, Cape Verde and South Africa are in the intermediate range of fertility, they have fertility levels close to replacement levels. Only Mauritius has fertility below replacement level. It is projected that by 2030, six countries including Mauritius, SADR, Cape Verde, Tunisia, Libya and Seychelles would have very low fertility levels below replacement, whilst only 2 countries (Somalia and Niger) would have high fertility (Figure 4). The rest (46) would be at various levels of fertility within the intermediate range of fertility (Figure 4). Western and Central Africa are the regions with high fertility (5.2 per woman each) whilst Northern Africa has the lowest fertility rate of 3.0 per woman (Figure 4) despite the slight increase in the fertility rate in Egypt the last years.

In the near future, factors such as optimism about the potential of the demographic dividend for improving economic outcomes, redirection of funding to support family planning services and

[33] United Nations, Department of Economic and Social Affairs, Population Division (2015). World Fertility Patterns 2015 – Data Booklet (ST/ESA/SER.A/370).

[34] Bongaarts J (2013). How exceptional is the Pattern of Fertility decline in Sub-Saharan Africa. UNECA Population Division Expert Paper No 2013/4

[35] Mueni E (2016). Changing the Narrative on Fertility Transition in Africa. Wilson Centre. www.newsecuritybeat.org/2016/04/

increasing demand for family planning services, including in countries which have historically recorded very low levels of contraceptive use[17] are likely to drive fertility decline.

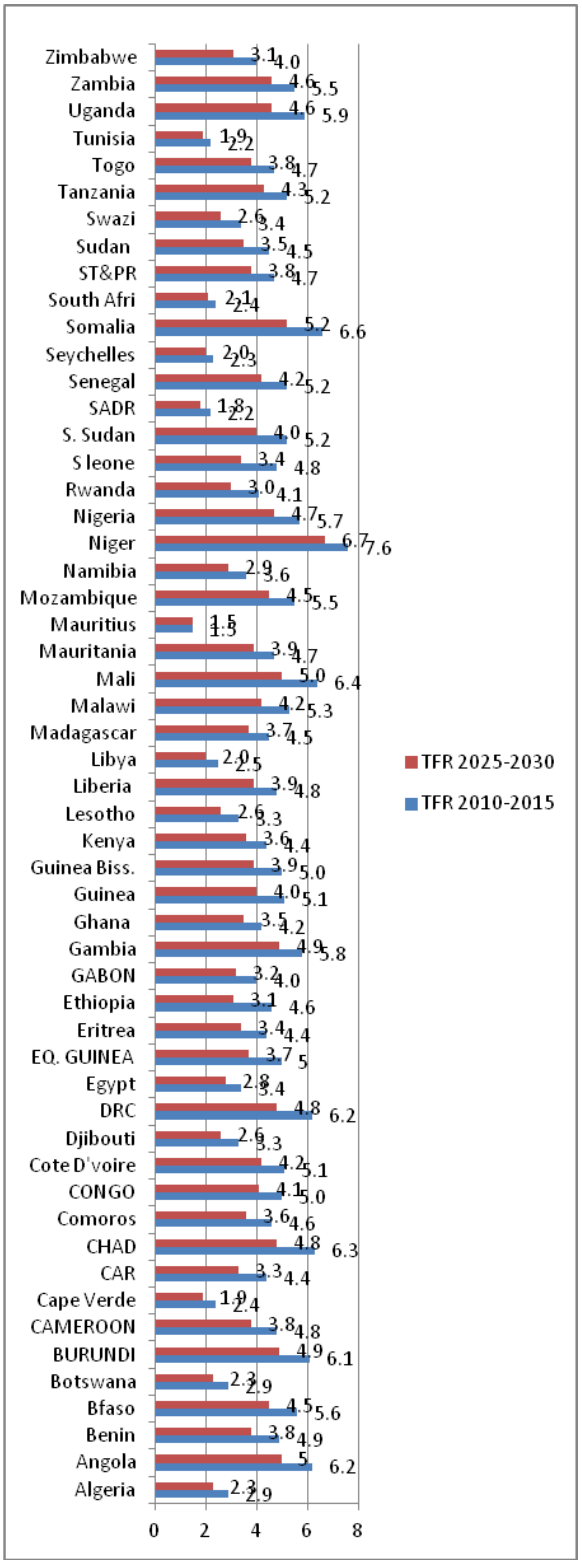

Figure 3: TFR in Africa Current (2010-2015 and Projected (2025-2030)

Source: UN Economic and Social Affairs, 2015

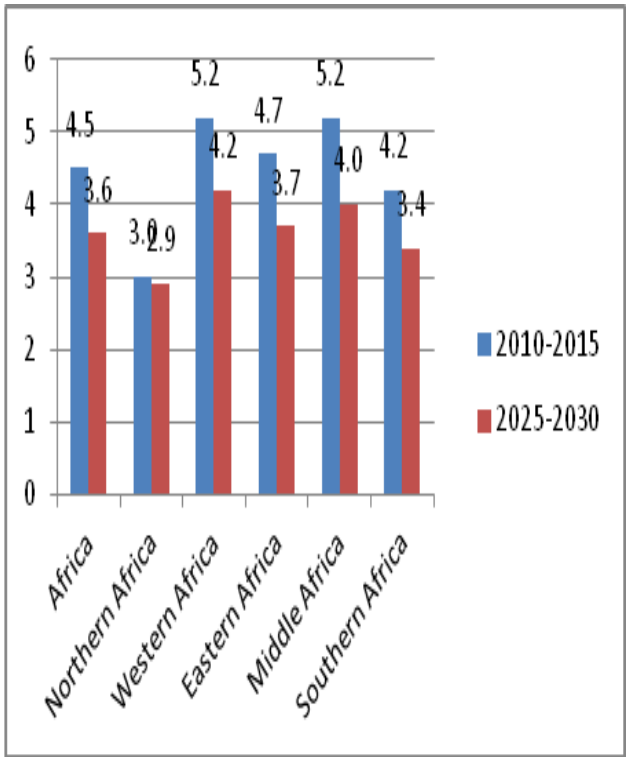

Figure 4: TFR in Africa Current (2010-2015 and Projected (2025-2030)

Source: UN Economic and Social Affairs, 2015

2.2.5 Contraceptive Prevalence

One of the most important transformations in the past few decades has been the improved use of modern contraceptives which has proven to be highly cost-effective in reducing maternal mortality, by reducing the number of unintended pregnancies, abortions and high risk births especially in the developing world[36].

Table 3: Contraceptive Prevalence (CPR) in Africa by 2015

Country	CPR	Country	CPR	Country	CPR
Djibouti	19	Zambia	49	Mauritius	76
Comoros	19	Congo	45	Zimbabwe	67
Angola	18	Libya	42	Swaziland	65
Senegal	18	Madagascar	40	Tunisia	63
Cote d'Ivoire	18	SÃO Tome and Principe	38	Cape Verde	61
Burkina Faso	17	Ethiopia	34	South Africa	60
Sierra Leone	17	Tanzania	34	Lesotho	60
Somalia	15	Gabon	31	Egypt	59
Nigerian	15	Uganda	27	Malawi	59
CAR	15	Ghana	26	Kenya	58
Guinea-Bissau	14	Cameroon	23	Namibia	56
Niger	14	Burundi	22	Algeria	56
Equatorial Guinea	13	Togo	20	Botswana	53
Benin	13	Liberia	20	Rwanda	52
Mozambique	12	DRC	20		
Mauritania	11				
Mali	10				
Gambia	9				
Sudan	9				
Eritrea	8				
Guinea	6				
Chad	5				
South Sudan	4				

Source: Africa Health Statistics 2015

[36] African Union, Economic Commission for Africa; African Development Bank and United Nations Development Programme, 2016. Transition report 2016: MDGs to Agenda 2063/SDGs (d)

Contraceptive prevalence rate for Africa increased from 28 percent in 1990 to 43.6 percent in 2013. However, the contraceptive prevalence rate is still the lowest in Africa by comparison to other regions worldwide, except Oceania[37]. For Africa (excluding North Africa), contraceptive prevalence rates are even lower at 29 percent for any method and 24 percent for modern methods among married women and those in union[38] This indicates that Africa needs to invest considerable effort to improve access to contraceptives.

Only one country (Mauritius) in Africa had contraceptive prevalence rate of over 70% (Table 3). This was followed by Zimbabwe with 67 percent. Countries or areas with contraceptive prevalence of 50 per cent or more are mainly islands (Cape Verde and Mauritius), or located in the northern Africa region of the continent along the Mediterranean coast (Algeria, Egypt and Tunisia) and in Southern Africa (Botswana, Lesotho, Namibia, South Africa, Malawi and Swaziland) (Table 3). Two countries in Eastern Africa (Kenya and Rwanda) also had contraceptive prevalence levels of 50 per cent or more in 2015 (Table 3). In contrast, 23 countries in Africa had contraceptive prevalence levels below 20 percent. This group includes Nigeria, where contraceptive use was at less than half the level in Ethiopia (15 percent and 34 percent, respectively). Less than 10 percent of married or in-union women of reproductive age were using contraception in South Sudan, Chad, Guinea, Eritrea, Sudan and Gambia in 2015 (Table 3).

2.2.6 Unmet Need for Contraceptives

Unmet need is considered very high when it is 25 percent or more and very low when it is 5 percent or less[39]. Unmet need for contraceptives on the continent is high at 23.3% (Table 4). Twenty-four countries have very high unmet needs whilst only Mauritius has very low unmet need (Figure 5).

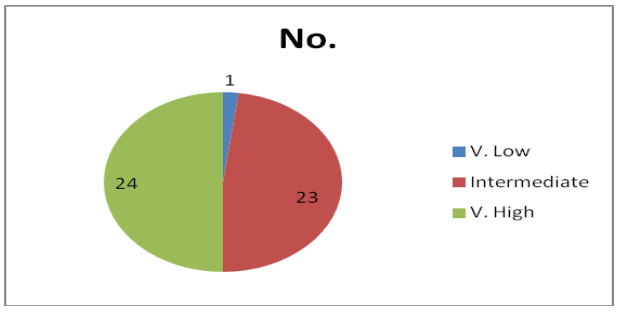

Figure 5: Number of Countries at Different Stages of Unmet Need

[37] UNSD, 2016
[38] UNFPA 2016. Monitoring ICPD Goals: Selected Indicators. State of the World Population 2016
[39] UN Department of Economic and Social Affairs. Policy Division. World Contraceptive Use 2014

Table 4: Unmet Need for Family Planning in Africa

Country	Unmet Need (%)	Country	Unmet Need (%)
Tanzania	25	Mauritius	4
Sierra Leone	25	Guinea-Bissau	6
Mali	26	Tunisia	7
South Sudan	26	Zimbabwe	10
Gabon	27	Algeria	10
Libya	27	Egypt	13
Central African Rep	27	Swaziland	13
Chad	28	South Africa	14
DRC	28	Niger	16
Senegal	29	Cape Verde	17
Sudan	29	Lesotho	18
Eritrea	29	Namibia	18
Mozambique	29	Congo	18
Liberia	31	Kenya	19
Mauritania	31	Nigeria	19
Burundi	32	Malawi	19
Comoros	32	Madagascar	19
Benin	33	Rwanda	21
Ghana	33	Zambia	21
Equatorial Guinea	34	Gambia	22
Togo	34	Cote D'Ivoire	22
Uganda	35	Guinea	22
Burkina Faso	36	Cameroon	24
SÃO Tome& Principe	38	Ethiopia	24

Source: African Health Statistics 2015

Among countries with intermediate unmet need, four countries namely Guinea-Bissau (6%), Tunisia (7%), Zimbabwe (10%) and Algeria (10%) have the lowest unmet need. Zimbabwe presents some interesting lessons that have helped reduce unmet need to as low as 10% and increased contraceptive prevalence rate from 14% just after independence in the 1980s to nearly 70 percent (67%) currently. Strong political commitment to the family planning programme was provided by the then first lady at the establishment of the Zimbabwe National Family Planning

Council just after independence[40]. Another mechanism that helped improve uptake of modern contraceptives is the promulgation of laws and policies on family planning. These included the abolition of fees for the low income group, which removed one of the barriers to contraceptive use, improving accessibility and availability of commodities to the rural population through the Primary Health Care system and using an old prescription to get supply of contraceptives[40]. The improvement of the status of women in Zimbabwe has also played a key role in the success of the Family Planning Programme. It is explained that efforts made since independence to change the status of women which included expansion of the education system which gave more opportunities to women and legislative changes that gave women the right to own property and to enter into contracts helped a lot in improving women's household decision-making autonomy and which improved fertility-related behaviour[40]. The institution of the community–based distribution mechanism of distributing condoms and oral contraceptive pills is still one of the cornerstones of the success story of the family planning programme in Zimbabwe[40].

2.3 Child Health

Significant progress has been made in child health since the launch of the ICPD in the 1990s and the millennium development agenda in 2000. Globally, the under-five mortality rate has decreased by 53 percent, from 91 deaths per 1,000 live births in 1990 to 43 per 1,000 in 2015. This translates to an annual reduction in under-five deaths from 12.7 million to 5.9 million within the same period. In Africa (excluding North Africa) significant reduction of 54 percent in under-five mortality from 180 deaths per 1,000 live births to 83 deaths per 1,000 live births from 1990 to 2015 was recorded. A higher reduction in under-five mortality of 64 percent (73 per 1,000 in 1990 to 24 per 1,000 in 2015) was recorded in North Africa.. Rate of under-five reduction in Africa was faster in 2000-2015 compared to 1990-2000 (4.1% versus 1.6 percent).[41]

Globally, the neonatal mortality rate also fell from 36 deaths per 1,000 live births in 1990 to 19 in 2015. However, the decline in neonatal mortality from 1990 to 2015 has been slower than that of post-neonatal under-five mortality: 47 percent compared with 58 percent globally. A similar trend was seen in Africa (excluding North Africa) and North Africa within the same period, where neonatal mortality rates reduced by 38 percent (46 to 29 deaths per 1,000 live births) and 55% (31 to 14 deaths per 1,000 live births) respectively; rates of decline much slower than the under-five mortality rates[41]. Despite the progress made, significant gaps still remain between the developed and developing countries, within countries, and between the richest and poorest families.

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[40] Akim Mturi, Kembo Joshua, 2011. Falling Fertility and increase in Use of Contraception in Zimbabwe. *African Journal of Reproductive Health, Vol. 15, No. 2, June, 2011, pp. 31-44*

[41] UN Interagency group (UNICEF, WHO, World Bank Group, UN), 2015.Levels and Trends in Child Mortality. Report 2015 a

The leading causes of deaths among children 1-59 months in Africa are diarrhea (18 per cent), pneumonia (15 per cent) and malaria (16 per cent). Neonatal deaths account for 29 percent of under-5 mortality and among neonates the main causes include preterm birth complications, asphyxia, and sepsis[42]. Many of the African countries have demonstrated either slow progress or stagnating neonatal mortality rates. The situation is worse for the large rural populations of Africa that have poor access to and utilization of maternal and newborn health services.

Improving child survival will depend on the institution of interventions that will reduce neonatal mortality. Among the proven, cost-effective and high-impact interventions are: skilled care at birth and emergency obstetric care; management of pre-term births, including antenatal corticosteroids for lung maturation; basic neonatal care; neonatal resuscitation; early identification and antibiotic treatment of serious infections; inpatient care for small and sick newborns; and prevention of mother-to-child transmission of HIV. Integration of these interventions into the service delivery modalities is also very essential. For example greater impact will be achieved if quality health services at the health facility are supported by strong outreach, follow-up and referral services. In addition, promoting healthy behaviors at home and making early decisions to seek care will also add more impetus[43] .

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To further improve child survival, efforts should be made to improve financial accessibility to care through mechanisms like health insurance, national health insurance funds and a concentration on social determinants of health like improving access to education, income earning opportunities, gender orientation, household food security, water and sanitation among others, especially targeting the poor, vulnerable and rural populations[44] .

2.3.1 Mortality among Children Under Five Years of Age

From 2015, nearly 19,000 fewer children are dying every day than in 1990, the baseline years for measuring progress for the SDGs and MDGs respectively[45]. The SDGs proposed a reduction in under-five mortality to at least as low as 25 deaths per 1000 live births by 2030[46]. Currently, however, 79 countries globally have an under-five mortality rate above 25, and 47 of them will not meet the proposed SDG target of 25 deaths per 1000 live births by 2030 if they continue their current trends in reducing under-five mortality . The current under-five mortality rate for the continent is 76 deaths per 1,000 live births[47] , which is 67% above the recommended SDG target

[42] African Union, Economic Commission for Africa; African Development Bank and United Nations Development Programme, 2016. Transition report 2016: MDGs to Agenda 2063/SDGs (e)

[43] MDG Report, 2015 Op. cit.

[44] MDG Report 2015 Op. cit

[45] http://www.who.int/gho/child_health/mortality/mortality_under_five

[46] http://www.who.int/gho/ Op. cit.

[47] UN Interagency group (UNICEF, WHO, World Bank Group, UN), 2015.Levels and Trends in Child Mortality. Report 2015 b

of 25 deaths per 1,000. This means that if Africa has to reduce under-five mortality rate to meet the SDG target by 2030, the annual rate of reduction of under-five mortality should be 4.5% or more. Currently, only 6 countries in Africa have under-five mortality rates at or below the SDG target of 25 per 1,000 live births. These are Libya, Tunisia, Seychelles, Mauritania, Egypt and Cape Verde (Figure 6). Libya has the lowest under-five mortality rate of 13 per 1,000 live births whilst Angola has the highest of 157 per 1,000 live births (more than twice as high as the continental average and over 6 times as high as the SDG target) (Figure 6). Twenty-two countries have under-five mortality rates above that of the continent whilst 31 member states have rates below (Figure 6). Several countries in Africa (over 90%) have to accelerate their efforts to meet the SDG target.

2.3.2 Infant mortality

Globally, the infant mortality rate has decreased from an estimated rate of 63 deaths per 1000 live births in 1990 to 32 deaths per 1000 live births in 2015, with annual infant deaths declining from 8.9 million in 1990 to 4.5 million in 2015. The risk of a child dying before completing the first year of age is five times higher in Africa than in Europe[48]. The infant mortality rate for Africa as at 2015 was 52 deaths per 1,000 live births, a reduction of 49% from the level in 1990. Like the under-five mortality rate, Libya and Angola have the lowest and highest IMRs in Africa respectively (11 versus 96 deaths per 1,000 live births). Twenty-nine countries have IMRs lower than the continental average IMR whilst 24 countries have IMRs above the average for the continent (Figure 7). This implies that significant numbers of children in many countries in Africa are not living beyond the first year of life and are dying from infectious diseases, such as pneumonia, tetanus, and malaria. An important factor in reducing post-neonatal mortality is adequate nutrition, particularly breast milk, which provides babies with both the nourishment and the antibodies to fight infectious diseases.

2.3.3 Neonatal Mortality

The neonatal period is the most vulnerable time for a child's survival. Of the estimated 5.9 million child deaths in 2015 globally, almost 1 million occurred in the first day of life and approximately 2 million in the first week[49]. Most African countries are either showing stagnation or are reducing neonatal mortality at very slow rates and therefore still maintain very high neonatal mortality rates compared to countries in other regions. The current neonatal mortality rate in Africa (27 deaths per 1,000 live births) is the highest in the world and contributes nearly 40% to the global burden[50].

