Chapter 5.
Conclusions

5.1 Conclusions

Improvements in maternal, neonatal and reproductive health can only be achieved if access and quality of care are ensured for all women and girls, including those who are currently underserved or excluded from health systems[1]. In the transition to the new Sustainable Development Goals (SDGs) era, there is a need to focus more deliberately on improving the health of women, children and adolescents from an equity standpoint. The aim of this report is to highlight the sources of unequal and preventable health differences among women and adolescent girls in sub-Saharan Africa (SSA). It presents findings based on the most recent available information that can be used to inform policy at different levels. Additionally, the report introduces new metrics such as the Human Opportunity Index (HOI), which provides a novel approach to understanding the constraints and opportunities for achieving equity in maternal and reproductive health.

Table 5.1 Country level average HOIs and multi-country pooled HOIs

		HOIs (%)	
	Opptunities	Country level average	Multi-country pooled average
Women of reproductive age (15-49 years old)	Not having anaemia	45.47	62.55
	Having the recommended BMI	58.76	62.06
	Met need for family planning	46.26	46.14
	Knowledge of a place where to get an HIV test	66.48	60.90
Pregnant women	Four antenatal care visits	46.20	34.21
	Delivery attended by skilled personnel	53.10	36.96
	Postnatal checkup	52.77	40.90
	Maternity care package	26.08	15.87
	Malaria prophylaxis during pregnancy	47.45	42.52
	HIV test offered during pregnancy	61.26	57.51
	Infant checkup within two months after delivery	45.51	31.65
	Six months of exclusive breastfeeding	76.67	78.09
Older adolescent girls (15-19 years old)	Met need for family planning	37.80	40.01
	Having never been pregnant	63.72	66.24
	Currently attending school	39.45	40.17

Note: BMI = Body Mass Index, HIV = Human Immunodeficiency Virus. The country level average is the average of individual country HOIs. The multi-country pooled average is the predicted HOI for the group of countries that has been calculated by pooling all country samples and weighting them taking into account the number of women between 15 and 49 years old of each country.

In general, the findings of this analysis are in accordance with those of other articles and reports[2,3]: Overall, coverage of services is low; inequalities are driven by income, education and location (urban and rural) for most indicators across women in SSA. Baseline coverage is even lower, and inequalities higher, for those interventions that require higher provider-patient interaction (e.g. antenatal care or delivery attended by skilled personnel) than for interventions that could be delivered through strategies outside the health system (e.g. exclusive breastfeeding or HIV information and testing) (Table 5.2).

This report provides a novel approach to understand inequalities of opportunities in Reproductive, Maternal, Newborn, Child and Adolescent Health (RMNCAH) by simultaneously analysing all the factors – wealth, education, place of residence and others such as, religion, marital status or age –, that may affect inequality and their relative contributions to it. The findings suggest that wealth, educational level and area of residence (urban/rural) are the three main variables associated with inequality of access to health care by women. Notably, these socio-economic barriers to demand are often interlinked (Figure 5.3).

The HOI approach enables the establishment of associations between individual and household circumstances and inequality. It also allows quantification of the different levels of inequalities[XIII] that exist within and across countries and among different opportunities, as it is shown in Appendix A, where country-level specific data complement the regional findings. It also complements other existing data, such as the Countdown to 2015 reports[4].

Table 5.2 Opportunities ranked by inequality level (multi-country pooled analysis)

		D-index (%)
1	Maternity care package	32.67
2	Currently attending school	23.73
3	Delivery attended by skilled personnel	23.32
4	Four antenatal care visits	19.26
5	Postnatal checkup	17.17
6	Infant checkup after delivery	15.89
7	Met need for family planning (older adolescents)	15.39
8	Met need for family planning (20-49 years old)	15.37
9	Having never been pregnant	15.30
10	Knowledge of a place where to get an HIV test	11.46
11	HIV test offered during pregnancy	11.36
12	Malaria prophylaxis during pregnancy	7.34
13	Having the recommended BMI	6.51
14	Not having anaemia	4.46
15	Six months of exclusive breastfeeding	1.11

Note: D-index= dissimilarity index. The multi-country by pooling average is the predicted HOI for the group of countries that has been calculated by pooling all country samples and weighting them taking into account the number of women between 15 and 49 years old of each country.

[XIII] Although the existence of inequalities in maternal and reproductive health opportunities is well known, this report highlights the different levels of inequalities that exist among countries and among different opportunities.