[48] http://www.who.int/gho/child_health/mortality/neonatal_infant_text/en/

[49] https://data.unicef.org/topic/child a

[50] UN Interagency group (UNICEF, WHO, World Bank Group, UN), 2015.Levels and Trends in Child Mortality. Report 2015 c

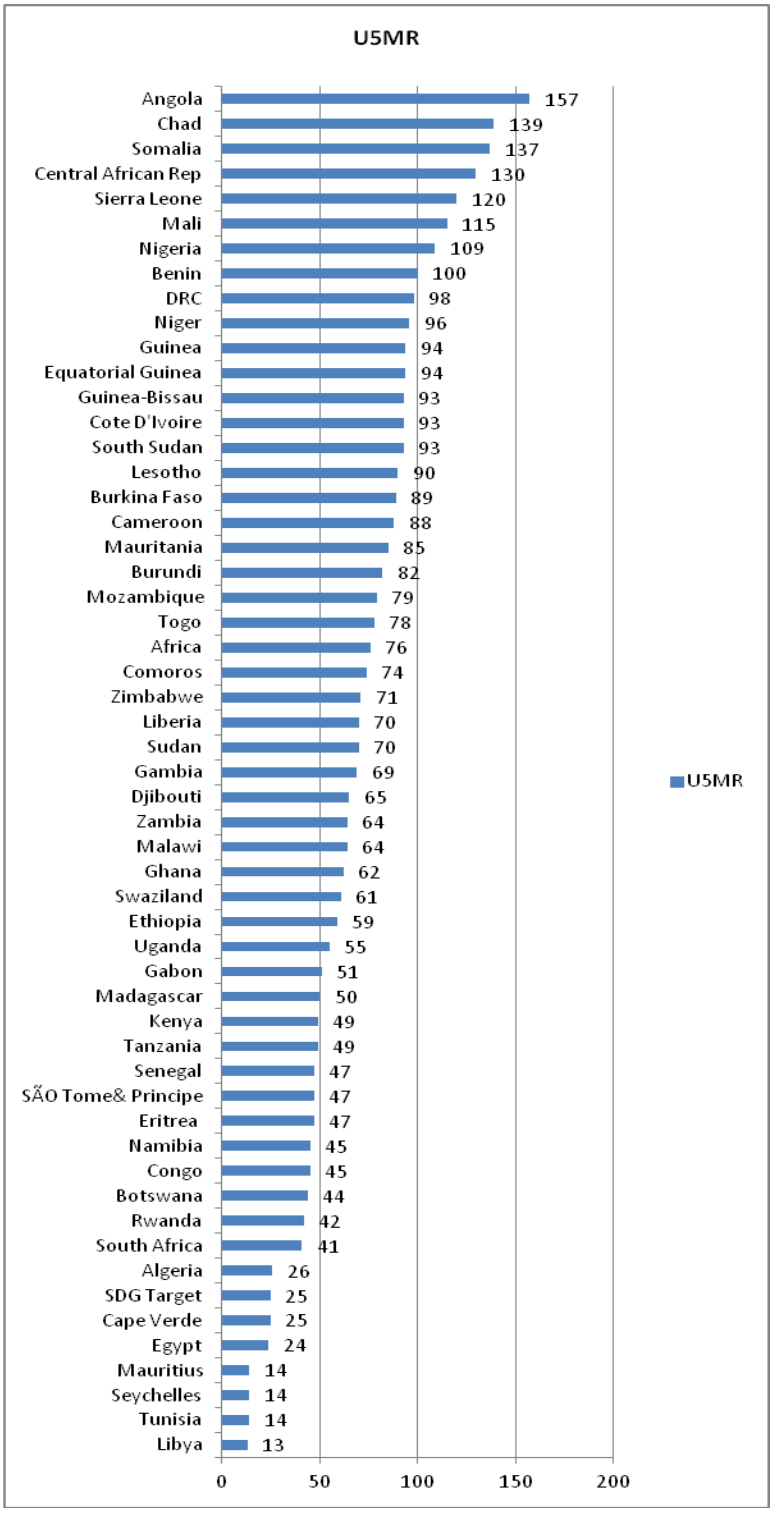

Figure 6: Current U5MR in Africa
Source: Africa health Statistics 2015

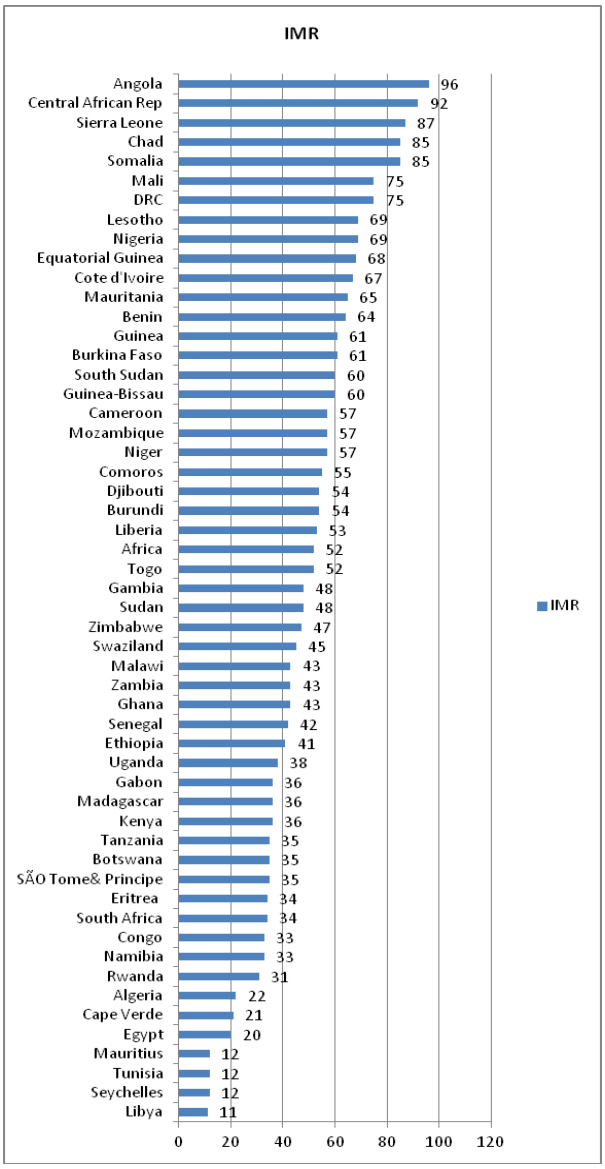

Figure 7: Current IMR in Africa
Source: Africa health Statistics 2015

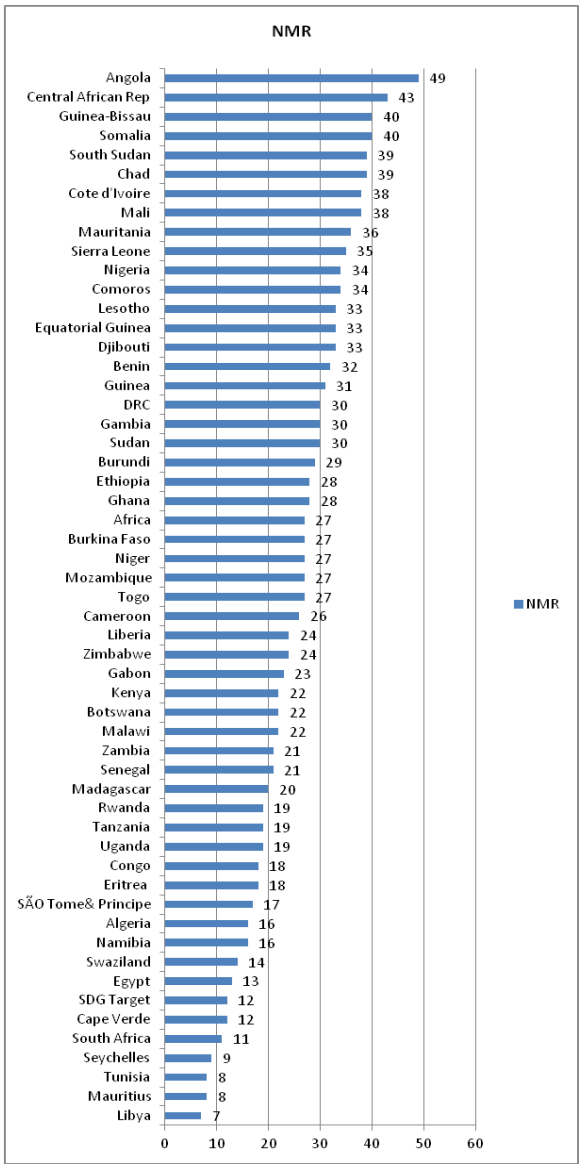

Figure 8: Current NMRs in Africa
Source: Africa Health Statistics 2015

Following a similar trend as the U5MR and the IMR, Libya and Angola have the lowest and highest NMRs in Africa respectively (7 versus 49 deaths per 1,000 live births). Africa's NMR is 2.3 times that of SDG target of 12 per 1,000 live births. As at the beginning of the SDG period in 2015, only 6 out of the 53 member states with data had NMRs at or below the SDG target. The countries include Libya, Mauritius, Tunisia, Seychelles, South Africa and Cape Verde (Figure 8). This implies 89% of African countries need to work at different rates to achieve the SDG target by 2030. Obviously, countries whose NMRs are more than the continental NMR need to work extra hard to achieve the SDG target. These constitute 23 out of the 53 countries with data and are mostly in Western and Central Africa.

Preterm birth complications (35 percent), intra-partum related complications (24 percent), and sepsis (15 per cent) were the major causes of neonatal deaths globally in 2015. Most deaths of children under age five are caused by diseases that are readily preventable or treatable with proven, cost-effective interventions[51].

2.3.4 Childhood Immunization

Every year immunization averts 2 to 3 million infant deaths globally from deadly diseases such as diphtheria, hepatitis B, measles, mumps, pertussis, polio and tetanus. Vaccines save lives, but 1 in 5 children, an estimated 21.8 million infants worldwide, still miss out on basic vaccines[52]. Around 60% of these children live in 10 countries: Angola, the Democratic Republic of the Congo, Ethiopia, India, Indonesia, Iraq, Nigeria, Pakistan, the Philippines, and Ukraine[53].

Vaccines are essential in ensuring healthy lives and promoting well-being for people all over the world. Target 3.8 in the Sustainable Development Goals (SDG's) recognizes this and calls for "… access to safe, effective, quality and affordable medicines and vaccines for all" by 2030[54]. It is proposed that at national level 90% coverage of all vaccines would be achieved and 80% coverage achieved at sub-national or district levels[55].

In 2015, about 86% (116 million) of infants worldwide received 3 doses of diphtheria-tetanus-pertussis (DTP3) vaccine, protecting them against infectious diseases that can cause serious illness and disability. By 2015, 129 countries had reached at least 90% coverage of DTP3 vaccine. Global vaccination coverage has remained steady for the past few years[56].

[51] https://data.unicef.org/topic/child (b)
[52] SDG Monitoring Framework. GAVI Brief. November 2015
[53]http://www.who.int/mediacentre/factsheets/fs378/en
[54] SDG Monitoring Framework Op. cit.
[55] SDG Monitoring Framework Op. cit.
[56] http://www.who.int/mediacentre Op. cit.

Table 5: Current Immunization (DTP3) Coverage in Africa

Country	DTP3 Coverage	Country	DTP3 Coverage
Rwanda	99	Senegal	89
Seychelles	99	Namibia	88
Ghana	98	Cameroon	87
Tunisia	98	Togo	87
Swaziland	98	Zambia	86
Tanzania	97	Mauritania	84
Mauritius	97	Sierra Leone	83
Gambia	96	Kenya	81
Lesotho	96	Guinea-Bissau	80
SÃO Tome & Principe	95	DRC	80
Algeria	95	Comoros	80
Botswana	95	Angola	80
Cape Verde	95	Uganda	78
Burundi	95	Djibouti	78
Libya	94	Mozambique	78
Eritrea	94	Mali	77
Egypt	94	Ethiopia	77
Sudan	94	Madagascar	73
Zimbabwe	91	Gabon	70
Burkina Faso	91	Benin	70
Malawi	91	South Africa	70
Congo	90	Niger	68
		Cote D'ivoire	67
		Nigeria	66
		Guinea	51
		Liberia	50
		CAR	47
		Chad	46
		Somalia	42
		South Sudan	39
Current Immunization coverage for Africa is 77%		Equatorial Guinea	24

Source: Africa Health Statistics (2015)

Africa has made significant improvements immunizing children against preventable diseases such as polio, pneumonia, diphtheria, measles and tuberculosis. Current data indicates that, 77% of the continent's children were immunized, compared to 1980, when only 5% of African children were vaccinated[57]. Gaps still exist. Currently, only 22 (41%) countries in Africa had attained the 90% immunization coverage whilst all the regions and the continent fell short (Table 5). Reasons attributed to gaps include insufficient public awareness about immunization, lack of trust in the health system, inadequate human resource and access to care, untimely vaccinations and service delivery, deficient infrastructure and poor data quality[58].

The global health community collectively recognized the need to accelerate progress towards attainment of set immunization targets and established the Global Vaccine Action Plan (2012-2020) (endorsed by194 member states of the World Health Assembly). The plan envisioned a world without people dying from vaccine-preventable diseases. It aimed to: strengthen routine immunization to meet vaccination coverage targets; accelerate control of vaccine-preventable diseases with polio eradication as the first milestone; introduce new and improved vaccines and spur research and development for the next generation of vaccines[59].

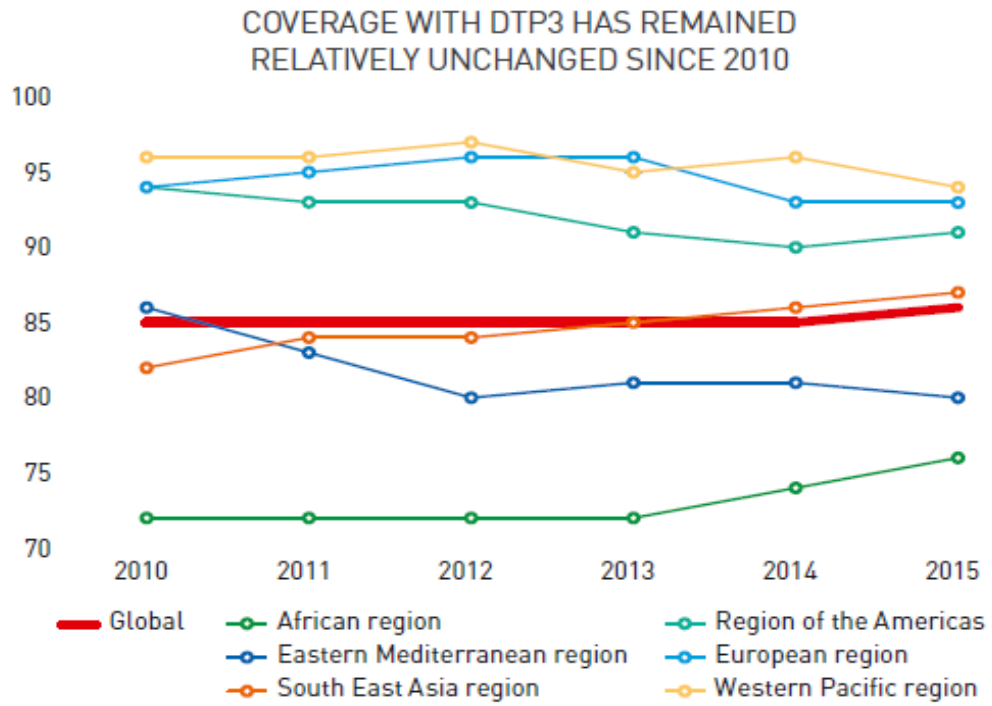

Figure 9: Global Immunization Coverage by Region 2010-2015
Source: WHO and UNICEF estimates for National Immunization Coverage 2010-2015

[57] Wiysonge C, 2015. Why Africa still lags behind in child immunization. The Conversation. http://theconversation.com/why-africa-is-lagging-behind-in-child-vaccination
[58] Wiysonge C, 2015. Op. cit.
[59] Global Vaccine Action Plan 2012-2020

A mid-term evaluation of the plan revealed that immunization coverage stagnated, with only 1% increase in coverage across the globe between 2010 and 2015, and Africa still lagged behind all the other regions (Figure 9). The report further revealed that among the countries that are showing progress, Ethiopia and the Democratic Republic of the Congo stand out because they are all counted among the twenty countries with the largest numbers of unvaccinated people, and their efforts to increase coverage are making a difference in closing the immunization gap. These efforts need to expand to reduce the socio-economic and geographic inequities that still persist in each of these countries[60]. Some countries (with less than or equal to 50% immunization coverage) that will require game changing strategies in order to meet the GVAP goal according to WHO include the following: Central African Republic, Chad, Equatorial Guinea, Somalia, South Sudan and Liberia (Table 5).

2.3.5 Childhood Nutrition

Good nutrition is essential for survival, physical growth, mental development, performance, productivity, health and well-being across the entire life-span; and the implications of good and improved nutrition in children are that: more children will live past the age of five; their growth will be less disrupted; their cognitive abilities will develop more fully and allow them to learn more without disruption, both within and outside of school and as a result, grow with fewer illnesses, thus assuring good jobs, better life, healthy aging and longer life expectancy[61]. Cost-benefit analysis of investing in nutrition interventions in 40 low to middle income countries revealed a ratio of 1:16[62] and investment returns of over 13% in countries like DRC, Nigeria, Mali and Togo[63].

Poor nutrition on the other hand, is a major problem worldwide, with 1 in 3 individuals suffering from one form of it or the other, especially in Africa (excluding North Africa), despite substantial investments to combat it. This represents a substantial challenge to sustainable development. In many African countries, fewer children are growing healthily; for example, the proportion of children under five who are not stunted or wasted ranges between 43 and 48 percent in countries likes Democratic Republic of Congo, Ethiopia, and Nigeria[64]. Furthermore, 58 million children under age five are stunted, 13.9 million are wasted, and 10.3 million are over-weight[65]. In addition, 163.6 million children and women of reproductive age are anaemic[66];

[60] 2016 Mid-term review of Global Vaccine Action Plan
[61] Africa Nutrition Scorecard 2015 (a)
[62] IFPRO 2014
[63] World Bank , 2015
[64] Africa Nutrition Scorecard 2015 (b)
[65] UNICEF-WHO-World Bank. 2015. *Levels and Trends in Child Malnutrition: Key Findings of the 2015 Edition*. Washington, DC, www.who. int/nutgrowthdb/jme_brochure2015.pdf?ua=1
[66] WHO. 2015. *The Global Prevalence of Anemia in 2011*. Geneva: World Health Organization

220 million people are estimated to be calorie deficient[67]; and 8 percent of adults over 20 are obese[68]. The investments made to combat the problem are beginning to yield results, but at a rather slow pace. While some forms of malnutrition, such as stunting, are showing modest but uneven declines, other forms, such as anemia in women of reproductive age, are stagnant. Still, others such as overweight and obesity are increasing[69]. Stunting is associated with suboptimal brain development, which is likely to have long-lasting harmful consequences for cognitive ability, school performance and future earnings. This in turn affects the development potential of nations[70]. While trends in stunting rates are declining steadily in Africa, the rate of population increase has meant that the number of stunted children has increased. According WHO, UNICEF, and the World Bank, this trend is projected to peak in 2020 and start falling (Figure 10).

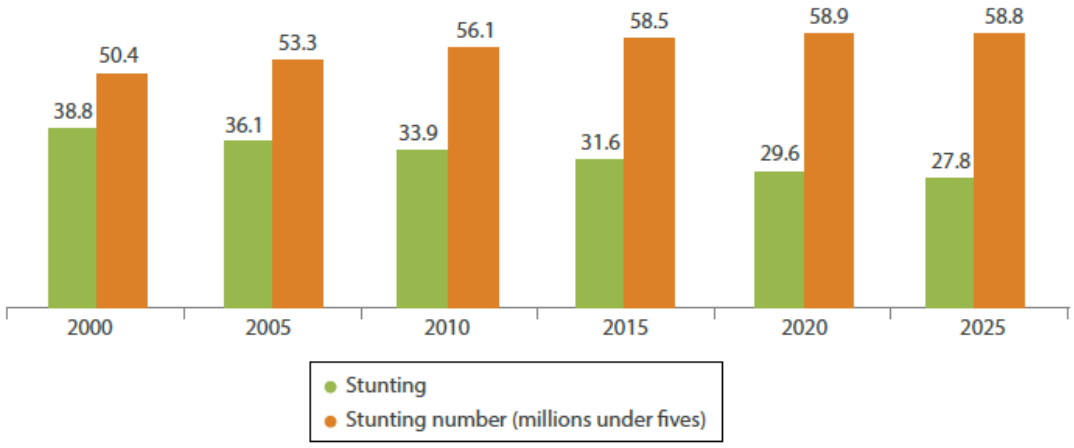

Figure 10: Levels and trends in Under-five stunting in Africa

Source: UNICEF-WHO-World Bank. 2015[58].

Currently, the rate of stunting in Africa is 31.6 percent, a 6.8% percent reduction from the level in 2010 (Figure 10). Only 7 countries in Africa have stunting rates below 20 percent. These include Seychelles, Tunisia, Algeria, Mauritius, Gabon, Ghana and Senegal (Figure 11). There is a huge amount of effort that member countries in Africa have to put in place to achieve the set malnutrition targets, especially stunting.

[67] FAO. 2015. *State of Food Insecurity in the World.* Food and Agriculture Organization of the United Nations.
[68] WHO. 2015. *Obesity: Situation and Trends*, www.who.int/gho/ncd/risk_factors/obesity_text/en/
[69] Africa Nutrition Scorecard 2015 (c)
[70] UNICEF 2013. Improving Child Nutrition:The achievable imperative for global progress.

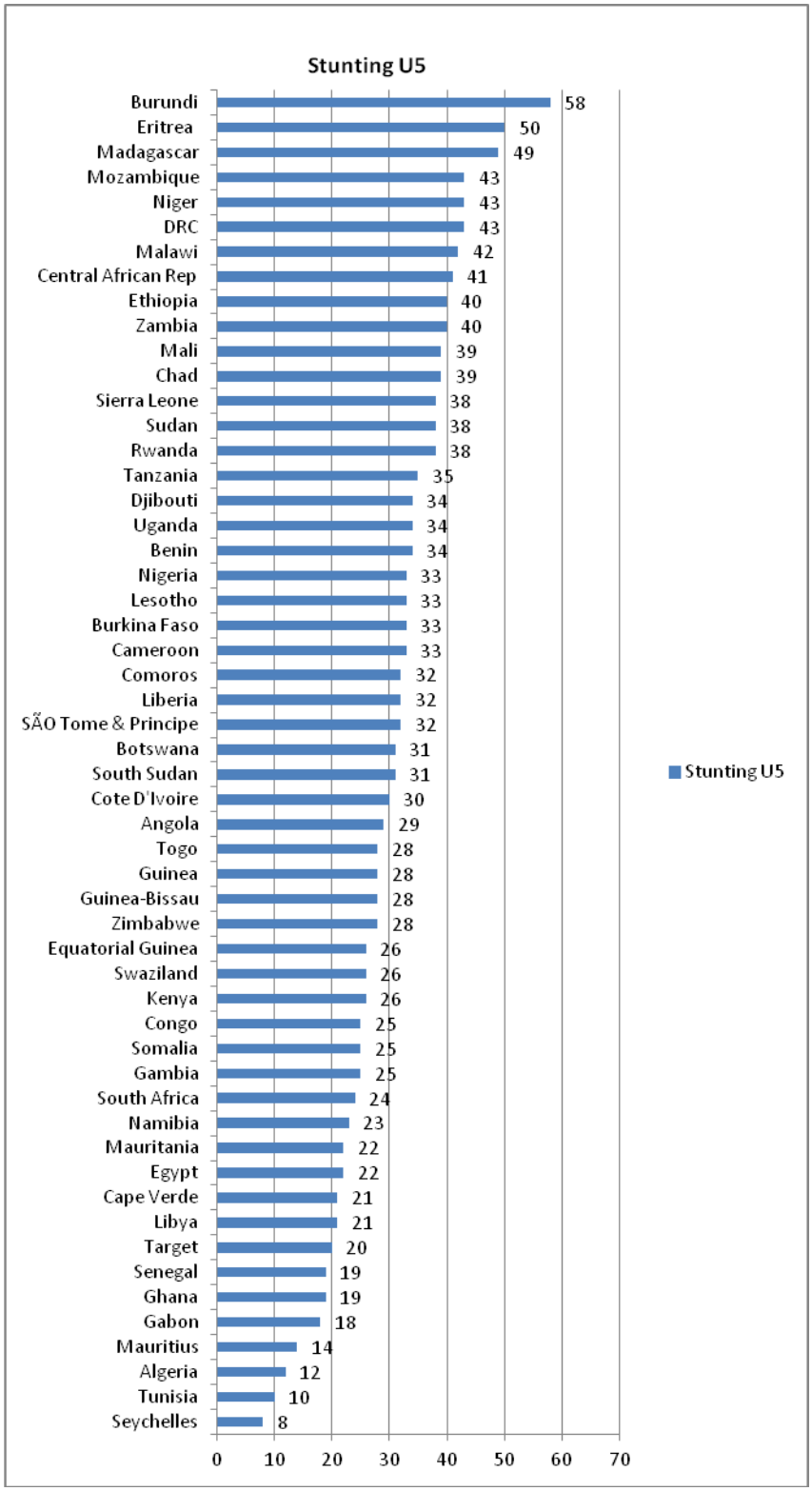

Figure 11: Current Stunting Rates in Africa
Source: African Health Statistics 2015

Some areas of action that will involve a large set of stakeholders to accelerate malnutrition reduction have been identified: the political environment for malnutrition reduction has to be generated; high-impact nutrition interventions need to reach more people.; sectors that are supportive of nutrition improvement must become active drivers of it; policies to create healthy food environments need to be implemented; more funding is needed to scale up nutrition actions; new partners need to be engaged in the fight against malnutrition and accountability mechanisms need to be strengthened to reassure investors and citizens alike that efforts will have a positive impact on status of nutrition[71]

2.4 Status of Sexual and Reproductive Health and Rights of Young People

The sustainability of global socio-economic development is closely tied to the wellbeing of its young people. Today's generation of young people numbers slightly less than 1.8 billion in a world population of 7.3 billion. That's up from 721 million people aged 10 to 24 in 1950, when the world's population totaled 2.5 billion[72]. In 15 countries in Africa (excluding North Africa), and in Chad, Niger and Uganda, half the population is under 18 and 16 respectively. Also, in five countries in Africa (excluding North Africa), populations are actually "youthening" rather than ageing; meaning their median age is projected to decline from 2010 to 2015[73]. This large number of young people represents an opportunity to accelerate economic growth and reduce poverty, but only if nations make the right investments in current and future generations[74]. This large population of young people is also associated with sexual and reproductive health and rights concerns and challenges that have implications for socio-economic growth and development.

When young people realize their sexual and reproductive health and reproductive rights, they are on a path to realizing their full potential as individuals and as actively engaged members of their communities and countries. Sexual and reproductive health and rights also help young people achieve important life intentions. In the process of enhancing and ensuring their reproductive health and rights, young people need support, empowerment and know-how from various facets of their cultures and societies[75] via quality education, decent work, positive participation in their communities, human rights protections and access to sexual and reproductive health information and services. In reality, these basic building blocks elude many young people especially those in Africa due to social, legal and economic obstacles[76] (Table 7).

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[71] Africa Nutrition Scorecard 2015 (d)

[72] United Nations Department of Economic and Social Affairs, 2014. World Economic Situation and Prospects. New York: United Nations. 2003. *World Youth Report 2003: Chapter 5: Youth and the Environment*. New York:

[73] United Nations Department of Economic and Social Affairs, 2014. Op. cit

[74] United Nations Population Fund, 2012. The Status Report on Adolescents and Young People in Sub-Saharan Africa: Opportunities and Challenges

[75] UNFPA 2013

[76] United Nations Department of Economic and Social Affairs, 2014. Op. cit.

Table 6: Social, Economic and Legal Obstacles of Young People to SRHR

Social obstacles	Economic obstacles	Legal obstacles
Gender norms and inequalities that put girls and young women at a disadvantage	Poverty, youth and the digital divide	Laws acting against the best interests of young people
Poor communication between parents and children about SRH	Underinvestment in human capital	Age of sexual consent to access RH services such as comprehensive abortion care, family planning and HIV counseling and testing
Health workers' negative attitudes drive a wedge between youth and services		
Undue pressures from families and friends to get pregnant immediately after marriage and stigmatization by the society on use of condoms especially by non-married		
Community gatekeepers' opposition to young people's access to information and services		
Girls lack the appropriate safe spaces to empower themselves		

Source: State of the World Population 2014

The results of all these obstacles are that: most adolescents and young people are still not getting what they need in the way of SRHR information and services; they are denied comprehensive sexuality education, have low uptake of HIV counseling and testing, poor access to HIV treatment for those who have tested positive, low contraceptive uptake, high incidence of child marriages and high rates of adolescent pregnancies. Promising interventions that are likely to help remove the obstacles include bolstering young people's sexual and reproductive rights, preventing sexual and gender-based violence, discouraging harmful traditional practices, promoting gender parity in education, improving employment and earnings ability, and stopping child and forced marriage[77].

2.4.1 Adolescent fertility (AFR)

Adolescent fertility reflects unmet need for contraception among girls aged 15-19 years. Increasingly, some of the most pervading social, cultural, and economic determinants that fuel adolescent sexuality in Africa have become seriously entrenched and have shown no signs of abating[78]. Adolescent fertility rate is considered high if more than 80 of all women aged 15 to19 years out of every 1,000 gives birth[79]. As Table 8 indicates, Central African Republic (CAR) and Libya respectively have the highest and lowest AFRs (229/1000 versus 4/1000 women aged 15-19 years). Average adolescent fertility rate for the continent is higher than expected (107.5 per 1000). At baseline (2015), only 18 countries had AFRs at or lower than the expected target of 80 per 1000.

Countries with AFRs at or lower than expected: Libya, Algeria, Djibouti, Mauritius, Botswana, Rwanda, South Africa, Egypt, Seychelles, Burundi, Ghana, Ethiopia, Mauritania, Comoros, Togo, Namibia, Senegal

Consequences of adolescent pregnancy on mother and child are serious. These include unsafe abortion and consequences, anaemia, malaria, HIV and other sexually transmitted infections, postpartum haemorrhage and mental disorders, such as depression, and obstetric fistula[80].The rates of preterm birth, low birth weight and asphyxia are higher among the children of adolescents, all of which increase the chance of death and future health problems for the baby.

[77] UNFPA, 2014. State of the World Population Report: The Power of 1.8 billion Adolescents, Youth and the Transformation of the Future

[78] Okonofua F. African Journal of Reproductive Health. Vol. 11 No.3 December, 2007

[79] United Nations, Department of Economic and Social Affairs, Population Division (2013). *Adolescent Fertility since the International Conference on Population and Development (ICPD) in Cairo* (United Nations publication).

[80] WHO, 2006; www.who.int/maternal_child_adolescent/topics/maternal/adolescent pregnancy

Since majority (66%) of African countries still have high AFRs, the implications on mother and child have far reaching consequences on socio-economic development.

Table 7: Current Adolescent Fertility Rate in Africa

Country	Adolescent fertility rate per 1,000 women aged 15-19 years	Country	Adolescent fertility rate per 1,000 women aged 15-19 years
Libya	4	Gabon	115
Tunisia	7	Zimbabwe	120
Algeria	12	Somalia	123
Djibouti	21	Nigeria	123
Mauritius	31	Cote d'Ivoire	125
Botswana	39	Cameroon	128
Rwanda	41	Tanzania	128
South Africa	54	Sierra Leone	131
Egypt	56	DRC	135
Seychelles	62	Burkina Faso	136
Burundi	65	Guinea-Bissau	137
Ghana	65	Uganda	140
Ethiopia	71	Malawi	143
Mauritania	71	Zambia	145
Comoros	71	Liberia	147
Togo	77	Congo	147
Namibia	78	Madagascar	147
Senegal	80	Guinea	154
Eritrea	85	South Sudan	158
Gambia	88	Mozambique	166
Swaziland	89	Equatorial Guinea	177
Cape Verde	92	Mali	178
Lesotho	94	Angola	191
Benin	98	Chad	203
Kenya	101	Niger	210
Sudan	102	CAR	229
SÃO Tome & Principe	110	AFRICA	100*.

NB: Data range for various countries (1999-2013). No data for SADR
Source: African Health Statistics, 2016; *[81]

[81] http://data.worldbank.org/indicator/SP.ADO.TFRT

2.4.2 HIV in Adolescents

HIV/AIDS is a major public health issue among young people globally. Globally, growing share of people living with HIV is represented by adolescents and young people. In 2015, 670,000 young people between the ages of 15 to 24 were newly infected with HIV, 250,000 of who were adolescents between the ages of 15 and 19[82]. Young women aged 15–24 years are at particularly high risk of HIV infection, accounting for 20% of new HIV infections among adults globally in 2015 (nearly 7500 of them acquiring HIV every week[83]). In Africa (excluding North Africa), young women 15-24 accounted for 25% of new HIV infections among adults[84] . Most recent data indicate that only 13 per cent of adolescent girls and 9 per cent of adolescent boys aged 15-19 in Africa (excluding North Africa) – the region most affected by HIV – have been tested for HIV in the past 12 months and received the result of the last test[85]. If current trends continue, hundreds of thousands more will become HIV-positive in the coming years.

Currently, prevalence of HIV among women aged 15-24 in Africa ranges from 0.01 percent in Egypt to 15.5 percent in Swaziland (Table 9). Six countries (Namibia, Zimbabwe, South Africa, Botswana, Lesotho and Swaziland), mostly in the Southern Africa region have HIV prevalence 5% or more, whilst 15 countries have prevalence from 1 to 5 percent; Twenty–seven countries have prevalence below 1%. Twelve countries mostly in the Southern, Eastern and Central Africa have prevalence higher than that of the continent (Table 8). AIDS-related deaths among adolescents have increased over the past decade while decreasing among all other age groups, which can be largely attributed to a generation of children infected with HIV perinatally that are growing into adolescence.

Gender inequalities, including gender-based violence and intimate partner violence exposure to violence during childhood and adolescence, exacerbate women's and girls' physiological vulnerability to HIV and block their access to HIV services[86]. Young people are denied the information and the freedom to make free and informed decisions about their sexual health, with most lacking the knowledge required to protect them from HIV. The impact of these barriers is strongest in high-prevalence settings, predominantly in Eastern and Southern Africa.

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[82] https://data.unicef.org/topic/hivaids/adolescents-young-people/

[83] UNAIDS 2016. Get on the Fast Track. Life Cycle Approach to HIV. Finding Solutions for Everyone at Every Stage of Life

[84] UNAIDS 2016. Prevention Gap Report

[85] https://data.unicef.org/topic/hivaids/adolescents-young-people/

[86] UNAIDS 2016. Women and Girls. SNAPSHOT

Table 8: HIV Prevalence among Women 15-24 years in Africa

Country	Prevalence (%)	Country	Prevalence (%)
Egypt	0.01	Angola	1.08
Tunisia	0.02	South Sudan	1.27
Algeria	0.03	Rwanda	1.27
Senegal	0.09	Gabon	1.28
SÃO Tome and Principe	0.15	Nigeria	1.28
Madagascar	0.15	Cote D'Ivoire	1.39
Sudan	0.16	Congo	1.43
Mauritius	0.17	Guinea-Bissau	1.48
Niger	0.18	Central African Rep	2.00
Somalia	0.24	Cameroon	2.09
Cape Verde	0.25	Tanzania	2.13
Eritrea	0.28	Equatorial Guinea	2.49
Mauritania	0.36	Uganda	3.72
Burundi	0.39	Malawi	4.07
Benin	0.39	Zambia	4.19
Liberia	0.42	Namibia	5.03
Sierra Leone	0.44	Zimbabwe	7.04
DRC	0.48	South Africa	8.14
Burkina Faso	0.53	Botswana	8.85
Ghana	0.56	Lesotho	10.16
Ethiopia	0.56	Swaziland	15.5
Gambia	0.66		
Guinea	0.73		
Mali	0.74		
Djibouti	0.76		
Togo	0.82		
Chad	0.96		

NB: No data for SADR, Kenya, Comoros, Libya, Mozambique and Seychelles

2.4.3 Child Marriage

Agenda 2063 recognizes that child marriage is a major impediment to regional development and prosperity. According to a 2014 UNICEF report on ending child marriage, 700 million out of all the women alive in the world today were married as children, 125 million (17%) of who live in Africa. Whether the prevalence of child marriage is low or high, it remains a challenge that African countries are grappling with.

Table 9: Percent of Children Married by 15 years in Africa (2006-2012)

Country	% Child Marriage by 15	Country	% Child Marriage by 15
Algeria	0	South Sudan	9
Tunisia	0	Zambia	9
Rwanda	1	AFRICA	9.5
South Africa	1	Burkina Faso	10
Swaziland	1	Comoros	10
Djibouti	2	Cote D'Ivoire	10
Egypt	2	Uganda	10
Lesotho	2	Benin	11
Namibia	2	Liberia	11
Burundi	3	Madagascar	12
Cape Verde	3	Malawi	12
Zimbabwe	4	Senegal	12
Ghana	5	Cameroon	13
SÃO Tome& Principe	5	Eritrea	13
Congo	6	Mauritania	14
Gabon	6	Mozambique	14
Kenya	6	Mali	15
Togo	6	Ethiopia	16
Gambia	7	Nigeria	17
Guinea-Bissau	7	Sierra Leone	18
Sudan	7	Guinea	21
Somalia	8	Niger	28
DRC	9	CAR	29
Equatorial Guinea	9	Chad	29

Source: Human Rights Watch 2015

Table 10: Percent of Children Married by 18 years (2006-2012)

Country	% Child Marriage by 18	Country	% Child Marriage by 18
Algeria	2	AFRICA	33.3
Tunisia	2	Mauritania	34
Djibouti	5	SÃO Tome& Principe	34
South Africa	6	Gambia	36
Swaziland	7	Cameroon	38
Rwanda	8	Liberia	38
Namibia	9	DRC	39
Egypt	17	Uganda	40
Cape Verde	18	Eritrea	41
Lesotho	19	Ethiopia	41
Burundi	20	Madagascar	41
Ghana	21	Zambia	42
Gabon	22	Nigeria	43
Guinea-Bissau	22	Sierra Leone	44
Togo	25	Somalia	45
Kenya	26	Mozambique	48
Equatorial Guinea	30	Malawi	50
Zimbabwe	31	Burkina Faso	52
Benin	32	Guinea	52
Comoros	32	South Sudan	52
Congo	33	Mali	55
Cote D'Ivoire	33	Central African Rep	68
Senegal	33	Chad	68
Sudan	33	Niger	76

Source: Human Rights Watch 2015

Child marriage and demographic dividend are intrinsically linked. Investing in children and youth, is an investment in the future of the nation, children who are forced into child marriage are often unable to continue their education, have limited access to quality health services, limited income generating activities and are inevitably denied the opportunity to productively contribute to the society in terms of human and social capital. It is projected that by 2050, Africa will be home to the largest number of child brides to the extent that a doubling of the rate of reduction of child marriages will not be adequate to curtail the problem. The reason is that the child population of Africa is expected to grow rapidly in the coming years, putting millions more

girls at risk of child marriage[87]. The prevalence of child marriage in Africa is 33.3% (Table 11) and 39% in Africa (excluding North Africa). Across all the regions except North Africa, prevalence of child marriage remains high (Western and Central Africa - 42% versus Eastern and Southern Africa -36%)[88]. As Tables 10 and 11 depict, Chad and Central African Republic are the countries with the highest prevalence of child marriage by age 15 years (29 percent) whilst Niger has the highest prevalence of child marriage by age 18 years. Countries with very high prevalence of child marriage by age 15 years include Chad (29%), Central African Republic (29%), Niger (28%), Guinea (21%), Sierra Leone (18%), Nigeria (17%), Ethiopia (16%), and Mali (15%). By age 18 years, countries with very high prevalence of child marriage include Niger (76%), Chad (68 %), Central African Republic (68%), Mali (55%), South Sudan (52%), Guinea (52%), Burkina Faso (52%) and Malawi (50%). Algeria and Tunisia have the lowest prevalence of child marriage in Africa by age 18 years (2% each).

The prevalence of child marriage has been slowly declining in Africa, but remains higher than the global average. However, amongst the poorest families in Africa prevalence has not changed since 1990. Without a rapid acceleration in the current rate of progress, Africa will fall well short of eliminating child marriage by 2030. Across the region, progress would have to be as much as five times faster than projected to meet the target[89]. The low value placed on women and gender inequality underpins the practice. Drivers of child marriage in Africa include: poverty which causes parents to marry off their under-age daughters for the dowry; fear for their safety; perpetuation of tradition and stigma of straying from tradition[90]. Girls who marry young are often denied a range of human rights: they are taken out of school; they are less able to negotiate safer sex with their partners, leaving them more vulnerable to sexually-transmitted infections, such as HIV. They are more vulnerable to early pregnancy, increasing the risks of medical complications in delivery and the likelihood of unsafe abortions. Once pregnant, they are also less likely to receive adequate medical care than older mothers. In low- and middle-income countries, babies are 50% more likely to die when born to a mother aged 20 or lower, compared to a mother aged 20 to 29 years[91].

Some evidence-based strategies identified to reduce child marriage include; empowering girls with information, skills and support networks; providing economic support and incentives to girls and their families; educating and mobilizing parents and community members; enhancing girls' access to high-quality education; and advocating for and encouraging supportive laws and policies[92].

[87] UNICEF 2014. Ending Child Marriage: Progress and Prospects

[88] http://www.girlsnotbrides.org/region/sub-saharan-africa/

[89] http://www.girlsnotbrides.org/region/sub-saharan-africa/

[90] UNICEF 2014. Op. cit.

[91] http://www.developmentprogress.org/blog/2016/04/12/ending-child-marriage

[92]International Centre for Research on Women, 2013. https://www.icrw.org/publications/solutions-to-end-child-marriage-2/

3 The Unfinished Business in Maternal Newborn Child and Adolescent Health in Africa

In the year 2000, the world out-doored a set of 8 goals (Millennium Development Goals) to help countries across the world especially developing countries, accelerate the pace of socioeconomic development in their countries. At the end of 2015 a review of the MDG performance was conducted and several observations made including considering maternal, newborn, child and adolescent health as unfinished business requiring attention in the sustainable development period. Most of the specific issues identified included:

3.1 Addressing the Main Causes of Maternal Death

The major direct causes of maternal mortality on the continent (Nearly 75% of all causes) are: severe bleeding (mostly postpartum hemorrhage) - 25%; infections (usually after childbirth) – 15%; high blood pressure during pregnancy (pre-eclampsia and eclampsia) – 13%; and unsafe abortion - 13%; other complications from delivery- 7%; and other direct causes-8%. The remaining are caused by or associated with diseases such as malaria, and HIV/AIDS during pregnancy. Several evidence-based, low-cost, high impact interventions are available to address the direct and indirect causes of maternal deaths. Key among them include:

3.1.1 Prevention and Treatment of Postpartum Haemorrhage

Primary postpartum haemorrhage (PPH) continues to be the most common cause of maternal death especially in low-income countries. Risk factors for PPH exist and may present antenatally or intrapartum; Skilled attendants need to be aware of risk factors for PPH and take these into account when counseling women about place of delivery essential for the wellbeing and safety of both the mother and the baby. In addition, it is recommended that active management of the third stage of labour (AMTSL) be offered to all women during childbirth by a skilled attendant to prevent PPH[93]. WHO guidelines for AMTSL include prophylactic administration of an uterotonic soon after the birth of the baby, delivery of the placenta by controlled cord traction (where skilled birth attendants are available) and late cord clamping (performed after 1 to 3 min after birth)[94]. Drugs that can be used for PPH prophylaxis include oxytocin (intravenous or intramuscular); syntometrine (intramuscular); ergometrine (intravenous or intramuscular) and oral misoprostol[95]. Even with these efforts to prevent PPH, some women still develop PPH and require treatment and timely interventions including use of additional uterotonics by skilled

[93] World Health Organization .WHO recommendations for the prevention of postpartum haemorrhage. Geneva: World Health Organization; 2012

[94] WHO 2012. Op. cit.

[95] Begley C, Gyte G, Devane D, McGuire W, Weeks AD. Active versus expectant management for women in the third stage of labour. Cochrane Database Syst Rev. 2010: CD007412: doi:10.1186/007410.001002/14651858

providers[96]. Major causes of PPH are uterine atony and retained placenta. For Uterine atony (which accounts for 75-80% of PPH) the following low cost interventions are applied: Bimanual uterine compression to stimulate contraction, emptying of bladder, administration of 5 units oxytocin by slow intravenous infusion (as first-line treatment), Ergometrine 0.5mg slow intravenous or intramuscular (contraindicated in women with history of hypertension). Misoprostol 1000 micrograms rectally is cost effective but not as effective as oxytocin, but may be helpful in low resource settings because it has the advantages of being stable at room temperature, easy to administer, and widely accessible. In early 2011 misoprostol was added to the World Health Organization's Model List of Essential Medicines for the prevention of PPH as a safe and effective medicine.

Evidence suggests that using oxytocin in the hospital setting and misoprostol in the community setting instead of oxytocin in hospital setting and no treatment in community setting, could prevent 22 cases of PPH; also, six fewer women would require additional uterotonics and four fewer women a blood transfusion. Oxytocin/misoprostol was found to be cost saving (US$320) compared to oxytocin/no treatment[97]. On the other hand, if misoprostol is used in both the hospital and community setting compared with no treatment (i.e. oxytocin not available in the hospital setting), 37 cases of PPH could be prevented; ten fewer women would require additional uterotonics; and six fewer women a blood transfusion. The cost savings would be US$533[98].

3.1.2 Prevention and Treatment of Maternal Peripartum Infections

Maternal sepsis remains a life-threatening condition and one of the leading direct causes of maternal mortality worldwide, accounting for up to 15% of maternal deaths. Among live births globally, prevalence of maternal sepsis is 4.4%, ranging from 1-2% in high-income countries and 7% in low-income countries[99]. In developing countries, many women still deliver at home, making prevention of infection at home and in the community important, especially if family members and traditional birth attendants are unaware of the need for infection prevention[100].