Table 5.3 Three main contributors to inequality for each opportunity and subgroup of women

	Opportunities	Country level		Multi-country	
Women of reproductive age (15-49 years old)	Not having anaemia	Wealth index	27.31	Religion	38.32
		Marital status	16.79	Educational level	21.14
		Educational level	15.18	Wealth index	13.85
	Having the recommended BMI	Wealth index	26.38	Age	26.27
		Age	23.11	Wealth index	25.65
		Area (urban/rural)	17.60	Area (urban/rural)	22.39
	Met need for family planning	Wealth index	22.15	Educational level	23.59
		Marital status	19.47	Wealth index	20.29
		Educational level	18.36	Religion	15.05
	Knowledge of a place where to get an HIV test	Educational level	25.20	Educational level	30.42
		Wealth index	21.60	Wealth index	22.72
		Marital status	17.11	Religion	18.79
Pregnant women	Four antenatal care visits	Wealth index	31.83	Educational level	30.71
		Educational level	20.25	Area (urban/rural)	24.91
		Area (urban/rural)	17.24	Wealth index	23.20
	Delivery attended by skilled personnel	Wealth index	32.45	Educational level	27.20
		Area (urban/rural)	24.17	Wealth index	21.81
		Educational level	18.36	Area (urban/rural)	20.40
	Postnatal checkup	Wealth index	32.62	Educational level	26.27
		Area (urban/rural)	21.64	Area (urban/rural)	24.81
		Educational level	19.61	Wealth index	22.13
	Maternity care package	Wealth index	32.26	Educational level	27.60
		Area (urban/rural)	22.24	Area (urban/rural)	26.82
		Educational level	20.58	Wealth index	24.23
	Malaria prophylaxis during pregnancy	Wealth index	26.09	Religion	65.77
		Marital status	18.78	Educational level	15.88
		Educational level	15.19	Marital status	6.39
	HIV test offered during pregnancy	Wealth index	30.67	Educational level	26.60
		Area (urban/rural)	23.64	Wealth index	22.43
		Educational level	21.09	Area (urban/rural)	18.81
	Infant checkup within two months after delivery	Wealth index	31.40	Area (urban/rural)	23.94
		Area (urban/rural)	17.50	Educational level	23.24
		Educational level	16.65	Wealth index	19.06
	Six months of exclusive breastfeeding	Wealth index	25.09	Wealth index	28.56
		Marital status	19.92	Educational level	25.90
		Educational level	15.75	Number of children	15.59

table continues next page

Table 5.3 Three main contributors to inequality for each opportunity and subgroup of women (continued)

	Opportunities	Country level		Multi-country	
Older adolescent girls (15-19 years old)	**Met need for family planning**	Marital status	38.98	Marital status	33.31
		Wealth index	24.15	Wealth index	22.61
		Area (urban/rural)	16.03	Religion	20.99
	Having never been pregnant	Marital status	69.11	Marital status	75.24
		Wealth index	10.54	Wealth index	8.66
		Occupation	9.91	Occupation	5.69
	Currently attending school	Marital status	40.07	Marital status	47.63
		Occupation	28.19	Occupation	19.69
		Wealth index	15.43	Religion	12.26

Note: The country level average is the average of individual country HOIs. The multi-country pooled average is the predicted HOI for the group of countries that has been calculated by pooling all country samples and weighting them taking into account the number of women between 15 and 49 years old of each country.

Based on data analysed, the most pressing issues identified are:

- Baseline coverage of maternal and reproductive health services is very low: about half of women of reproductive age in SSA are not provided with routine maternity care components that have a potentially significant impact on maternal and infant health. Multi-country coverage rate of "four antenatal care visits" is 42 percent, "delivery attended by skilled personnel" is 48 percent and "mother checkup" is 49 percent. Adolescents are the most neglected group in terms of access to contraceptive information and services. While for all women of reproductive age, "met need for family planning" has a multi-country coverage rate of 55 percent and a country level average of 53 percent, for adolescent girls the multi-country coverage rate for "met need for family planning" is 47 percent, and the country level average is 46 percent. Importantly, the same proportion of women is not provided with preventive interventions for infectious diseases that contribute significantly to the burden of perinatal and neonatal deaths in the region. For example, multi-country coverage rate for "malaria prophylaxis during pregnancy" is lower than 50 percent (46) and coverage rates for HIV-related opportunities are around 65 percent.

- The combination of high inequality indices (D-index) with low HOIs and coverage rates for most RMNCAH indicators, suggests a situation of uneven distribution of available reproductive and maternal health opportunities. What this indicates is the dramatic situation for the poorest and most marginalised women, adolescent girls and newborns in SSA. With few exceptions for specific health opportunities such as "six months of exclusive breastfeeding", these groups are essentially excluded from the health system.