Caesarean section is the most important risk factor for maternal infection in the immediate postpartum period. Other risk factors include third-degree or fourth degree perineal tear after

[96] World Health Organization . WHO guidelines for the management of postpartum haemorrhage and retained placenta. Geneva: World Health Organization; 2009

[97] Danielle L. Lang, Fei-Li Zhao, and Jane Robertson. Prevention of PPH: Cost consequences analysis of misoprostol in low resource settings BMC Pregnancy Childbirth. 2015

[98] Danielle et al, 2015. Op. cit.

[99] Mercedes Bonet, Olufemi T Oladapo, Dina N Khan, Matthews Mathai, A Metin Gülmezoglu, 2015. New WHO guidance on prevention and treatment of maternal peripartum infections - The Lancet Global Health. Volume 3, Number 11

[100] Julia Hussein, Dileep V Mavalankar, Sheetal Sharma, and Lucia D'Ambruoso. A review of health system infection control measures in developing countries: what can be learned to reduce maternal mortality. Global Health 2011.

vaginal birth and manual removal of placenta. Prevention of peripartum sepsis includes the observation of fundamental surgical aseptic techniques and use of prophylactic antibiotics and also the use of prophylactic antibiotics in manual removal of placenta and perineal tears (3rd and 4th degrees). Third generation cephalosporins are recommended because they are readily available. Specific treatment regimens are recommended for peripartum conditions such as chorioamnionitis (amoxicillin and gentamicin) and endometritis (clindamicin and gentamicin).

A set of principles of good clinical practice are recommended to optimise the effects of the interventions recommended for prophylaxis and treatment. These include the need for health practitioners and managers to provide an enabling environment for infection prevention and control, changing their attitudes and practices and mobilizing resources to ensure that adequate sanitation facilities are in place, hygiene and infection control measures are implemented, and antimicrobial agents are accessible. It also highlights the need to harness institutional efforts to identify puerperal infections promptly and provide the appropriate treatment[101].

3.1.3 Management of Pre-eclampsia and Eclampsia in Low and Middle-Income Settings

Preeclampsia is a condition, within the spectrum of hypertensive disorders of pregnancy, characterized by elevated blood pressure (>140/90 after 19 weeks of pregnancy) and proteinuria (>0.3g/24 hours)[102], which can progress to eclampsia if left untreated and involve multiple organ systems. Pre-eclampsia complicates 2–8% of all pregnancies, and 10–15% of direct maternal deaths are associated with preeclampsia and eclampsia[103]. Preeclampsia is also an important cause of fetal and neonatal mortality. Although, the condition is of public health concern in both developed and developing countries, its impact is felt more in developing countries, usually because of non-existent primary prevention strategies and late presentation emanating from its unknown etiology and poor predictability. Furthermore, in developing countries, a woman is seven times as likely to develop preeclampsia as a woman in a developed country (from 10-25% of these cases will result in maternal death)[104]

As a condition of public health concern its associated challenges are at different levels: health policy; early detection and prevention; and management[105]. Deficient policy guidelines and poor policy implementation in several African countries at both higher and lower levels of the health

[101] WHO 2015. www.thelancet.com/lancetgh Vol 3 November 2015

[102] Milne F, Redman C, Walker J, Baker P, Bradley J, Cooper C, et al. The pre-eclampsia community guideline (PRECOG): How to screen for and detect onset of pre-eclampsia in the community. BMJ. 2005;330:576–80

[103] Duley L. The global impact of pre-eclampsia and eclampsia. Semin Perinatol. 2009;33:130–7. [PubMed

[104] Preeclampsia Foundation, 2013. Preeclampsia and Maternal Mortality: A Global Burden http://www.preeclampsia.org/health-information/149-advocacy-awareness/332-preeclampsia-and-maternal-mortality-a-global-burden

[105]Kayode O. Osungbade and Olusimbo K. Ige, 2011. Public health perspectives of pre-eclampsia: Implications for Health Systems Strengthening. Journal of Pregnancy (Hindawi). Volume (2011) (a)

system are implicated. This situation has come about because of poor data for decision-making which is blamed on poor vital statistics registration system and record keeping in most health facilities on the continent[106]. In addition a large amount of data on pre-eclampsia is lost due to substantial number of home deliveries and the paucity of use of research in policy development on the continent[107,108].

Identification and early diagnosis of preeclampsia in community settings is necessary to ensure maternal and fetal well-being. The most important initial step toward a diagnosis of preeclampsia in community settings is the assessment of risk. Assessment of risk should be performed before 20 weeks of gestation and women should be referred for expert evaluation by specialist if they have either had a previous preeclampsia, a multiple pregnancy, pre-existing underlying medical conditions like renal disease, diabetes or chronic hypertension. Patients with multiple pregnancy, nulliparity, family history, raised body mass index before pregnancy and maternal age > 40 for multiparous women were shown to have increased the risk for preeclampsia as well[109]. In addition to assessing the risk, the World Health Organization (WHO) ante-partum care model calls for a blood pressure check in the second antenatal visit in addition to testing for proteinuria in nulliparous women or in women with previous preeclampsia. Measuring blood pressure and proteinuria is challenging in low-resource settings due to the financial cost and lack of training. Significant training is needed to measure blood pressure accurately, along with the availability of well-maintained equipment, both of which pose a challenge to the early identification of preeclampsia in community settings. A detection tool that is affordable and can be easily applied is needed[110].

As stated earlier, it is difficult to formulate strategies for effective primary prevention because the causes of pre-elampsia are unknown. There is some evidence that secondary prevention with calcium supplementation and aspirin administration during pregnancy are beneficial in women with low calcium intake, and at a very high risk of developing severe early onset disease, respectively[111].

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[106] P. Tugwell, V. Robinson, and E. Morris, "Mapping global health inequities: challenges and opportunities," in Center for Global, International and Regional Studies, University of California, Santa Cruz, Calif, USA, 2007

[107] G. Woelk, K. Daniels, J. Cliff et al., "Translating research into policy: lessons learned from eclampsia treatment and malaria control in three southern African countries," Health Research Policy and Systems, vol. 7, article no. 31, 2009. View at Publisher

[108] M. Aaserud, S. Lewin, S. Innvaer et al., "Translating research into policy and practice in developing countries: a case study of magnesium sulphate for pre-eclampsia," BMC Health Services Research, vol. 5, article no. 68, 2005

[109] Duckitt K, Harrington D. Risk factors for pre-eclampsia at antenatal booking: Systematic review of controlled studies. BMJ. 2005;330:565. [PMC free article] [PubMed

[110] Firoz T, Sanghvi H, Merialdi M, von Dadelszen P. Pre-eclampsia in low and middle income countries. Best Pract Res Clin Obstet Gynaecol. 2011;25:537–48.

[111] Briceño-Pérez C, Briceño-Sanabria L, Vigil-De Gracia P. Prediction and prevention of preeclampsia. Hypertens Pregnancy. 2009;28:138–55.

Poor management of pre-eclampsia has been as a result of poorly functional health systems and inadequate access to health care. These are observed at the level of decision-making to access care, reaching care and managing the condition at facility levels where delays have been observed especially in developing countries. Inadequate information on when and where to seek help, coupled with lack of decision-making power, poverty, and the rising cost of health care often result in fatal delays in care seeking. Some socio-demographic and cultural underpinnings of maternal health-seeking behaviour have also been documented[112]. Delays in getting to prompt care are a major obstacle in many member countries. Location, distance and lack of transport are important factors. In addition, referral delays due to visits to other orthodox health care and alternative practitioners have been observed. Delays which arise in health facilities have also been shown to prevent women from receiving the care they need before, during, and after childbirth. Poor financial accessibility due to poor or non-existent health financing mechanisms especially for the poor and vulnerable prevent poor and rural women from getting care especially during emergencies. The attitudes of health service providers and perceived poor quality of care are also identified barriers. This is made worse by the lack of trained personnel and lack of equipment and supplies[113].

Delivery of the fetus and placenta is the only definitive treatment for preeclampsia but the option, is sadly not available for most patients who are diagnosed before the baby is full-term. The goal of managing preeclampsia is to keep blood pressure of the woman in the normal range with anti-hypertensives and prevent the development of complications like eclampsia. There is no clear drug of choice for use during hypertensive disorders of pregnancy. The choice of anti-hypertensive however is largely guided by the clinicians experience and familiarity with a particular drug[114]. The full intravenous or intramuscular regimen of magnesium sulfate is the drug of choice for both prevention of eclampsia in severe preeclampsia cases as well as treatment of eclampsia[115].

One of the ways forward, especially for the LMICs, could be scaling up of existing community-based delivery platforms for screening and delivering intervention strategies. The existing cadres could be utilized for screening and early referrals to prevent delays in identification and treatment. Raising awareness of the need for women to reach emergency care without delay if complications arise during delivery is particularly critical. In addition, training community members on recognition of dangers signs and prompt referral needs to be considered since many women deliver at home. Strong political commitment in strengthening health systems is strongly

[112] Kayode O. Osungbade and Olusimbo K. Ige, 2011. Public health perspectives of pre-eclampsia: Implications for Health Systems Strengthening. Journal of Pregnancy (Hindawi). Volume (2011) (b)

[113] Kayode O. Osungbade and Olusimbo K. Ige, 2011. Public health perspectives of pre-eclampsia: Implications for Health Systems Strengthening. Journal of Pregnancy (Hindawi). Volume (2011) (c)

[114] Duley L, Henderson-Smart DJ, Meher S. Drugs for treatment of very high blood pressure during pregnancy. Cochrane Database Syst Rev. 2006;3:CD001449

[115] Knight M. UKOSS. Eclampsia in the United Kingdom 2005. BJOG. 2007;114:1072–8

recommended. The use of data to improve quality of care is also important especially improving reporting systems and record-keeping practices to estimate disease burden to aid service planning and delivery. Maternal death audits would aid the understanding of the pathways to survival and death and help in local efforts at improvement[116, 117].

3.1.4 Management of Unsafe Abortion

Ending the silent pandemic of unsafe abortion is an urgent public-health and human-rights imperative. Globally, unsafe abortion contributes to 13 percent of maternal deaths usually from hemorrhage, infection and poisoning, whilst it contributes to 9% of maternal deaths in Africa according to recent estimates. Nearly all unsafe abortions are in developing countries. Reliable data for the prevalence of unsafe abortion are generally scarce, especially in countries where access to abortion is legally restricted. However, Guttmacher estimates that 8.3 million induced abortions occurred each year between 2010 and 2014, an increase of 4.6 million per year in the 1990s mainly because of increase in the number of children of childbearing age[118] . Estimated annual abortion rate is 34 procedures per 1,000 women age 15-44 years and ranges from 26 procedures per 1,000 in married women and 36 procedures per 1,000 in unmarried women. Across the regions in Africa abortion rates vary: 38 per 1,000 in Northern Africa, 31 per 1,000 in Western Africa and 34 per 1,000 in Eastern, Central and Southern Africa regions. Evidence shows that in 12 out of 54 African countries, abortion is not permitted for any reason and about 90% of women of childbearing age live in countries with restrictive abortion laws; and even where the law allows abortion under limited circumstances, it is likely that few women in these countries are able to navigate the processes required to obtain a safe, legal procedure[119]

The public health rationale to address unsafe abortion was first drawn to attention four decades ago. Following this, a declaration in favour of safe abortion was made at the Programme of Action of the International Conference on Population and Development in 1994 thus - "In circumstances where abortion is not against the law, such abortion should be safe."[120] At the Special Session of the UN General Assembly in June, 1999, governments agreed that "in circumstances where abortion is not against the law, health systems should train and equip

[116] G. Woelk, K. Daniels, J. Cliff et al., "Translating research into policy: lessons learned from eclampsia treatment and malaria control in three southern African countries," Health Research Policy and Systems, vol. 7, article no. 31, 2009. View at Publisher

[117] B. L. Sorensen, P. Elsass, B. B. Nielsen, S. Massawe, J. Nyakina, and V. Rasch, "Substandard emergency obstetric care—a confidential enquiry into maternal deaths at a regional hospital in Tanzania," Tropical Medicine and International Health, vol. 15, no. 8, pp. 894–900, 2010

[118] Guttmacher 2016. Abortion in Africa

[119] Center for Reproductive Rights (CRR), *The World's Abortion Laws 2016,* New York: CRR, 2016.

[120] UNFPA. Key actions for the further programme of action of the International Conference on Population and Development, adopted by the twenty-first special session of the General Assembly, New York, June 30–July 2, 1999. New York:

health-service providers and should take other measures to ensure that such abortion is safe and accessible"[121]. Similarly, the Maputo Protocol adopted by the African Union in 2003 further spelt out grounds under which safe, legal and accessible abortion services could be provided. The protocol further puts on state parties the obligation to protect women's reproductive rights, particularly by authorizing safe abortion in the cases listed in Article 14. 2 c. In addition, the Maputo Protocol urges governments to adopt legal policies and frameworks so as to reduce cases of unsafe abortion, as well as to develop and implement national action plans in order to mitigate the prevalence of unintended pregnancies and unsafe abortions.

Treatment of abortion complications burdens public health systems in the developing world. Conversely, ensuring women's access to safe abortion services lowers medical costs for health systems. Evidence revealed that the total health-system cost of providing post-abortion care (PAC) services in the developing world was $232 million in 2014[122]. Because many women need PAC but cannot access it—and those who do get medical care may not receive comprehensive quality care—providing all women in need with the WHO recommended standard of care would cost substantially more, an estimated $562 million. Unsafe abortion is a burden not only for health systems but also for women themselves and their households. A study in Uganda, where abortion is common despite being legally restricted and highly stigmatized, found that women having unsafe abortions spent on average $49 in out-of-pocket expenditures for the procedure as well as treatment of complications[123]

Primary prevention includes reduction in the need for unsafe abortion through contraception, legalisation of abortion on request, the use of safer techniques, and improvement of provider skills. The advent of vacuum aspiration in the 1960s revolutionised the primary prevention of complications in developing countries. This technology relies on the use of a simple syringe with a plunger to generate negative pressure for uterine evacuation, and plastic cannulas of varying sizes. WHO recommends vacuum aspiration as the preferred method for uterine evacuation before 12 weeks of pregnancy[124]. This method is faster, safer, more comfortable, and associated with shorter hospital stay for induced abortion than sharp curettage. In countries with a small number of physicians, vacuum aspiration can be safely and effectively used by mid-level health service providers, such as midwives (Task-sharing).

The combined use of mifepristone and misoprostol has become the standard WHO-recommended medical regimen for early medication abortion, and is better than either drug

[121] UNFPA, 1999 Op. cit.

[122] Singh S, Darroch JE, Ashford LS. 2014. Adding It Up: The Costs and Benefits of Investing in Sexual and Reproductive Health, 2014. New York: Guttmacher Institute

[123] Sundaram A, Vlassoff M, Bankole A, Remez L, Gebrehiwot Y.2010. Benefits of Meeting the Contraceptive Needs of Ethiopian Women: In Brief, New York: Guttmacher Institute.

[124] World Health Organization. Safe abortion: technical and policy guidance for health systems. Geneva: World Health Organization, 2003.

alone. Mifepristone can be expensive and is not available in much of the world, whereas misoprostol is cheap and widely available. Regimens with misoprostol alone as an abortifacient have varied widely, with reported success rates ranging between 87% and 97%[125]. Increased access to misoprostol has been associated with improved women's health in developing countries, and studies are being done to refine the regimen for misoprostol alone to induce abortion. As of July 2009, mifepristone was available in only five African countries: Ethiopia, Ghana, South Africa, Tunisia and Zambia. Misoprostol was registered for gynecologic uses (primarily for preventing and treating postpartum hemorrhage) in three of those countries (Ethiopia, Ghana and Zambia) as well as in an additional five countries: Nigeria, Sudan, Tanzania, Kenya and Uganda[126].

Secondary prevention entails prompt and appropriate treatment of complications. Post-abortion care is spreading worldwide. Content includes post-abortion assessment and diagnosis, uterine evacuation procedures and techniques, pain management, infection prevention, management of complications, referral to other sexual and reproductive health services, contraceptive counselling and provision, and follow-up care[127].

Most women undergoing abortion do so because they became pregnant when they did not intend to. Because contraceptive use is the surest way to prevent unintended pregnancy among sexually active couples and adolescent girls, programs and policies that improve women's and men's knowledge of, access to and use of contraceptive methods are critical in reducing the need for abortion. To reduce the high levels of morbidity and mortality that result from unsafe abortion, the provision of post-abortion care should be improved and expanded[128]. To reduce the number of clandestine procedures, the grounds for legal abortion in the region should be broadened, and access to safe abortion services should be improved for women who meet legal criteria[129]. A liberal abortion law does not ensure the safety of abortions. Service guidelines must be written and disseminated, providers must be trained, and governments must be committed to ensuring that safe abortions are available within the bounds of the law. Unsafe abortion endangers health in the developing world, and merits the same dispassionate, scientific approach to solutions as do other threats to public health[130].

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[125] Blanchard K, Winikoff B, Ellertson C. Misoprostol used alone for the termination of early pregnancy. A review of the evidence. Contraception 1999; 59: 209–17.

[126] Ipas 2009. Misoprostol and medical Abortion in Africa

[127] Kestler E, Valencia L, Del Valle V, Silva A. Scaling up post-abortion care in Guatemala: initial successes at national level. Reprod Health Matters 2006; 14: 138–47.

[128] Guttmacher 2016. Op. cit

[129] Guttmacher 2016. Op. cit

[130] Guttmacher 2016. Op. cit

3.1.5 Management of Indirect Causes of Maternal Deaths (Malaria and HIV)

Globally, indirect causes like malaria and HIV/AIDS constitute up to 25% of all maternal deaths. Pregnancy is associated with a higher risk of acquiring HIV, and HIV acquired during pregnancy or breastfeeding is associated with an increased risk of HIV transmission to the infant. Pre-exposure prophylaxis (PrEP) has been considered in pregnant women who are at high risk of exposure. In PrEP trials, exposure to TDF-containing PrEP during the first trimester of pregnancy was not associated with adverse pregnancy or infant outcomes. Contraception services, safer conception management and links to antenatal care should be available when providing PrEP services for women. The risks and benefits of and alternatives to continuing to use PrEP during pregnancy and breastfeeding should be discussed with each person[131].

The WHO guidelines on the use of antiretroviral (ARV) drugs for treating pregnant women and preventing HIV infection in infants are based on the following guiding principles that[132]: ART should be initiated in all pregnant and breastfeeding women living with HIV, regardless of WHO clinical stage and at any CD4 cell count and continued lifelong. Providing ART to all pregnant and breastfeeding women living with HIV serves three synergistic purposes: (i) improving the mother's health; (ii) preventing mother-to-child transmission of HIV; and (iii) preventing the transmission of HIV from the mother to a sexual partner. It is important to note that these recommendations are relevant for all epidemic settings, although implementation will be context specific. Because ART has individual health benefits for all individuals living with HIV, the recommendation applies to both breastfeeding and non-breastfeeding populations[133].

Prevention and management of malaria in pregnancy are based on prophylactic antimalarial for preventing malaria in pregnancy and provision and promotion of use of Insecticide Treated Nets for preventing malaria in pregnancy.

3.2 Child Survival

The leading causes of child mortality were preventable newborn problems and infectious diseases, including preterm birth complications (15%), intrapartum related complications (11%), pneumonia (13%), diarrhea (9%), and malaria (7%). Of all the deaths in under-fives, 45% were associated with undernutrition, whilst more than 80% of newborn deaths were associated with

[131]WHO, 2016. Consolidated Guidelines on the Use of Antiretroviral Drugs for Treating and Preventing HIV Infection, 2nd edition. Recommendations for a public health approach

[132] WHO 2016,. Op. cit

[133] WHO, 2016. Op. cit.

low birth weight[134]. Some emerging childhood conditions have had some significant impact on child health apart from the traditionally known ones. These emerging conditions include congenital anomalies, injuries, chronic respiratory diseases, acquired heart diseases, childhood cancers, diabetes, and obesity.

Evidence-based essential interventions for child survival that are well known but are not reaching all children exist. These interventions are organized under the following priority areas and are summarized in Table 12 as follows: Adolescence and pre-pregnancy interventions; interventions within the pregnancy, childbirth, postnatal, infancy and childhood periods; health and multisector actions and interventions addressing key emerging priorities. The interventions summarized in the table include health and non-health sector interventions that need to be implemented at scale and with quality to close the equity gap and reach universal coverage. Preconception and periconception care interventions are increasingly important, not only to prevent congenital anomalies and optimize fetal development but also to enhance health during the child's life[135]. Women's empowerment, education, poverty alleviation, legal frameworks and policies, access to safe drinking water and sanitation, and a safe environment are all essential to protect and support children's health and prevent common conditions such as diarrhea and pneumonia[135,136].

The successful delivery of the health related or clinically oriented child survival interventions will require a strong health system which is well equipped and has the right mix of community and health facility based delivery of services. Optimising the mixture of community and facility based delivery of services is a widely-used strategy to ensure that interventions reach populations, when and where they need them[137].Evidence has shown that community health workers can increase access to preventive interventions such as health education, breast feeding and nutrition promotion and support, essential newborn care, stimulation and psychosocial support, and use of insecticide treated nets[138]. Similarly, appropriately trained and supported

[134] Liu L, Oza S, Hogan D, et al. Global, regional, and national causes of child mortality in 2000-13, with projections to inform post-2015 priorities: an updated systematic analysis. *Lancet* 2015;385:430-40.

[135] Marmot M. Closing the health gap in a generation: the work of the Commission on Social Determinants of Health and its recommendations. *Glob Health Promot* 2009;suppl 1:23-7.

[136] World Health Organization. Ending preventable deaths from pneumonia and diarrhoea by 2025. WHO, 2013 (available at www.who.int/maternal_child_adolescent/news_events/news/2013/ gappd_launch/en/).

[137] Perry HB, Zulliger R, Rogers MM. Community health workers in low-, middle-, and high-income countries: an overview of their history, recent evolution, and current effectiveness. *Annu Rev Public Health* 2014;35:399-421.

[138] Gilmore B, McAuliffe E. Effectiveness of community health workers delivering preventive interventions for maternal and child health in low- and middle-income countries: a systematic review. *BMC Public Health* 2013;13:847.

community health workers can provide treatment interventions for pneumonia, diarrhea, malaria, and severe acute malnutrition[139].

Table 11: Summary of Evidence-based Child Survival Strategies and Interventions[140],[141]

Priority Area	Strategies/Interventions
Adolescence and Pre-pregnancy	Family planning Preconception care
Pregnancy	Appropriate care for normal and high risk pregnancies
Childbirth	Promotion and provision of thermal care for all newborns Promotion and provision of hygienic cord and skin care Promotion and support for early initiation and exclusive breast feeding within the first hour Newborn resuscitation
Postnatal period	Antibiotics for newborns at risk and for treatment of bacterial infections Appropriate postnatal visits Extra care for small and sick babies (kangaroo mother care, treatment of infection, support for feeding, and management of respiratory complications)
Infancy and childhood	Exclusive breast feeding for six months and continued breast feeding up to at least two years with appropriate complementary feeding from six months Monitoring and care for child growth and development Routine immunisation for common childhood diseases, including introduction of new vaccines against *Haemophilus influenzae*, *Pneumococcus*, and rotavirus Micronutrient supplementation, including vitamin A from 6 months Prevention and management of childhood malaria Prevention and management of childhood pneumonia Prevention and management of diarrhea Case management of severe acute malnutrition Comprehensive care of children exposed to or infected with HIV

[139] Lewin S, Munabi-Babigumira S, Glenton C, et al. Lay health workers in primary and community health care for maternal and child health and the management of infectious diseases. *Cochrane Database Syst Rev* 2010;3:CD004015.

[140] World Health Organization, Partnership for Maternal, Newborn and Child Health, Aga Khan University. Essential interventions, commodities and guidelines for reproductive, maternal, newborn and child health (RMNCH). PMNCH, 2011 (www.who.int/pmnch/knowledge/publications/201112_essential_interventions/en/).

[141] World Health Organization. Compilation of WHO recommendations on maternal, newborn, child and adolescent health. 2013. www.who.int/maternal_child_adolescent/documents/mnca- recommendations/en.

Table 11 continued

Health and multisector interventions	*Ensuring food security for the family (or mother and child)* Maternal education Safe drinking water and sanitation Hand washing with soap Reduced household air pollution Health education in schools
Interventions to address key emerging priorities	*Congenital anomalies* Optimisation of maternal nutrition to prevent low birth weight Periconception supplementation with folic acid Minimising and reducing exposure to harmful environment and substances Preconception and periconception maternal screening Newborn screening (for example, for hypothyroidism and haemoglobinopathies) *Injuries* Policy and regulations to prevent and reduce risks of injuries and accidents Setting standards for safe environments and recreation areas for children Developing better road infrastructure Health education on risks of injuries, burns, and drowning *Overweight and obesity* Appropriate policies and regulations on marketing of unhealthy foods and beverages to children and ensuring availability of healthy and nutritious choices Limitation of energy intake from total fats and sugars Increase in consumption of fruit and vegetables, as well as legumes, whole grains, and nuts Reducing the fat, sugar, and salt content of complementary foods and other processed foods Ensuring that healthy and nutritious choices are available and affordable to all consumers Practising child and school food and beverage policies Increased regular physical activity and reduced screen time

3.3 Youth and Adolescent Sexual and Reproductive Health

Until recently, adolescent and young people's sexual and reproductive health and rights had been given very little attention. The world community has began paying more attention towards adolescent and young people's issues as evidenced in some international conventions, protocols and legal instruments. Critical among them are: the UN General Assembly Special Session on Children in 2002 which recognized the need to develop and implement health policies and programs for adolescents that promote their physical and mental health[142]; the committee of the Convention on the Rights of the Child which issued in 2003, a general comment recognizing the special health and development needs and rights of adolescents and young people[143], the Millennium Development Goals, which included and tracked indicators to reduce pregnancy rates among 15–19 year olds, increase HIV knowledge, and reduce the spread of HIV among young people[144] and recently the SDGs which has at least 10 of the 17 goals relating directly to the youth and their development and pays special attention to youth education, health, nutrition, employment, dignity, empowerment, security, equality, and young people's participation in conversations that affect them and their surroundings[145].

A greater attention on adolescent and youth SRHR is extremely important because of the huge impact on individuals themselves, families, communities and societies of the risk of neglect. For girls, early pregnancy and motherhood can be physically risky and can compromise educational achievement and economic potential. Adolescent girls especially face increased risk of exposure to HIV and STIs, sexual coercion, exploitation, and violence for example. Many challenges confront young people in terms of their SRHR in Africa especially. These are seen at various levels including Political, Socio-cultural and religious, Service delivery, Socio-economic, interpersonal, and personal levels.

Low political commitment, restrictive and non-existent laws and policies in support of young people's sexual and reproductive health exist in many member states. Some socio-cultural practices in some societies approve child marriage and early childbearing, while some do not frown on difference in ages of partners. Especially for unmarried sexually active women, many cultures stigmatize and exhibit judgmental attitudes towards discussions and activities around issues such as contraceptive use and STI/HIV testing and treatment and sometimes safe abortion services where laws approve it. Poor health systems for sexual health, family planning, and

[142]United Nations Resolution adopted by the General Assembly [on the report of the Ad Hoc Committee of the Whole (A/S-27/19/Rev.1 and Corr.1 and 2)] S-27/2. A world fit for children 2002. 11 October 2002 Twenty-seventh special session

[143] Convention on the Rights of the Child. General Comment No. 4 (2003). Adolescent health and development in the context of the Convention on the Rights of the Child

[144] The Millennium Development Goals. http://www.un.org/millenniumgoals/

[145] Arif Ekram 2016. What are the SDGs and how do they relate to the Youth Giving Movement. http://www.youthgiving.org

maternal health are common, with unmarried adolescents ignored in some cases, married adolescents in others, and an overall deficiency of youth-friendly services and poor integration of services[146]. In some member states, reasons for poor utilization of SRH services were distant health facilities, poor quality of service, inconvenient service locations, inconvenient hours of operation, unaffordable service costs[147] and lack or erratic supplies of consumables, medicines and equipment. The influence of some significant others on young people's access to information and services cannot be underestimated. These include healthcare workers, teachers, family members, parents and peers. Health provider attitudes have been considered the most influential among them. Many healthcare workers deter adolescents from using services because of their lack of confidentiality, judgmental attitudes and disrespect[148]. At the personal level, young people's sexual and reproductive healthcare-seeking behaviour may be restricted by: fear of people finding out and other confidentiality issues that may result in violence; embarrassment; lack of knowledge; misinformation and myths, stigma, and shame[149]

Building the skills and changing the attitudes of health care providers at existing health facilities to make them more adolescent-friendly is more cost effective than building adolescent health corners which serve a few people and are also more expensive. Preventing adolescent pregnancy and delaying early childbearing is a crucial starting point for improving maternal and newborn health, as well as improving women's lives more broadly. Studies in countries such as Mexico and Nigeria have shown that when girls and adolescent women are exposed to a set of interventions that include sex education, cash transfer schemes and life-skills development, they are less likely to have early pregnancies[150].

Universal access to SRHR must tackle policy and legal barriers to access, such as spousal or parental consent and minimum age for access to health services. Services should be provided and also measured according to whether they are non-judgmental, respectful and ensure confidentiality. The provision of quality, comprehensive, age appropriate sexual and reproductive health and rights education in schools, for both boys and girls, is also key to promoting an understanding and awareness of sexual and reproductive health and rights, including the ways to protect oneself against sexually transmitted infections (including HIV) and

[146] Jessica L Morris and Hamid Rushwan, 2015. Adolescent Sexual and Reproductive health: the Global Challenges. *International Journal of Gynaecology and Obstetrics.* Volume 131, Supplement 1, October 2015, Pages S40–S42

[147] Atitegeb Ayehu, Teketo Kassaw, Getachew Hailu, 2016. Level of Young People's Sexual and Reproductive Health Service Utilization and its Associated Factors among Young People in Awabel District, Northwest Ethiopia. *Plos one*.March 2016

[148] International Federation of Gynaecology and Obstetrics. http://www.figo.org/figo-project-publications

[149] A.K. Blanc, A.O. Tsui, T.N. Croft, J.L. Trevit, 2009. Patterns and trends in adolescents' contraceptive use and discontinuation in developing countries and comparisons with adult women. *Int Perspect Sex Reprod Health*, 35 (2) (2009), pp. 63–71

[150] Lloyd CB, ed., Growing Up Global: The Changing Transition to Adulthood in Developing Countries, Washington, DC:National Academies Press, 2005.

unintended pregnancy, and to helping adolescents make informed and responsible decisions about their body and their health and to exercise a healthy and safe sexuality. Comprehensive sexuality education needs to take a holistic approach which equips adolescents with the necessary skills and knowledge about relationships, gender equality and joint decision-making and which enables girls in particular to make their own informed choices to protect their sexual and reproductive health.

3.4 Human Resources for MNCAH in Africa

Evidence exists that increased availability of skilled health workers is directly linked to improved MNCH outcomes[151] . However, there is tremendous variation across countries not only in availability and distribution of doctors, nurses, midwives and other trained providers, but also of the services actually provided by health workers with the same occupational title. In Africa, where the global health crisis is most severe, health workforce density for MNCH is below the recommended 2.3 per 1000 and very few national human resource for health (HRH) policies exist to guide the training and deployment of the health workforce for MNCH. Of all the countries in the Region, 36 have critical shortage of human resource for health, 8 with only about 0.8 physicians, nurses and midwives per 1000 population while the minimum acceptable density threshold is 2.3 per 1000 population. The estimated shortage of doctors, nurses and midwives in the Region was about 820,000 staff in 2006. When all categories of health workers are included, the shortfall is estimated at 1.4 million[152].

The main causes of the present situation that constitutes a key impediment to meeting the MNCH needs include: migration of qualified health workers to well resourced countries; inadequate remuneration and incentives; mal-distribution of the available health workers; underinvestment in the production of sufficient health workers; inadequate capacity of HRH departments to carry out the main HRH functions and; low implementation of most of the existing plans[153]. In addition, there are significant disparities between rural and urban areas, with shortages in the rural areas. Close to 86 percent of medical specialists, 63 percent of general physicians and 51 percent of nurses and midwives serve mainly in urban areas[154]. The challenges facing the countries are uneven and pose a strategic threat to national and regional health systems development and the overall well-being of MNCH of populations in the Region. Major and pressing HRH challenges identified are: weak HRH leadership and governance capacity; weak training capacity; inadequate utilization; retention and performance of available health workforce

[151] Speybroeck N, Dal Poz MR, Evans DB: Reassessing the relationship between human resources for health, intervention coverage and health outcomes. [http://www.who.int/hrh/documents/reassessing_relationship.pdf],Background paper prepared for The World Health Report 2006.Geneva: World Health Organization, 2006.
[152] WHO. World Health Report 2006 Geneva, Switzerland, 2006.
[153] WHO. Road Map for Scaling –up the HRH: for Improved Health Service Delivery in the African Region 2012-2025
[154] WHO Regional Office for Africa Survey on HRH profiles, inputs World Health Report, 2006.

for MNCH; insufficient information and evidence-base; weak regulatory capacity; uncoordinated partnerships; and weak policy dialogue[155].

A number of opportunities to address the crisis of human resources for MNCH in the African Region exist. These include: the Global Health Initiatives; the 2001 Abuja Declaration for increasing financial resources for health including HRH; the 2008 Ouagadougou Declaration on Primary Health Care and Health Systems which identifies HRH as a health priority; the 2008 Algiers Declaration on investing in and promoting research for health including building HRH evidence; and the Global Code of Practice on international recruitment of health personnel adopted at the Sixty-third World Health Assembly in 2010 which encourages Member States to implement effective policy measures to educate, retain and sustain the health workforce. In addition, the high level inter-ministerial (health, education, public service, finance) consultation in March 2007 hosted by the African Union (AU) made recommendations for health workforce development in Africa using multi-sectoral response and identified priority areas that were later endorsed by the Conference of African Ministers of Health of the AU in April 2007 and the first HRH global forum in 2008 adopted the Kampala Declaration which provides strategic directions for human resource for health.

Six strategic interventions consistent with the roadmap for scaling up the human resource for health are proposed to address the human resource for MNCH in Africa. These are:

1. Strengthening leadership and governance capacity of the health workforce to make available appropriately skilled and high-performing doctors, nurses and midwives in the right quantity where they are needed. It is required to increase the domestic investment for sustainable financing of national health workforce plans including recruitment and to strengthen HRH management and leadership capacities.

2. Strengthening HRH regulatory capacity in the Region by establishing HRH regulatory and professional bodies where they do not exist or by increasing their capacity where they exist. This capacity should also be available at sub-regional and regional levels to improve harmonization of professional regulation and practice including alignment between HRH policy reforms and regulatory framework for professionals and services.

3. Scaling up education and training of doctors, nurses and midwives by strengthening education and training capacity especially in countries facing shortages. This could be achieved by increasing the numbers of qualified teaching staff, teaching and learning materials and improving infrastructure. The capacity building includes adherence to socially accountable standards of quality and quantity including mandatory accreditation.

[155] WHO, 2006. Op. cit.

4. Optimizing the utilization, retention and performance of the available mechanisms for equitable and rational distribution; the design and implementation of retention strategies that will attract and retain skilled workers in service areas and teaching institutions and; the provision of specific incentives to qualified health personnel serving in rural areas and hardship areas.

5. Improving MNCH workforce information and evidence by strengthening HRH information systems, establishing national HRH observatories (where absent) and compiling and disseminating evidence at national, sub-regional and regional levels as well as building capacity in HRH research and in the use of the evidence generated.

6. Strengthening partnership and dialogue for the MNCH health workforce by fostering partnership, improving dialogue among stakeholders such as education, finance and public service, regulatory bodies, professional associations, as well as the private sector and development partners for their involvement in HRH development at all levels. Advocacy at national, regional and global levels should continue in order to secure substantial financial investment in HRH development.

4 Sexual and Reproductive Health and the Demographic Dividend

Sustainable development cannot be achieved without assuring that all women and men, girls and boys, enjoy the dignity and human rights to expand their capabilities, secure their reproductive health and rights, find decent work, and contribute to sustainable economic growth[156]. There has historically been window of rapid economic growth in countries experiencing the demographic transition (population shifts from high fertility rates and high mortality rates to low fertility rates and low mortality rates) if countries make the right human capital investments to ensure that a country's working age population grows larger than the non-working age population, thus creating a more productive economy in a state facing fewer costs associated with non-workers, like children and the elderly[157].

Realizing the demographic dividend requires building the capabilities of young people, and ensuring their rights and freedoms to achieve their potential. However, the chance to realize their potential is derailed for millions of girls worldwide by child marriage, early and unintended pregnancies, poor access to reproductive health care, and limited education (Figure 12). The

[156] *esaro.unfpa.org/.../UNFPA,* ***Demographic Dividend*** *accessed 25/11/16*

[157] UNFPA 2014. State of the World Population 2014 Factsheet: The power of 1.8 billion: Adolescents, Youth and the Transformation of the Future. Sub-Saharan Africa

fulfillment of sexual and reproductive health and reproductive rights, therefore, is not a side-line to inclusive national growth; it is essential for any society to achieve a demographic dividend[158]

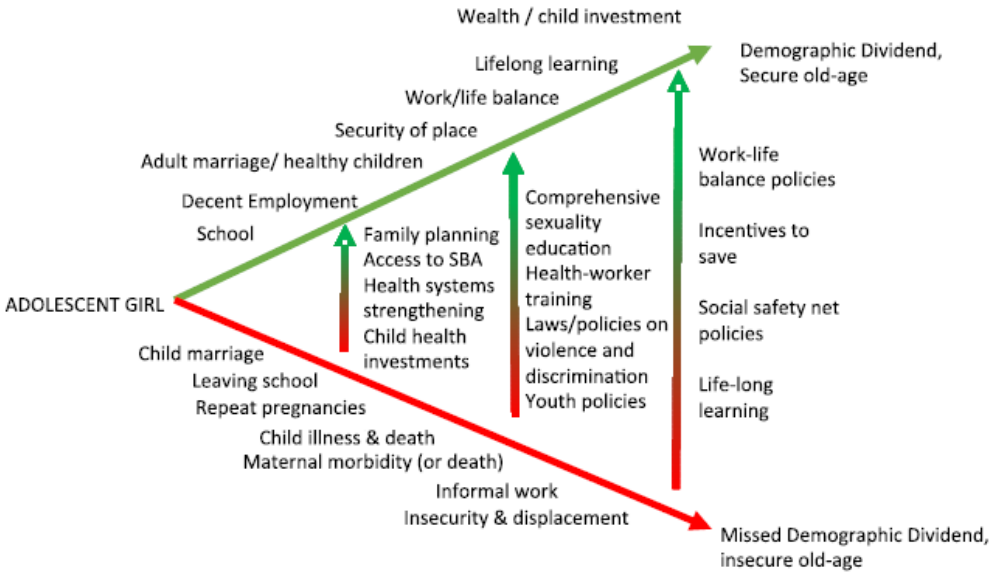

Table 12: Capitalizing on the Demographic Dividend
Source: esaro.unfpa.org

If countries in Africa make the right human capital investments, the combined demographic dividends could be at least $500 billion per year (equal to one third of the region's current GDP) for up to 30 years[159]. Africa has yet to overcome major challenges related to sexual and reproductive health and rights, gender equality and female empowerment which have negative implications for human capital investments.

The successful implementation of pocflicies that empower women and girls, promote gender equity in social and economic environments and ensure universal access to sexual and reproductive health and rights are vital to securing the demographic dividend. The focus of policy initiatives should be on expanding employment and increasing the living standards of broad sections of the population especially young people[160].

Evidence shows that a full demographic dividend in Africa will only be realized if a substantial increase in human capital investments accompanies and reinforces fertility decline. However, it is not clear this will happen: social norms and the complementarity among longevity, health

[158] esaro.unfpa.org. Op. cit.
[159] esaro.unfpa.org. Op. cit
[160] esaro.unfpa.org. Op. cit

investments, and education tend to induce a process that either boosts economic takeoff or stifles it, with the possible consequence of countries remaining in a development trap[161,162].

Women's economic and political empowerment has impressive impacts on economies and demographic dividend. Ten Latin American countries attributed a 21 percent rise in female labour force participation (on average) to delayed marriage and childbearing and lower fertility[163]. Socio-cultural practices, norms and environments that undermine gender equality and promote child marriage and gender-based violence, tend to stifle women's participation in the labour force, reduce their ability to generate income and weaken their decision-making power. These eventually lower the opportunity cost of children and fuel persistent high fertility. Programmes that reduce maternal mortality and morbidity improve women's labour force participation and improve human capital required for economic growth. This tends to improve women's income-generating abilities and promote women's empowerment - necessary ingredients for harnessing the demographic dividend. Almost a quarter of girls in Africa (excluding North Africa), drop out of school because of unintended pregnancies. Providing girls with just one extra year of education beyond the average, boosts their eventual wages by 10 to 20 percent[164]

Over half of the fertility decline in the modern era is attributed to voluntary family planning, with women's education and employment, economic protection and child survival also contributing[165]. Family planning is a highly-cost effective investment in the health and livelihood of both women and children, and can strongly influence the demographic dividend, especially in the middle of the demographic transition when fertility declines as a result of improved access to family planning and reduction in unmet need. During the middle stage when fertility falls, countries have a window of opportunity for economic growth through an increase in the working-age population, decrease in the number of young people to support and without, yet an ageing population[166]. Spending one dollar for contraceptive services reduces the cost of pregnancy-related care, including care for women living with HIV by $1.47, maximizes countries savings and eventually boost economic growth. For example, an estimated 30-50% of East Asia's dramatic economic growth in 1965-1990 was attributed to reduced child mortality

[161] Ashraf, Quamrul H., David N. Weil, and Joshua Wilde (2013) The effect of fertility reduction on economic growth. Population and Development Review 39, 97–130.
[162] Mason, Andrew, Ronald Lee, and Jennifer Xue Jiang (2016) Demographic dividends, human capital, and saving. The Journal of the Economics of Ageing 7, 106–122.
[163] World Bank (2011) 2012 World Development Report on Gender Equality andDevelopment. Washington, DC: World Bank.
[164] African Union 2013.Draft Policy Brief for the International Conference on Maternal, Newborn and Child Health (MNCH) in Africa. Johannesburg, South Africa, 1 – 3 August, 2013
[165] Bongaarts JW, Mauldin P and Phillips J (1990) The demographic impact of family planning programs. *Studies in Family Planning*. 21 (6): 299–310.
[166] African Union, 2013 Op. cit

and subsequent lower fertility rates that created a baby-boom cohort and decreased the dependency ratio. This demographic dividend boosted economic growth. Further evidence also shows that, reduction in fertility of one child per woman in Nigeria would lead to a 13% increase in GDP per capita in 20 years, and 25% in 50 years[167].

A healthy transition to adulthood lays the groundwork for a healthy adult population—critical to realizing a demographic dividend. Healthy people are more productive, bringing greater resources and income to families and higher levels of economic growth for nations. Addressing HIV prevention and sustaining treatment among both younger and older adults is vital to improving the health of Africa's population and the economic well-being of the continent[168].
Azomahou et al. (2016) confirm an economic growth reduction induced by HIV, which is relatively stable in the early stages of an epidemic due to a direct loss of available labour but increases sharply due to the reduction in educational investments[169].

For the demographic dividend to be achieved, member countries in Africa need to: reduce fertility by improving information, access to and use of voluntary family planning as a key intervention to address unintended pregnancy and, thereby, high fertility; invest in human capital through education, health, and workforce training in addition to investments in health, to prepare for the window of opportunity that the demographic transition presents; institute policies such as strengthening social security systems to prepare the large working age group for their inevitable aging in addition to promoting private savings as a means for old age security; institute policies that emphasize gender equality, allowing women to access voluntary family planning so that they can contribute to the family's economic well-being; invest in girls' education as a crucial strategy for achieving lower family size and fertility decline; provide comprehensive health service for children and adolescents to succeed in school and prepare to contribute to the workforce.

[167] African Union, 2013 Op. cit

[168] International Conference on Family Planning. Addis Ababa, Ethiopia. November 12-15 2013. The Potential of youth for a Demographic Dividend

[169] Azomahou, Théophile T, Raouf Boucekkine, and Bity Diene (2016) HIV/Aids and development: A reappraisal of the productivity and factor accumulation effects. *American Economic Review, Papers & Proceedings* 106, 472–477. (In David E. Bloom, Michael Kuhn and Klaus Prettner 2016. Africa's Prospects for Enjoying a DemographicDividend Vienna Institute of Demography Working Papers 4/2016)

5 Social Determinants of Health and Underserved Areas in SRHR

5.1 Determinants of SRHR in Africa

5.1.1 Socio-cultural factors

Gender norms, traditional practices, beliefs, myths and taboos determine to various extents the sexual and reproductive health and rights (SRHR) direction in most African countries and vary greatly within and across countries. The patriarchal nature of most African countries influences gender norms by perpetuating male dominance. This makes most women and other vulnerable groups economically dependent on men, thus making them often unable to claim their sexual and reproductive health and rights, refuse or negotiate safe sex and access health services.

Similarly, sexual and gender based violence against women predispose women directly to HIV/AIDS/STIs and indirectly promote women's fears of accessing SRHR services. Some traditional practices and beliefs also affect sexual health and access to services: Studies have documented the sexual and reproductive health seeking behaviours of women and men and concluded that in some communities, individuals prefer to access SRH services from traditional providers such as TBAs and spiritualist rather than from the formal health system[170] for fear of being accused of infidelity and being perceived as weak.

Cultures in most African countries consider issues around sex and sexuality as taboos and leads to reluctance to discuss and address problems related to sexual health. It also leads to stigma for those who do not conform to socially accepted norms of sexual behaviour. For example, adolescents who have sex before marriage and men who have sex with men are stigmatized, and this in turn reduces access to SRH services by these groups[171].

5.1.2 Influence of Service Providers on SRHR Service Utilization

Individuals of any age, status or background deserve to have access to friendly, appropriate, client-oriented, and affordable sexual and reproductive health services. However, some providers deny, discourage, or misinform potential SRH clients (See Table 13).

[170] Kamwesiga J. Uganda Health Care System: Community based rehabilitation course 2011

[171] *Sally Griffin*. Literature review on Sexual and Reproductive Health Rights:Universal Access to Services, focusing on East and Southern Africa and South Asia

Table 13: Provider Attitudes that Restrict Client Access to Services

Provider Attitudes that Restrict Client Access to Services
Distrust of the long-term effects of contraceptives on people's bodies, particularly nulliparous women.
Concern that providing easy access to contraception for minors and unmarried people, low-cost treatment for STIs, and rapid attention to post-abortion complications will encourage people to "misbehave" in the future.
Dislike for some aspects of SRH service delivery, which they find to be tiresome, unrewarding, or even disgusting.
Belief that many clients, especially the young or poorly-educated, are incapable of making their own reproductive health decisions.
Suspicion that clients are often dishonest or are trying to trick the provider into helping them to abort
Unwillingness to allow clients to have more than a month's supply of contraceptives at a time because of desire to conserve scarce resources.

Adolescents and women with disabilities are the most likely to suffer this plight. All of these behaviours are counter-productive and impede sexual and reproductive rights. For providers to have a positive impact on client utilization of SRH services, their actions need to increase client understanding and diminish the psychosocial and financial costs of services. If governments and organizations wish to reduce negative provider practices in health facilities, more attention and funding need to be given to: adapting and scaling up promising approaches[172,173,174]; developing and implementing innovative supervision systems that are regular and focused on client–provider interactions; revising guidelines and developing job aids that specifically proscribe client denial and misinformation; introducing a continuing education programme for providers so that they are up-to-date on the latest information, treatments and counseling techniques; ensuring that providers' workloads are manageable and that their basic supplies are adequate; and seeking regular client feedback on service quality and tailoring services to meet clients' changing needs.

[172] Meuwissen LE, Gorter AC, Kester ADM, Knottnerus JA. Can a comprehensive voucher programme prompt changes in doctors' knowledge, attitudes and practices related to sexual and reproductive health care for adolescents? A case study from Latin America. *Tropical Medicine & International Health* 2006; 11:889-898.

[173] Rogo K, Orero S, Oguttu M. Preventing unsafe abortion in Western Kenya: an innovative approach through private physicians. *Reproductive Health Matters* 1998; 6: 77-83.

[174] Harrison A, Karim SA, Floyd K, Lombard C, Lurie M, Ntuli N et al. Syndrome packets and health worker training improve sexually transmitted disease case management in rural South Africa: randomized controlled trial. *AIDS* 2000; 14:2769-2779.

5.1.3 Financing and Structural Mechanisms affecting equity in Service Delivery

The number of people living in extreme poverty still remains unacceptably high despite the progress on the target to reduce the 1990 poverty rate in half by 2015 (five years ahead of schedule, in 2010). In 2011, seventeen percent of people in the developing world (including 50% of African countries) lived at or below $1.25 a day (down from 43 percent in 1990 and 52 percent in 1981)[175]. These have implications for access to sexual and reproductive health services. Improved financial commitment and support although not a panacea, is a necessary factor in improving the SRHR landscape of the continent. Lack of political will to invest, competing priorities for resources on the part of governments, and inability of international donors to fulfill their commitments has led to a corresponding lack of funding for improved access to SRH services[176]. Out-of-pocket (OOP) payment for health care, the most significant form of health system financing in the region, has led to an overall decline in the utilization of health services, mainly for women as they depend often on men's resources and decisions for a timely access to services.

Weak health systems characterized by inadequate health financing, infrastructure and human resources; erratic supplies of SRH commodities, drugs and contraceptives, and limited access to universal SRH have affected improvements in the SRH landscape of the continent over the years. These may be attributed to long-term under-investment in the health sector. Poor communications and transport infrastructure especially in rural and hard to reach areas are important in preventing access to SRH services, especially in maternal health care where transport to referral services is an essential component of dealing with emergencies and preventing mortality.

Contemporary policies promoted by the IMF and World Bank have led to increasing privatization of services in some countries, and promotion of user fees as a strategy for sustainable financing of health services. These approaches have been seen to increase access to SRH services in some countries, but have been demonstrated to increase inequity between the wealthier and poorer segments of the population, as the poorest are denied access to services[177]. It has also raised issues of service quality due to poor monitoring and regulation of the private sector. While no 'one-size-fits-all' solution to the particular challenges of SRH services exists, there are examples of successful innovations in targeting, financing of government provided care, demand side subsidies, and sustainability.

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[175] http://www.worldbank.org/en/topic/poverty/overview

[176] Resource flows project, 2006. Financial resources flows for population activities in 2004. *UNFPA/UNAIDS/Netherlands Interdisciplinary Demographic Institute*

[177] Raberg M & Jeene H, 2002. „Selling out rights: How policy affects access to health services in East and Central Africa", *Save the Children UK*, London.

5.1.4 Demographic Factors

The demographic profile of many emerging countries is characterized by an age structure that is either extremely young, or has a rapidly rising proportion of the population in their teens. Add this to a widening window of sexual opportunity as puberty begins earlier and marriage happens later, and the role of adolescent sexual health starts to take centre stage. Indeed, the sheer size of the populations now moving into their childbearing years is a challenge which can strain many health systems, as this generation will give birth to the largest population increment the world has ever seen. This increase presents both a challenge and in many countries also an opportunity, as the large cohort of young adults has the potential to yield a demographic dividend.

Adolescents are believed to experience poor SRH in many countries. Obstacles to obtaining good SRH for young adults can be seen at three levels: the individual, the health system, and socio-cultural factors. Adolescents themselves may be hesitant to seek SRH health services due to personal objections, a lack of financial resources, and inadequate knowledge regarding SRH needs and services. At the health systems level, the infrastructure may not be attuned to the needs of adolescents, with providers who are unwilling or ill-equipped to serve young people, facilities which lack adequate provision to ensure confidential services, and products and services which do not meet the needs of adolescents. The socio-cultural environment, such as religion and ethnicity, may dictate that services may not or cannot be provided or accessed by adolescents.

The link between education and SRH is bidirectional. Education is closely related to better health, due to better knowledge about the causes, consequences, and methods to reduce risk of poor SRH. As family size decreases, there is more chance of education being made available to all children, increasing knowledge. This virtuous circle continues until education is ubiquitous for both males and females. Obviously, there is close synergy between education and wealth, with education having been used as a proxy for wealth in many studies concerning SRH. Poorer families cannot afford to send children to school, both due to the fees associated with education, and also (in poor areas) because children are a resource to be used in the household.

Girls are far more likely to miss out on education than boys, as limited household resources are focused on males. This can further entrench traditional gender roles, hindering the spread of knowledge about good SRH. The education of women is known to be a strong determinant of improvements in population SRH. Contraceptive use is strongly related to the educational level of the woman. More highly educated women are more likely to use modern methods than less educated women. However, wealth moderates this effect. There is less of a differential in modern contraceptive use between rich and poor if the women are educated, as compared to that among women who are not educated, although the differential is not eradicated completely. Education can therefore be seen as ‘levelling’ the playing field between rich and poor, to a certain extent, with regard to modern contraceptive use.

Individuals living in rural areas generally lack access to SRH services compared to those living in the urban areas. This is mainly due to the heavy concentration in urban areas of hospitals and other places where skilled attendants are available. These urban/rural differentials are maintained even when wealth is taken into account. Poor urban women are more likely to have a skilled attendant at birth than poor rural women, although there is not much difference between the proportions of women with skilled attendance at birth in the richer strata.

5.1.5 Political Factors

Political factors influence positively or negatively the SRHR landscape in member states depending on the socio-cultural context. Despite the fact that the international policy context is clear on issues of sexual and reproductive health and reproductive rights, some member states lack the political will to implement international policy, especially on sensitive issues such as abortion, and services for marginalized groups and adolescents. National legislative frameworks which are characterized by repressive laws can prevent people's access to some SRH services; however, some other SRHR legislative frameworks in some member states can also enable access when enforced.

In many countries on the continent, accountability systems that mandate political leadership to provide quality SRH services are lacking, whilst limited opportunities for civil society groups to participate in policy debates are non-existent. However, examples where social mobilization has been successful in pushing issues onto the political agenda, and helped to achieve increased access to SRH services and family planning exist. In Ghana for example advocacy drive and social mobilization have ensured comprehensive abortion care services within the full extent of the law and inclusion of family planning into the national health insurance scheme.

5.1.6 Sexual and Gender Based Violence

Sexual and gender-based violence (SGBV) is one of the most widespread human rights abuses and public health problems in the world today. It includes acts of violence in the form of physical, psychological, economic, or sexual violence/coercion against a person specifically because of his or her gender. According to the World Health Organization, risk factors and causes of sexual and gender based violence include: traditional gender norms that support male superiority and entitlement, social norms that tolerate or justify violence against women, weak community sanctions against perpetrators, poverty, and high levels of crime and conflict in society.

Sexual violence and coercion may produce adverse sexual and reproductive health outcomes through direct and indirect pathways, as follows:

Direct - Unprotected coerced sex may lead to outcomes such as unintended pregnancy, unsafe abortion miscarriage STIs (including HIV/AIDS), and gynaecological disorders (among others).

Indirect - In addition, sexual violence and coercion may disempower girls and women, making it harder for them to negotiate sex and condom/contraceptive use, or to access services such as HIV testing and counselling.

This may indirectly result in adverse sexual and reproductive health outcomes. Fatal outcomes include homicide, suicide and maternal mortality and morbidity. Unfavourable socio-economic and socio-political environment and lack of empowerment and gender inequalities make women vulnerable to SGBV and its SRHR consequences. Governments are obliged to institute a number of measures including legislation to address the problem.

Prevention of Sexual Violence and Coercion involves: Entertainment-education programmes using radio and television to produce behavioural change related to numerous public health issues; life-skills and school-based prevention programmes that have tried to prevent unwanted sex by educating girls and boys to protect themselves and have tried to promote gender equitable norms and non-violence among boys and Community-based efforts to improve the social and economic status of women.

Ideally, those who experience sexual violence should be able to seek help from health-care providers, social services, and law enforcement. Often, they need compassionate counselling, emergency contraception, STI treatment, HIV PEP, TT vaccine and care for other health problems. Those who want to bring a perpetrator to justice need access to a competent and sensitized police force and judicial system. Unfortunately, throughout the developing world and in some industrialized countries, the institutional response to sexual violence is woefully inadequate. Health-care providers and law enforcement officials often hold negative attitudes about victims; laws sometimes fail to criminalize marital rape, forced oral sex, penetration with fingers or objects, child sexual abuse, and/or rape of boys or young men. Moreover, in many settings, existing laws are not enforced.

5.1.7 Harmful Traditional Practices (HTP)

HTP is a human rights issue which affects the rights of victims because it discriminates against women and causes physical and psychogical harm. Several types exist depending on the context. In Africa, the most prevalent include female genital cutting (FGC), forced and early marriages, forced pregnancies, wife inheritance and maltreatment of widows, polygamy, nutritional taboos and traditional practices associated with childbirth[178]. Harmful traditional practices violate the

[178] Advocates for human rights, 2010. http://www.stopvaw.org/harmful_practices_types_prevalence

following human rights: *right to life*; *right to health*; *right to non-discrimination on the basis of sex; Right to liberty and security of the person*, which includes the right not to be subjected to violence and recognizes the need for children to receive special protections; *Right to freedom from inhuman or degrading treatment*, which recognizes the inherent dignity of the person[179].

Paradoxically, many of these traditional practices are intended to control women's sexuality and reproductive capacity; however, they rather expose women to reproductive health risks that threaten their fertility and lives. HTPs inflict both immediate and long-term psychological and physical effects on women, adolescents and children who mostly are the victims. These practices expose them to sickness and death from hemorrhage, infection (HIV/STIs), under-nutrition, keloid formation, and consequent obstructed labor and obstetric fistula. In addition, some suffer mood swings and irritability, a constant state of depression, and anxiety[180].

Eradication of HTPs may be carried out at different levels including: legal; social, economic, cultural and political; service delivery; education, training and awareness building:[181].

Legal: Enacting, implementing and enforcing laws against HTPs and taking appropriate measures to impose penalties, punishment and other enforcement mechanisms for the prevention and eradication of violence against women and children; introducing legal and administrative mechanisms for women and children subjected to HTPs effective access to counselling, restitution, reparation and other just forms of dispute resolution;

Social, cultural, political- Eradication of traditional norms and religious beliefs, practices and stereotypes which legitimise and promote the persistence and tolerance of HTPs against women and children; introducing and supporting gender sensitisation and public awareness programmes aimed at eradicating HTPs; and motivating the media to adopt guidelines which ensure continuous and sensitive coverage of the issue.

Service provision: Providing easily accessible information on services available to women in general and victims in particular; ensuring accessible, effective and responsive police, prosecutorial, health, social welfare and other services, and establishing specialised units to redress cases.

Education, Training and awareness building: Introduce and promote gender sensitisation and training of all service providers engaged in the administration of justice, such as judicial officers,

[179] USAID Policy Projects. http://www.policyproject.com/matrix/harmfultradpractices.cfm

[180] USAID Policy Projects. Op. cit

[181] African Commission on human and People's Rights.The prevention and eradication of violence against women and children (Addendum to SADC Declaration on Gender and Development). http://www.achpr.org/instruments/eradication-violence-woman-sadc-addendium

prosecutors, police, prison, welfare and health officials; undertake and share research on the causes, prevalence and consequences of violence against women and children; encouraging the exchange of national, regional and international best practices for the eradication HTPs.

5.1.8 SRHR and Equity Factors

As indicated in earlier sections, the SRHR landscape in Africa has improved markedly since the 1990s till date, but significant gaps still exist that need to be closed by the end of the SDG period. Significant disparities in health have contributed partly to the gaps that exist. Factors commonly linked to these disparities include wealth quintile, ethnicity, educational level, age, gender, vulnerable populations (adolescents, people with disabilities, elderly and migrants/refugees), and place of residence. Indeed, these social and economic inequalities are well recognized as underlying factors that drive health inequalities, including in SRH, and allow them to be entrenched[182]. More vulnerable population groups, either as result of social or economic exclusion, are more amenable to risk throughout their life-time and much less likely to access SRH services, leading to SRH outcomes that are negative.

Numerous social, cultural, legal and barriers exist for many vulnerable groups, making access to SRH care through existing SRH programmes and services a challenge. In addition, many SRH inequities are rooted in gender inequality that place women and young girls at increased risk of adverse SRH outcomes, including gender based violence, which is a result of increased vulnerability due to decreased access to education, employment and economic opportunity and less household decision-making ability and power[183]. The environment is also increasingly being recognized as an important determinant of health that can impact on SRH outcomes and contribute to inequities by directly or indirectly influencing susceptibility and biologic exposure. Structural and political factors also contribute, as the policies, strategies and organization of SRH services often result in control and access to SRH resources that is not always equitable for all members of society[184].

In order to reduce equity in access to SRHR on the continent, WHO proposes the following strategies[185]: Promoting gender responsive policies by promoting the use of sex-disaggregated data and the integration of gender analysis and actions in all policies; promoting the health of vulnerable groups by mitigating the factors that systematically prohibit or restrict population groups from gaining economic, social, political and cultural inclusion and which factors are strongly associated with inequities in health status and access to health services; strengthening the local governance system by mobilizing action for health and health equity in all local policies and promoting strong leadership and institutional change, intersectoral partnerships, innovative

[182] WHO, 2015. SRH and Rights: Well-being and equity for all. http://www.euro.who.int/data/assets/pdf_
[183] WHO, 2015. Op. cit.
[184] WHO, 2015 Op. cit.
[185] http://www.euro.who.int/_data/assets/pdf_file/0016/141226/Brochure_promoting_health.pdf

action that addresses all aspects of health and living conditions at that level; and building and sustaining institutional and human resource capacities to address health inequities through a number of activities, including the review of public health policies and strategies, training and the facilitation of networks.

5.1.9 Health related Sectors that affect SRHR

Education and SRHR

The educational sector's contribution to SRHR outcomes cannot be underestimated. Education can be harnessed to improve SRHR outcomes and reduce GBV. Effective skills-based education gives young people the knowledge and skills to make informed decisions about their SRHR, and develops attitudes and values that support human rights and gender equality. Despite the strong correlation between education and SRHR outcomes, few young people on the continent receive adequate education in preparation for their sexual lives, which leaves them vulnerable to coercion, abuse and exploitation, unintended pregnancy and sexually transmitted infections, including HIV[186].

Several factors are responsible for the low educational status of African women and the persistent gender disparities in education. These include early and unintended pregnancy, poor sexual and reproductive health (SRH), gender inequalities and gender-based violence (GBV). SDG4, advocates for inclusive and quality education for all and the promotion of lifelong learning. This could be achieved by addressing issues around health and gender equality, introducing comprehensive sexuality education into the curriculum of schools and integrating them into adolescent sexual and reproductive health services[187]. Girl child education also needs to be improved, by governments doing everything they can to ease the financial burdens families face by providing individual and family-level financial incentives to ensure higher levels of school completion among all children, hence narrowing the educational gap between boys and girls.

Food Security and SRHR

An understanding of, and addressing the links between women's, girls' and children's rights, including their sexual and reproductive rights, and the human right to adequate food and nutrition is fundamental to the eradication of hunger and malnutrition[188]. Food security and universal access to healthcare including SRHR, are linked through multiple pathways; improvement in one will have spill-over effects on the other. Malnutrition and undernutrition is associated with poor sexual and reproductive health outcomes.

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[186] http://www.unesco.org/new/en/dakar/education/education-for-health-

[187] http://www.unesco.org

[188] Khanna, T., Verma, R. & Weiss, E. (2013). Child marriage in South Asia: Realities, responses and the way forward. Washington DC.: International Center for Research on Women (ICRW).

Undernutrition results in anaemia, wasting and stunting. It is estimated that half of all pregnant women worldwide suffer from iron deficiency anaemia, and this is made worse with repeated pregnancies, which deplete whatever little body reserve is available. If women experience blood loss during childbirth, they face the risk of dying or suffer long-term morbidities. Postpartum haemorrhage is the commonest cause of maternal death in developing countries. Malnutrition in girls also results in poor growth and development of the body resulting in obstructed labour and obstetric fistulae and low birthweight babies. Nutritional status is critical to people living with HIV and AIDS, to deal with a compromised immune system. Furthermore, nutritionally deficient pregnant women may have a foetus with intra-uterine growth restriction (IUGR) to which it responds with complex compensatory mechanisms[189].

To ensure food security and avoid the negative SRHR outcomes, governments need to: improve access to adequate, culturally appropriate, nutritious and safe food for all; increase investment in rural infrastructure, technology, research, education for small-scale farmers, including women; promote sustainable agricultural practices; regulate investments in agriculture; and implement a truly just land reform and administration programme to secure land rights and tenure of peasants, fishers and indigenous peoples; and develop cooperation among agriculture producers on the continent[190].

Water, Sanitation and Hygiene (WASH) and SRH

There is paucity of research on the linkage between WASH and sexual and reproductive and child health outcomes in contemporary times, although few exist that have established a relationship. One study in Afghanistan revealed that poor household water access was an important risk factor for pregnancy-related mortality[191]. Some other studies have established the association between hygienic practices at the birth place by mother and birth attendants to be associated with positive birth outcomes and neonatal survival[192,193]. Adequate water, sanitation and hygiene (WASH) are essential components of providing basic health services. The advantages of providing WASH in health care facilities are to prevent infections and spread of disease, protect staff and patients, and uphold the dignity of vulnerable populations like pregnant women; but many health care facilities in low resource settings lack basic WASH services,

[189] Arrow 2014. Linking Poverty, Food Sovereignty and Security, and Sexual and Reproductive Health and Rights Arrow for Change, vol 20, no. 1

[190] Arrow 2014 Op. cit.

[191] Gon G, Monzon L, Benova L, Wiley B, Campbell O (2014) The contribution of unimproved water and toilet facilities to pregnancy-related mortality in Afghanistan: analysis of the Afghan Mortality Survey. Trop Med Int Health 19: 1488–1499.

[192] Blencowe H, Cousens S, Mullany LC, Lee AC, Kerber K, et al. (2011) Clean birth and postnatal care practices to reduce neonatal deaths from sepsis and tetanus: a systematic review and Delphi estimation of mortality effect. BMC Public Health 11 Suppl 3: S11

[193] Rhee V, Mullany LC, Khatry SK, Katz J, LeClerq SC, et al. (2008) Maternal and birth attendant hand washing and neonatal mortality in southern Nepal. Arch Pediatr Adolesc Med 162: 603–608.

compromising the ability to provide safe care and presenting serious health risks to those seeking treatment[194].

When WASH services are not available in health facilities, several negative effects are observed. These include. sepsis and other severe infections estimated to cause 430,000 deaths annually in children[195] and discouragement of women from patronizing SRH services including antental, delivery and other reproductive health services[196] and absenteeism by staff[197].

Suggestions to improve WASH in facilities in Africa include the development and implementation of national policies and standards on WASH in health care facilities, together with strategies that identify adequate funding, human resources and institutional arrangements to ensure that standards are implemented. In addition, health facilities are to provide clients with potable water supply, adequate sanitation facilities and hand washing and menstrual hygiene facilities [198].

5.2 Underserved Areas in SRHR

5.2.1 Integration of SRHR into Health Emergencies

Emergencies in general have a greater toll on the poorest and most vulnerable people in the population, especially women, children, adolescents and people with disabilities. In areas affected by current or recent armed conflict and disease outbreaks, HIV incidence, maternal, neonatal and child mortalities are among the highest in the world and on the continent. Sexual and reproductive health (SRH) is an important public health need in all communities, including those facing emergencies.

As stated in the outcome document of the Rio+20 United Nations Conference on Sustainable Development, universal access to reproductive health, including family planning and sexual health, is needed and should be integrated into national strategies and programmes including the humanitarian preparedness programmes of member countries. This is important in order to

[194] WHO, 2015. Water, sanitation and hygiene in health care facilities: status in low and middle income countries and way forward.

[195] Oza et al., 2015. Neonatal cause-of-death estimates

[196] Velleman et al., 2014. From Joint Thinking to Joint Action: A Call to Action on Improving Water, Sanitation, and Hygiene for Maternal and Newborn Health

[197] Chaudhury N, Hammer J, Kremer M, Muralidharan K, Rogers FH (2006) Missing in action: teacher and health worker absence in developing countries. J Econ Perspect 20: 91–116.

[198] WHO, 2016 Op. cit

improve access to SRH during health emergencies and to reduce SRH-related morbidity and mortality these times[199].

The World Health Organization has proposed 5 priority actions to be considered by member countries to improve universal access to SRH services in emergencies as follows (Table 14):

[200]Table 14: Priority Actions to Improve Universal Access to SRH in Emergencies

Item	Priority Action	Activities
1	Incorporate SRH into multisectoral and health emergency risk management policies and plans at national and local levels	Allocate human and financial resources to integrate SRH into the national health emergency risk management programmes as part of national plans of action for risk reduction (including preparedness) and in emergency response and recovery plans. Assure SRH services are part of national health policies and stable primary healthcare systems, which builds resilience and capacity for emergencies
2	Integrate SRH into health risk assessment and provide early warning for communities and vulnerable groups	Incorporate assessments of SRH risks, vulnerabilities and capacities at all levels, informed by poverty, gender and disability analyses. Estimate the impact of identified SRH risks to strengthen the overall primary health-care system and plan for emergency response to address these concerns. Involve vulnerable groups in the development and implementation of community early warning systems, ensuring that their needs are addressed and that systems are gender-responsive
3	Create an environment of learning and awareness	Foster an awareness of key SRH risks and actions within a culture of improving community health, safety and resilience at all levels. Include health emergency risk management, including risk assessment, vulnerability reduction, emergency response planning and the Minimum Initial Service Package (MISP) in the curricula for SRH workers, and for the broader health emergency management community. Strengthen media advocacy on the importance of maintaining SRH services during a response

[199] http://www.who.int/hac/techguidance/preparedness/SRH_policybrief/en/

[200] http://www.who.int/. Op. cit.

4	Identify and reduce risks for vulnerable communities and SRH services by reducing underlying risk factors.	Address underlying health vulnerabilities of the population by ensuring strong primary health care and preventive health measures with key provisions for SRH (and advance gender equality) Establish community networks to monitor local vulnerabilities and capacities, build all health facilities to withstand local hazards and ensure that these facilities remain functional to provide SRH services, including care for childbirth and obstetric and newborn complications during emergencies.
5	Prepare existing SRH services to absorb impact, adapt, respond to and recover from emergencies.	Adopt specific policies for the inclusion of vulnerable populations (women, adolescents, newborn, displaced and disabled people) that reflect risk assessment, gender and other analyses into disaster preparedness planning. Pre-position reproductive health kits, maintain vehicles to be used for referral of complications, and enact clear policies and procedures for coordination at all levels to ensure a comprehensive, well-coordinated response

5.2.2 Emergency Obstetric and Neonatal Care (EmONC)

Emergency obstetric and neonatal care (EmONC) is a high impact priority intervention highly recommended for improving maternal and neonatal health outcomes. It is a cost effective priority intervention to reduce maternal and neonatal morbidity and mortality in poor resource settings[201,202]. Basic EmONC alone can avert 40% of intrapartum related neonatal deaths and a significant proportion of maternal mortality[203].

Worldwide, about 15 percent of all women suffer complications during childbirth that can become life threatening when not managed quickly and appropriately. In most cases, deaths are avoidable because complications can be identified early during pregnancy (antenatal care visits)

[201] Adam T, Lim SS, Mehta S, Bhutta ZA, Fogstad H, Mathai M, Zupan J, Darmstadt GL: Cost effectiveness analysis of strategies for maternal and neonatal health in developing countries. BMJ. 2005, 331 (7525): 1107-10.1136/bmj.331.7525.1107

[202] . Accorsi S, Bilal NK, Farese P, Racalbuto V: Countdown to 2015: comparing progress towards the achievement of the health Millennium Development Goals in Ethiopia and other sub-Saharan African countries. Trans R Soc Trop Med Hyg. 2010, 104 (5): 336-342. 10.1016/j.trstmh.2009.12.009

[203] Lee AC, Cousens S, Darmstadt GL, Blencowe H, Pattinson R, Moran NF, Hofmeyr GJ, Haws RA, Bhutta SZ, Lawn JE: Care during labor and birth for the prevention of intrapartum-related neonatal deaths: a systematic review and Delphi estimation of mortality effect. BMC Public Health. 2011, 11 (Suppl 3): S10-10.1186/1471-2458-11-S3-S10

and labor (partograph) when the pregnant women seek assistance by skilled professionals and can be treated with emergency obstetric and neonatal care. This includes signal functions like blood transfusion, caesarean sections, fetal extractions and administering of medicines.

The absence of this care in many countries, especially in Africa, is a key reason why women and newborn continue to die at unacceptably high numbers. Every day, about 800 women, almost all in developing countries, die during pregnancy and childbirth[204]. Most of these deaths could be prevented. Moreover, for every woman who dies, approximately 20 women suffer short or long-term illnesses or disabilities, like obstetric fistula, uterine prolapse, anemia or infertility[205]. Saving women's and babies' lives requires two complementary strategies: the first is to prevent unwanted pregnancies by ensuring universal access to modern contraceptives, the second involves enabling all pregnant women to deliver in well-equipped health facilities with the assistance of skilled health professionals, including midwives, nurses and doctors trained to provide emergency obstetric and neonatal care when a complication occurs. But in many of the world's poorest countries, women do not have access to this critical care.

Poor women in remote areas are the least likely to make it to a health center or benefit from skilled assistance when emergencies arise during pregnancy and childbirth. While developing regions as a whole have made progress in recent years in increasing women's access to routine and emergency maternal health care, there are still major inequities, particularly in Sub-Saharan Africa and Southern Asia[206]. Experience demonstrates that advances in emergency obstetric and newborn care are achievable, even in the poorest and most extreme settings, given the political and financial commitment. Increased investment is required to make these life-saving services available to all women.

Thirty (30) countries in Africa (excluding North Africa) conducted Emergency Obstetric and Neonatal Care (EmONC) assessments and the evidence shows that availability of EmONC services is generally low with the availability of basic EmONC being even lower. One determining factor for this situation is the availability of trained midwives[207]. Evidence also exists that there is shortage of health facilities providing the full range of emergency obstetric care. A study of 2.7 million deliveries across seven developing countries found that only one-third of women who needed lifesaving care for a complication received it[208].

[204] World Health Organization, UNICEF, UNFPA and The World Bank, "Trends in Maternal Mortality: 1990-2010," 2012.
[205] World Health Organization and UNICEF, "Building a Future for Women and Children: The 2012 Report
[206] United Nations, "The Millennium Development Goals Report 2011."
[207] AMREF _SU4AM _roadmap 2011-2015
[208] https://www.unfpa.org/sites/.../EN-SRH%20fact%20sheet-Urgent.pdf

Around the world, evidence demonstrates that investments in quality emergency obstetric and neonatal care can significantly reduce avoidable maternal and newborn deaths and disabilities. Emergency obstetric care requires skilled personnel and adequate health care infrastructure, including medicines and supplies and access to reliable and fast transportation. The long term goal is for all births to take place in appropriate health facilities, as is the case in all countries that have managed to significantly reduce their maternal mortality rates. In the interim, before this long-term goal is reached, universal access to emergency obstetric and newborn care means that all women and newborns with complications have access to well-functioning facilities such as a district hospital or maternity centre. Existing facilities can often, with just a few changes, be upgraded to provide emergency obstetric and newborn care[209].

Communities also play a critical role by contributing to the management of the health facilities, building local emergency transportation networks, monitoring the quality of care and creating shared community savings accounts that can be used in case of emergency. An increasing number of countries are promoting free care policies for maternal and newborn health, for emergency obstetric and neonatal care or, sometimes, only for caesarean sections. These strategies require the mobilization of adequate and sustainable resources and a close monitoring and evaluation in order to minimize the possible adverse effects and ensure effective access to services for the poor and marginalized.

Scaling up an emergency obstetric and neonatal care (EmONC) programme entails reaching a larger number of people in a potentially broader geographical area. Multiple strategies requiring simultaneous attention should be deployed. Conditions to be met include appropriate awareness across the board and a policy environment that leads to the following: commitment, health systems-strengthening actions, allocation of resources (human, financial and capital/material), dissemination and training, supportive supervision and monitoring and evaluation[210].

5.2.3 Immunization

Immunization is regarded as one of many child survival interventions that have influenced positively child health by bringing about reduction in child deaths and disabilities, since the Expanded Programme on Immunization (EPI) was launched in 1974 by the World Health Organization. Evidence shows that smallpox, which had killed two million people per year until the late 1960s, was wiped out by 1979 after a massive worldwide immunization campaign; the number of polio cases fell from over 300,000 per year in the 1980s to just 2,000 in 2002; two-thirds of developing countries have eradicated neonatal tetanus; the number of reported measles

[209] UNFPA website, "Emergency Obstetric Care," Accessed February 20, 2012

[210] Anne-Marie Bergh, Emma Allanson, Robert C. Pattinson. What is needed for taking emergency obstetric and neonatal programmes to scale?

deaths has dropped from 6 million to less than 1 million per year; whooping cough cases have fallen from 3 million per year to less than a quarter of a million whilst diphtheria cases have declined from 80,000 in 1975 to less than 10,000 today[211]. Immunization also now serves as a means of delivering other life-saving interventions, such as vitamin A supplementation, anti-helminthes for the management of worm infestation and distribution of Insecticide Treated Nets (ITNs) for protection against malaria. Routine immunization has been established in all countries of the region; however, coverage of immunization (measured by DPT3 vaccination) varies widely from 99% in Eritrea to 33% in Equatorial Guinea. Average immunization coverage in the continent is 72% (11% short of the global coverage). Widespread poverty and lower educational status especially amongst rural dwellers are some challenges accounting for the low performance in the region[212].

Maternal immunization protects both the mother and foetus from the morbidity of certain infections. It can also provide the infant passive protection against infections acquired independently after birth. Despite maternal immunological adaptations to pregnancy, immunization of pregnant women appears to be as effective as in non-pregnant women[213]. Rubella, diphtheria/pertusis/Tetanus (Tdap) is usually given prior to pregnancy whilst Tetanus, Diphtheria/Tetanus and hepatitis can be given during pregnancy[214]. Safe and effective vaccines against human papilloma virus (HPV) types 16 and 18, which cause about 70 percent of cervical cancer cases, provide a tremendous opportunity to reduce cervical cancer incidence in Africa. Immunizing girls before the initiation of sexual activity and possible exposure to the HPV is a key strategy to prevent cervical cancer. The WHO recommends that all girls aged 9 to 13 years receive the HPV vaccination through national immunization programmes in African countries where cervical cancer constitutes a public health priority and vaccine introduction is feasible. In 2014 progress continued to be made towards ensuring immunizations for Africa's girls, as the first seven African countries pilot ways to deliver the HPV vaccine and other health interventions designed to improve the lives of adolescent girls. These projects will pave the way for countries to strengthen capacity and build the infrastructure needed to vaccinate girls' nationwide. Immunizing adolescents against HPV in particular offers a unique and cost-effective opportunity for African governments to combat cervical cancer and communities to improve awareness creation on immunizing babies, children and adolescents

[211] Bloom et al 2005. World Economics Vol. 6 No. 3 July-sep 2005

[212] African Union Commission, NEPAD Planning and Coordinating Agency, UN Economic Commission for Africa, and UN World Food Programme. *The Cost of Hunger in Africa: Social and Economic Impact of Child Undernutrition in Egypt, Ethiopia, Swaziland and Uganda*. Report. Addis Ababa: UNECA, 2014

[213] The obstetrician-gynecologist's role in adult immunization. Gonik B, Fasano N, Foster S Am J Obstet Gynecol. 2002;187(4):984

[214] http://sogc.org/publications/immunization-before-and-during-pregnancy

5.2.4 Nutrition

The nutrition status of children under five years of age is one of the key indicators used to assess progress towards MDG 1. Latest data show that only nine of the world's sixty-three (63) developing countries are on track to reaching Target 1C, MDG 1, i.e. to reduce by half the prevalence of underweight children. Only three of these are from Africa[215]. The improved nutritional status of people has a direct impact on economic performance through increased productivity and enhanced national comparative advantage. In order for Africa to maximize its present and future economic growth opportunities, increased efforts are needed for cost-effective interventions that address the nutritional situation of the most vulnerable members of the society.

The African Regional Nutritional Strategy (2005-2015) provides such opportunity by: increasing awareness among governments of the region and the regional and international development partners, and the community on the nature and magnitude of nutrition problems in Africa and their implications for the development of the continent, and advocate for additional resources for nutrition; advocating for renewed focus, attention, commitment and a redoubling of efforts by member states, in the wake of the worsening nutrition status of vulnerable groups; stimulating action at the national and regional level with the view to improving nutrition outcome by providing guidance on strategic areas of focus; providing a framework of action on nutrition that takes into account emerging issues of HIV and AIDS, diet related chronic disease and resurgence of TB and malaria and defining mechanisms for collaboration and cooperation among the various actors concerned with food and nutrition problems at national, regional and international levels[216].

In Africa, years of nutritional neglect have led to a cycle of malnutrition and poor health, beginning in-utero, continuing throughout childhood and adolescence, and transferring to the next generation with the birth of a malnourished, low-birth-weight baby[217]. The underlying causes of most nutrition problems in the region are chronic poverty; food insecurity; an inadequate supply of safe and nutritious food in quantity and quality; poor access to health services; an unhygienic environment; and poor quality water and sanitation. Studies in four countries in Africa revealed that child under-nutrition can lead to significant negative impacts on health, education and labour productivity[218].

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[215] Unstats-Millennium Development Goals Indicators," RSS Main, July 2, 2012, "Children under 5 moderately or severely underweight, percentage

[216] African Regional Nutrition Strategy 2005-2015

[217] United Nations Children Fund(UNICEF), 2009

[218] *Sally Griffin*. Literature review on Sexual and Reproductive Health Rights:Universal Access to Services, focussing on East and Southern Africa and South Asia

On the health sector, financial losses ranging from 1% to 11% of total budget allocated to health can be incurred. This can be worsened further by 76% of the episodes that do seek medical attention and end up with complications. Evaluation of the educational sector showed that repetition rates of between 2 to 4.9% are experienced by stunted children with the majority occurring at primary school level. On the labour front it is estimated that the working age population had been reduced by 1 to 8% because of child mortalities associated with undernutrition[218].

The nutritional status of women before and during pregnancy can have significant influence on foetal, infant and maternal health outcomes[219]. Poor maternal weight gain in pregnancy due to an inadequate diet increases the risk of premature delivery, low birth weight and birth defects. Evidence suggests that nutrition education and counselling is most likely to show greatest benefit in low and middle-income countries when provided in conjunction with nutrition support. A systematic review of studies which provided antenatal dietary advice with the aim of increasing protein and energy intake found that nutrition advice alone was sufficient to improve protein intakes during pregnancy, reduce the risk of preterm birth by 54% and increase head circumference at birth[220]. Another systematic review and meta-analysis of 34 studies providing nutrition education and counselling (including 11 studies in low- and middle-income countries), with and without nutrition support in the form of food baskets, food supplements or micronutrient supplements found that nutrition education and counselling improved gestational weight gain by 0.45kg, reduced the risk of anaemia in late pregnancy by 30%, increased birth weight by 105g and lowered the risk of preterm delivery by 19%[221].

5.2.5 Stillbirths: A hidden Health Problem

Stillbirth, defined as the death of a fetus weighing at least 1,000 g (2.2 lbs) or one that occurs at or after 28 weeks' gestation, is a common yet nearly invisible problem[222]. Global incidence numbers are imprecise, as 99% of stillbirths occur in low- and middle-income countries, where the least information is available. Only a small minority of stillbirths is counted through vital registration; the estimates rely largely on surveys and statistical models. The most recent global study estimated that there were 2.6 million stillbirths in 2009, down from an estimated 3.0

[219] Rush D. Nutrition and maternal mortality in the developing world. *American Journal of Clinical Nutrition*. 2000,
[220] Ota E, et al. Antenatal dietary advice and supplementation to increase energy and protein intake. *Cochrane Database of Systematic Reviews*. 2012, CD000032
[221] Girard AW, Olude O. Nutrition education and counselling provided during pregnancy: effects on maternal, neonatal and child health outcomes. *Paediatric and Perinatal Epidemiology*. 2012, 26:191-204
[222] World Health Organization (WHO), National, regional, and worldwide estimates of stillbirth rates in 2009 with trends since 1995, *Policy Brief*, Geneva: WHO, 2011.

million in 1995[223]. However, while the worldwide stillbirth rate declined by 14% between 1995 and 2009, from 22 to 19 stillbirths per 1,000 total births, the rate of decline was slower than that associated with either maternal mortality or child mortality.

Most stillbirths are avoidable, as evidenced by the low stillbirth rate of three per 1,000 births in developed countries, in contrast to 29 per 1,000 births in Sub-Saharan Africa[123]. Two-thirds of stillbirths globally occur in rural areas, where levels of professional care during pregnancy and delivery, including access to cesarean sections, are lower than in urban areas. Almost half of stillbirths occur during labor and delivery, highlighting the magnitude of loss of life just hours and minutes prior to birth[224]. Studies suggest that 25–62% of these stillbirths could be avoided with improved obstetric care and quicker responses to childbirth complications, including reducing delays in seeking care when complications occur during home deliveries[225]. Infection is a leading cause of stillbirth, accounting for about half of all stillbirths in developing countries[226]. Syphilis remains a major cause, although the disease is treatable and WHO recommends that all pregnant women be tested as part of routine antenatal care. Only 66% of women making antenatal care visits (54% of all women giving birth) are currently screened for syphilis[227]. Malaria during pregnancy is another important preventable cause of stillbirth[228].

Better collection and use of data are critical for understanding and addressing the health burden due to stillbirth. Systematic collection in vital registration, in particular, is essential to measuring the scale of the problem and choosing the highest priority actions to include in efforts to improve maternal health[229].

5.2.6 Maternal Death Surveillance and Response System (MDSR)

Maternal and death surveillance and response (MDSR) is a continuous cycle of notification, review, analysis and response which works to increase the avoidability of preventable maternal and mortality by involving all stakeholders in the process of identifying maternal and deaths, understanding why they happened and taking action to prevent similar deaths occurring in the

[223] Cousens S et al., National, regional, and worldwide estimates of stillbirth rates in 2009 with trends since 1995: a systematic analysis, *Lancet*, 2011, 377(9774):1319–1330

[224] Lawn JE et al., Stillbirths: Where? When? Why? How to make the data count? *Lancet*, 2011, 377(9775):1448–1463.

[225] Lawn JE et al., Global report on preterm birth and stillbirth (1 of 7): definitions, description of the burden and opportunities to improve data, *BMC Pregnancy and Childbirth*, 2010, doi:10.1186/1471-2393-10-S1-S1, accessed Mar. 14, 2014.

[226] Goldberg RL et al., Infection-related stillbirths, *Lancet*, 2010, 375(9724):1482–1490.

[227] Guttmacher Institute, special analyses (see Appendix, pp. 42–45).

[228] Goldberg RL et al., Infection-related stillbirths, *Lancet*, 2010, 375(9724):1482–1490

[229] World Health Organization (WHO), National, regional, and worldwide estimates of stillbirth rates in 2009

future. Key administrative elements of any national MDSR system should include: a national policy to notify all maternal and deaths; a national policy to review all maternal and deaths; a national maternal and death review committee that meets at least biannually; sub-national maternal and death review committees at the district and facility levels[230].

Apart from these key administrative elements, the system is guided by some key principles such as notification and investigation of all suspected maternal and child deaths; notification within 24 hours of maternal deaths in health facilities (or within 48 hours when a woman dies in the community); zero reporting when no suspected maternal deaths have occurred and timely review of all probable maternal deaths; immediate recommendations, where possible, to help health facilities and communities to prevent similar deaths, ensuring that key messages and information reach people who can make a difference ; timely review and analysis at district and national levels to identify trends and patterns; timely publication of findings and recommendations at national level and continuous monitoring of the MDSR system and of how recommendations are implemented[231].

The MDSR system has been in existence since the lifetime of the MDGs; however, it remains underserved especially in Africa. A survey carried out by WHO in 2015 revealed that, although policies existed in most countries to notify and review maternal and child deaths (86%), in addition to existence of committees at various levels (60%), there was a gap between these and implementation of the processes (46%)[232].

Challenges and barriers to implementation of the MDSR system are under-reporting of suspected maternal deaths due to inefficient and incomplete systems of notification, a blame culture in some places that prevents health workers and others from fully taking part in the MDSR process, inadequate human and financial resources to support the process, inadequacy of legal frameworks, lack of political will and support, socio-cultural norms and practices that inhibit the operation of the system and problems of infrastructure that inhibit the operation of the system[233].

To improve the MDSR system, member states need to advocate at the highest possible political level for support and resources, widely disseminating MDSR findings and recommendations to policy- and decision-makers at all levels of the health system; encouraging support of the system by health professionals by building capacities through training, giving appropriate and timely feedback to front-line staff about findings and recommendations and emphasizing the benefits

[230] WHO, 2016 Time to respond. A report on the global implementation of Maternal Death Surveillance and Response
[231] WHO 2016. OP. cit.
[232] WHO 2016 Op. cit
[233] WHO 2016. Op. cit.

and dispelling fears of a blame culture. In addition, strong legal, administrative and financial frameworks need to be built to support and sustain the system[234]

5.2.7 Integrated Supply Chain Management and Logistic Management Information System

An effective and sustainable supply chain system for drugs and other commodities is important and can be complex. A correctly and efficiently run distribution system should also keep drugs in good condition, rationalize drug storage points, use transport as efficiently as possible, reduce theft and fraud and provide information for forecasting needs. This requires a good management of the system along with a simple but well-designed information system in place[235]. Logistics management information systems (LMIS) play an increasingly critical role in the ability of various countries' Ministries of Health to increase responsiveness of their supply chain, reduce costs, and fulfill people's demand for better quality health services and improved health outcomes through informed decision making and actions[236].

During design of overall supply chain systems, acquiring the Information that is needed to support all functions of the supply chain must be a priority area. However, more often than not, this is not the case, particularly in low-resource settings. Public health supply chain managers in developing countries do not have regular access to reliable real time information for procurement and supply management decision making. Typically, these managers rely on past experience, guess work, and very poor information systems, usually paper-based, and sometimes without access to available data[237]. The main challenges faced by most member states include but not limited to inadequate technical knowledge and skill sets on how to approach the design and implementation of LMIS that fits supply chain requirements; and inadequate resources for structural, resource, and organizational support such as workforce and budget. To address these problems, reliable procurement and supply chain management information systems need to be implemented. Some good practices could be adopted from countries like Swaziland, Mali, South Africa and Lesotho[238].

[234] WHO 2016. Op. cit

[235] http://www.who.int/hiv/amds/lmis/en/

[236] Gashaw Shiferaw and Emmanuel Nfor; Systems for Improving Access to Pharmaceuticals and Services LMIS TECHNICAL BRIEF:The USAID/SIAPS Best Practices in the Design, Implementation, and Use of Pharmaceutical Logistics Management Information Systems. http://apps.who.int/medicinedocs/documents/

[237] http://apps.who.int/medicinedocs/documents/ Op. cit.

[238] http://apps.who.int/medicinedocs/documents/ Op. cit.

6 Lessons Learnt and Challenges in Implementing Maternal, Newborn, Child and Adolescent Health (MNCAH) in Africa

Several lessons have been learnt in the implementation of maternal, newborn, child and adolescent health in Africa since the 1990s till date. These lessons are synthesized within the context of interventions that have improved the MNCAH landscape in Africa and other continents and in the context of previous MNCAH reviews, the Maputo Plan of Action and other continental commitments.

1. Strong political will, leadership and support are important ingredients in ensuring improved MNCAH on the continent that will drive Africa's socio-economic agenda: The support and leadership shown by African leaders so far have brought about the progress seen in the MNCAH landscape so far. However, MNCAH is an unfinished business and therefore, previous efforts need to be up-scaled to ensure attainment of the SDG goals.

2. Improved health outcomes due to accelerated implementation of MNCAH programmes are promoted by a favourable legislative environment: countries that have favourable legislation that discourage harmful traditional practices/sexual and gender-based violence and favour girl-child education, comprehensive sexuality education, family planning, adolescent sexual health and safe abortion among others have improved MNCAH outcomes.

3. Innovative health financing mechanisms and investments in human resource for health care markedly improve quality of medical care for children, improves uptake of MNCAH services, improves management of maternal complications and reduces maternal and child deaths: Innovative financing in the form of insurance schemes among other home grown financing schemes yield sustainable outcomes. Skilled human resource availability made possible through strategic planning and investment, coupled with task-sharing mechanisms, staff retention plans and equitable distribution (between rural and urban areas) especially at the lower levels of care, are important ingredients.

4. Investments in the youth and social and human capital will capitalize on the demographic dividend and transform the economies of Africa like it did in the East Asian countries in the 1980s: The successful implementation of policies that empower women and girls and promote gender equity in social and economic environments are vital to securing the demographic dividend. The focus of policy initiatives should be on expanding employment and increasing the living standards of broad sections of the population coupled with creation of legal and regulatory environments conducive to investment.

5. Prioritizing maternal and child health and access to quality health care for women and children in national development plans and massive investment in health from local resources brings about better implementation of SRHR programmes.

6. Targeting vulnerable populations and addressing equity and coverage gaps of key health services and implementing cost-effective, high impact interventions with a multisectoral approach improves the MNCAH landscape.

7. Strong partnerships with communities (particularly traditional healers) and health-related sectors improve SRHR programming: There is a need to ensure greater involvement of communities and vulnerable populations in decision-making and more synergistic partnerships with other development sectors particularly, education and agriculture to make partnerships more effective.

8. Stronger and resilient health systems are essential to ensuring optimal MNCAH outcomes. Health systems that have appropriate numbers of human resources, adequate health financing, consistent supply of medical equipment and pharmaceuticals, constant improvement of service delivery, and an empowered management and leadership have contributed to the gains made in the past and will need to be ensured in the future if the SDG goals need to be attained.

9. Strong decentralized monitoring and accountability systems with high level political oversight improves results and is key to SRHR programming

Several challenges still persist that prevent optimal progress from being made in achieving set SRHR goals and which need to be overcome to ensure accelerated attainment of the SDG goals. Key among them are the following:

1. Low political commitment in support of SRHR in general and young people's sexual and reproductive health in particular still exist in many member states

2. Persistence of Harmful socio-cultural practices characterized by: Social norms that tolerate or justify violence against women including harmful traditional practices such as FGM and forced/early marriages; existence of traditional gender norms that support patriarchy leading to low prioritization of women's SRHR; Low social status of women, children, adolescents and youth and persistent gender inequalities including women's low decision making power and restricted access to resources consequently resulting to limited access to health services

3. Long-term under-investment in the health sector over the years has led to weak health systems characterized by inadequate health financing, infrastructure and human

resources; erratic supplies of SRH commodities, drugs and contraceptives, and limited access to universal SRH including during emergencies.

4. Existence of numerous socio-economic difficulties and an unfavorable economic environment that prevents enactment of policies targeted at expanding employment and increasing the living standards of broad sections of the population especially young people and women. This prevents the attainment of the demographic dividend.

5. Unfavourable legislative and policy environments characterized by poor implementation of laws which perpetuate SGBV, forced and early marriages and other harmful traditional practices; restrictive abortion laws in some member states and inadequate implementation of existing laws thereby hindering access to abortion services to extent possible in law; Limited implementation of laws and legal instruments on SGBV despite their existence in majority of member states ; restrictive laws and policies that limit access to SRHR services by adolescent and youth.

6. Lack of innovative health financing mechanisms in several member states and persistence of out-of pocket payment for health care, the most significant form of health system financing in the region, has led to an overall decline in the utilization of health services, mainly for women as they depend often on men's resources and decisions for a timely access to services.

7. Existence of SRH inequities rooted in gender inequality and unfavourable structural and political factors that place women and young girls at increased risk of adverse SRH outcomes, including gender based violence, which is a result of increased vulnerability due to decreased access to education, employment and economic opportunity

7 Recommendations to Improve the MNCAH Landscape

Political Commitment and Leadership

The AUC, RECs, CARMMA and Member States should:

- Continue to advocate strong political commitment, leadership and ownership of SRHR programmes to ensure completion of the unfinished MNCAH business
- Continue the CARMMA campaigns which should be framed around the renewed AU commitment to end preventable maternal deaths by 2030. A renewed continental campaign that ensures mothers do not die giving life should continue to place MNCH firmly on the agenda, and maintain the high-level support witnessed through the CARMMA campaign.
- Hold political leaders accountable for attainment of commitments set out in Agenda 2063, the MPoA 2016-2030, the SDGs, and other international and national development frameworks.
- Provide strong and visible leadership via effective policy-making and legislation, budgeting and increased accountability for women's, children's and adolescents' health. This can be achieved through collaboration between different arms of government working closely with communities, civil society, young people and the private sector to achieve health and SRHR targets

Financing for Health and MNACH

Member states with support of RECs should:

- Increase government expenditure on health in line with agreed Abuja target of allocating at least 15% or more of their budget resources to health and according to growth of the economy
- Explore innovative ways to improve domestic resource mobilization such as increasing taxes on alcohol and tobacco, debt/equity swaps, floating of health bonds, especially to diaspora communities and encouraging domestic savings.
- Reduce out-of–pocket expenditures for health by removal of user fees for MNACH services and institution of innovative health financing mechanisms like insurance schemes that offer financial protection to the poor and vulnerable thus ensuring equity.
- Identify and institute budget lines and budgetary allocations for essential, cost-effective and high impact health interventions, programmes, commodities and supplies
- Provide incentives for private sector involvement in health directly or through partnerships with civil society.
- Strengthen legislative frameworks, policies, operational strategies, and sustainability frameworks that govern international partnerships and collaborations with donors in the health sector to ensure pledges are honored

- Leverage funds from existing innovative funding sources such as GAVI, Global fund for AIDS, Malaria and Tuberculosis; and Vaccine alliance to support MNACH and adolescent health

Health Legislation and Policy and Promotion of Social Norms
Member states should:

- Remove legal, regulatory and policy barriers limiting adolescent and young people's access to SRH services.
- Enact, review and enforce laws to prevent early and forced marriages, gender – based violence and traditional harmful practices
- Review restrictive abortion laws to ensure safe abortion to the full extent of the law and implement policies for post- abortion care
- Promote legislative and policy frameworks that enhance good health literacy and positive behaviours in areas such as comprehensive sexuality education for adolescents and adults; breastfeeding and good nutrition; water, sanitation and hygiene practices; and decision-making related to health.
- Empower the poor and marginalized (including women, children, the elderly, youth, people with disabilities, rural populations, displaced persons and migrants) to improve their health status by intentionally investing in them and supporting community-led efforts to address their challenges and advance their inclusion in all aspects of life

Health Systems Resilience
Member states should:

- Invest in health workers, particularly mid-level cadres such as midwives and community health officers by improving their competencies, numbers, working conditions and rewards to enable them provide quality services, especially at the lower levels of health care.

- Make available the widest range of technologies, commodities and supplies for SRHR at all times by investing in procurement capacity and supply-chain management for life-saving commodities across the health system.

- Strengthen primary health care systems by instituting integrated, comprehensive, quality SRHR, HIV/AIDS, Malaria/TB services at all levels of the health system and regularly monitor them for availability, accessibility, acceptability and quality of services provided

- Prioritize evidence-based, high-impact interventions and services for women, children and adolescents in efforts to ensure universal health coverage. These may include family planning, immunization, emergency obstetric and neonatal care and skilled attendance at birth.

- Strengthen emergency preparedness capacities at all levels, by making available institutional frameworks for multisector emergency management; human resources and medical supplies and equipment for emergency response; uninterrupted health services; and surveillance mechanisms in accordance with international health statutes.

Gender Equality, Empowerment and Human Rights
Member states should:

- Protect the rights of women, men, adolescents and youth so that they can have control over and decide freely and responsibly on matters related to their sexuality, including access to sexual and reproductive health, free from coercion, discrimination and violence

- Target adolescents and youth both in and out of school, for comprehensive sexuality education that emphasizes gender equality and human rights including attention to gender norms, power and social values of equality, non-discrimination, and non-violent conflict resolution.

- Eradicate child marriage, female genital mutilation/cutting and other harmful practices and eliminate all forms of discrimination and violence against women and girls

Investment in Child and Adolescent Health and Development
Members States should:

- Develop and invest in child and adolescent health and development programmes that involve multisector efforts across health, education, nutrition, water, sanitation and hygiene, responsive caregiving, social and mental stimulation, environment, employment and economic development programmes. Involvement of the private sector, civil society organizations and development partners will be required in this effort.

- Ensure that young people achieve literacy and numeracy and have relevant technical and vocational skills for employment and entrepreneurship and expand age-appropriate opportunities for socioeconomic and political participation.

- Expand civil registration and vital statistics systems to increase access to services and entitlements in order for women, adolescents and children to realize their rights to proper health care, education and basic social benefits, including housing and social protection.

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9 ANNEX 1: MNCH SCORECARD

Country	Neonatal mortality rate (2015)	Maternal mortality ratio (2015)	Proportion of births attended by skilled personnel	Contraceptive prevalence rate	Unmet Need for family Planning	Pregnant women with 4 Antenatal visits	Adolescent fertility rate	Proportion of children aged 12–23 months receiving DPT3 immunization	Proportion of stunting under 5 years	General gov't expenditure on health as a percetage of general government expenditure	Proportion of HIV-positive pregnant women who received antiretroviral medicine to reduce the risk of MTCT
											
	Deaths per 1,000 live births	Deaths per 100,000 live births	Percent	Percent	Percent	Percent	Births per 1,000 women 15-19 years	Percent (2014)	Percent	Percent (2014)	Percent (2014)
Algeria	16	140	97 (2013)	56 (2012)	10 (2012)	67(2013)	12 (2013)	9	12 (2012)	10	32
Angola	49	477	47 (2007)	18 (2009)	ND	32 (1996)	191 (2009)	80	29 (2007)	5	45
Benin	32	405	77 (2014)	13 (2012)	33 (2012)	59 (2014)	98 (2009)	70	34 (2014)	10	53
Botswana	22	129	95 (2007)	53 (2008)	ND	73 (2007)	39(2011)	95	31 (2007)	9	91
Burkina Faso	27	371	66 (2010)	17 (2014)	36 (2014)	34 (2010)	136 (2008)	91	33 (2012)	11	75
Burundi	29	712	60 (2010)	22 (2011)	32 (2011)	33 (2010)	65 (2008)	95	58 (2010)	13	78
Cameroon	26	596	64 (2014)	23 (2011)	24 (2011)	44 (2011)	128 (2008)	87	33 (2011)	4	66
Cape Verde	12	42	78 (2005)	61 (2005)	17 (2005)	62 (2005)	92 (2003)	95	21 (1994)	12	ND
Central African Rep	43	882	54 (2010)	15 (2011)	27 (2011)	72 (2010)	229 (2009)	47	41 (2010)	14	47
Chad	39	856	23 (2010)	5 (2010)	28 (2010)	38 (2010)	203 (2009)	46	39 (2010)	9	25

Comoros	34	335	82 (2012)	19 (2012)	32 (2012)	23 (2000)	71 (2010)	80	32 (2012)	9	ND
Congo	18	442	93 (2012)	45 (2012)	18 (2012)	49 (2012)	147 (2009)	90	25 (2011)	9	17
Cote d'Ivoire	38	645	59 (2012)	18 (2012)	22 (2012)	79(2012)	125 (2009)	67	30 (2012)	7	80
Djibouti	33	229	87 (2014)	19 (2012)	ND	23 (2012)	21 (2010)	78	34 (2012)	14	20
DRC	30	693	80 (2014)	20 (2014)	29 (2014)	48 (2014)	135 (2011)	80	43 (2013)	11	47
Egypt	13	33	92 (2014)	59 (2014)	14 (2014)	83(2014)	56 (2012)	94	22 (2014)	6	8
Equatorial Guinea	33	342	68 (2011)	13 (2011)	35 (2011)	67 (2011)	177 (2008)	24	26 (2010)	7	74
Eritrea	18	501	34 (2010)	8 (2002)	30 (2002)	57 (2010)	85 (1999)	94	50 (2010)	4	52
Ethiopia	28	353	16 (2014)	34 (2014)	24 (2014)	32 (2014)	71 (2013)	77	40 (2014)	16	73
Gabon	23	291	89 (2012)	31 (2012)	27 (2012)	78 (2012)	115 (2009)	70	18 (2012)	7	69
Gambia	30	706	57 (2010)	9 (2013)	22 (2010)	72 (2010)	88 (2011)	96	25 (2013)	15	53
Ghana	28	319	74 (2011)	26 (2014)	33 (2014)	87 (2014)	65 (2013)	98	19 (2014)	7	81
Guinea	31	679	45 (2012)	6 (2012)	22 (2005)	57 (2012)	154 (2010)	51	28 (2014)	9	ND
Guinea-Bissau	40	549	45 (2014)	14 (2010)	6 (2010)	65 (2014)	137 (2009)	80	28 (2014)	8	83
Kenya	22	510	62 (2014)	58 (2014)	19 (2014)	58 (2014)	101 (2013)	81	26 (2014)	13	67
Lesotho	33	487	78 (2014)	60 (2014)	18 (2014)	74 (2014)	94 (2013)	96	33 (2014)	13	72
Liberia	24	725	46 (2007)	20 (2013)	31 (2013)	78 (2013)	147 (2010)	50	32 (2013)	12	52
Libya	7	9	100 (2008)	42 (2007)	27 (2007)	ND	4 (2002)	94	21 (2007)	5	ND
Madagascar	20	353	44 (2009)	40 (2009)	19 (2009)	51 (2013)	147 (2006)	73	49 (2009)	10	4
Malawi	22	634	87 (2014)	59 (2014)	19 (2014)	45 (2014)	143 (2012)	91	42 (2014)	17	64
Mali	38	587	56 (2010)	10 (2013)	26 (2013)	35 (2010)	178 (2010)	77	39 (2006)	6	26
Mauritania	36	602	65 (2011)	11 (2011)	31 (2011)	48 (2011)	71 (2011)	84	22 (2012)	6	11
Mauritius	8	53	98 (2003)	76 (2002)	4 (2002)	ND	31 (2012)	97	14 (1995)	10	ND
Mozambique	27	489	54 (2011)	12 (2011)	29 (2011)	51 (2011)	166 (2009)	78	43 (2011)	9	91
Namibia	16	265	81 (2007)	56 (2013)	18 (2013)	63 (2013)	78 (2011)	88	23 (2013)	14	95
Niger	27	553	29 (2012)	14 (2012)	16 (2012)	33 (2012)	210 (2009)	68	43 (2012)	8	ND

Nigeria	34	814	49 (2011)	15 (2013)	19 (2011)	51 (2013)	123 (2010)	66	33 (2014)	8	29
Rwanda	19	290	91 (2015)	52 (2011)	21 (2011)	44 (2015)	41 (2008)	99	38 (2015)	10	95
SÃO Tome and Principe	17	156	82 (2009)	38(2009)	38 (2009)	72 (2009)	110 (2006)	95	32 (2008)	12	ND
Senegal	21	315	59 (2014)	18 (2013)	29 (2011)	48 (2014)	80(2011)	89	19 (2014)	8	53
Seychelles	9	ND	ND	ND	ND	ND	62 (2013)	99	8(2012)	10	ND
Sierra Leone	35	1360	60 (2013)	17 (2013)	25 (2013)	76 (2013)	131 (2011)	83	38 (2013)	11	ND
Somalia	40	732	33 (2006)	15 (2006)	ND	6(2006)	123 (2005)	42	25 (2009)	ND	3
South Africa	11	138	94 (2008)	60 (2004)	15(2004)	87 (2008)	54 (2007)	70	24 (2008)	14	95
South Sudan	39	789	19 (2010)	4(2010)	27 (2010)	17 (2010)	158 (2008)	39	31 (2010)	4	18
Sudan	30	311	23(2010)	9 (2010)	30 (2010)	51 (2014)	102(2010)	94	38 (2014)	12	5
Swaziland	14	389	82 (2010)	65 (2010)	13(2010)	77 (2010)	89 (2009)	98	26 (2014)	17	95
Tanzania	19	398	49 (2010)	34 (2010)	25 (2010)	43 (2010)	128 (2007)	97	35 (2014)	12	90
Togo	27	368	59 (2014)	20 (2014)	34 (2014)	57 (2014)	77 (2011)	87	28 (2013)	8	87
Tunisia	8	62	99 (2012)	63 (2012)	7 (2012)	85 (2012)	7 (2011)	98	10 (2012)	14	ND
Uganda	19	343	57 (2011)	27 (2014)	35 (2014)	48 (2011)	140 (2013)	78	34 (2012)	11	92
Zambia	21	224	64 (2014)	49(2014)	21 (2014)	56 (2014)	145 (2012)	86	40 (2013)	11	86
Zimbabwe	24	443	80 (2014)	67 (2014)	10 (2014)	70 (2014)	120 (2013)	91	28 (2014)	8	78

Source: African Heath Stats

10 ANNEX 2: PROGRESS IN PLAN OF ACTION TOWARDS ENDING PREVENTABLE MATERNAL, NEWBORN AND CHILD MORTALITY