- For women of reproductive age as a whole (15-49 years old), wealth, education and area of residence (urban/rural) are the most prominent determinants of access to the health opportunities analysed. However, for older adolescent girls (15-19 years old), being married appears to be the main source of inequalities for all opportunities observed, with percentages ranging from 40 to 75 percent (see Table 5.3).

The descriptions of inequality of opportunity in this report may be relevant for decision-makers and managers in low and middle income countries (LMICs), and other development stakeholders in guiding broad strategic priorities and designing equity-oriented policies. They will also help to identify services with the largest inequality, as well as the most underserved groups. In turn, this may inform decisions on better targeting RMNCAH resources – both domestic and foreign – to support the scale-up of health interventions.

Actions directed to increase access to and use of quality maternal and reproductive health services and to reduce inequalities between women are urgently needed, especially in settings where baseline inequalities are high.

Box 9. Strengths and limitations of the study

The large number of countries and observations included in the analysis provides strong statistical power to the study.

The relationships presented here should not be interpreted as causal. Rather, the report provides information about associations between individual and household circumstances and inequality. In this respect, more context-specific research, including a number of causal relations to identify the determinants of inequalities, is needed in order to design the most appropriate interventions to address the observed inequities.

Notably, each of the 29 SSA countries included in the study has distinctive features that should be taken into account by policy makers to generate appropriate and effective policies. Although individual country results cannot be extrapolated to the rest of the SSA region, the results of the multi-country pooled analyses allow for drawing policy implications that could be generalised throughout the region.

The representativeness of the sample populations is an essential criterion in order to be generalisable. In this report the Demographic Health Surveys (DHS) samples used are representative of the populations they include[5].

The HOIs and the D-indices are always upper and lower bounds respectively. Thus, in all cases conclusions are drawn following the most conservative results.

Finally, the opportunities analysed in this report are strongly associated with individual efforts and decisions, therefore they are not "opportunities" in the strict economic sense. As explained in Chapters 1 and 2, the opportunities selected for the study are not as exogenous as would be desirable, since they are to a certain extent related to personal choices in the case of adult women. This is a limitation of this study.

5.2
Policy options for adolescent girls

Overall reproductive health opportunities among older adolescent girls scored low HOIs and high inequalities in these analyses. They appear to be the most neglected group in terms of access to contraceptive information and services, putting them at risk of early pregnancy and contracting HIV and other sexually transmitted diseases. Only around half have their family planning needs satisfied and are enrolled at school, and, on average, more than 20 percent have had a pregnancy before the age of 19 (multi-country pooled analysis results).

Addressing the needs of adolescent girls requires addressing potential factors that act as barriers to accelerating progress. Marital status, along with wealth and occupation, appear to be strongly correlated with inequality of opportunity for this group. Increasing access to schooling is a critical strategy in ending child marriage and ensuring that married girls have the opportunity to complete their education. Strategies aimed at retaining older adolescent girls in school, preferably through at least the end of secondary education, e.g. scholarships, conditional or unconditional cash transfers and economic assistance for material and transportation, are key. If expanded and promoted, they could help adolescent girls (and their families) to delay marriage and first pregnancy, while reducing the high fertility rates observed among adolescents[6]. Introducing economic incentives or schemes (cash transfers, scholarships microfinance, loans) to increase the economic security of girls and families can encourage families to avoid or postpone early entry of children into the workforce or other consider alternatives[7].

Beyond education, protection services need to be accessible via a number of channels (in the health facility, at school, in the community) in order to ensure that cases of child marriage in the community are responded to effectively. There is an urgent need for SSA countries to implement youth-friendly health services – for both unmarried and married girls –, as several African countries are already doing[8], and to make them accessible, acceptable and appropriate for adolescents' needs[9].

Advocating to strengthen, implement and fund laws and policies that prevent child marriage is crucial to upholding girls' rights. For example, advocacy in favour of raising the legal marriage age for girls to 18 years old and enforcing compliance where this already exists are crucial[9]. In addition, policies impeding girls' access to contraceptive methods by requiring parental or spousal consent need to be reviewed[10].

Further, policies should target adolescent girls as well as other influential family members, who are often the decision makers on their behalf, and communities, which can have a powerful influence over them[11].

5.3
Final considerations

Despite progress between 1990 and 2015 in some Millennium Development Goals (MDGs) indicators, the target of reducing maternal mortality by 75 percent was not achieved. Importantly, inequality within and among countries for this indicator is growing. The gap in levels of maternal mortality between the best and worst performing countries in the past 20 years has doubled[12]. Though more women and adolescent girls are receiving services (e.g. delivery with a skilled birth attendant, antenatal care visits), these are often of poor-quality. In addition, many still undergo pregnancy and childbirth outside the health system or do not access modern contraceptives, the most cost-effective intervention to curb the number of maternal deaths[13,14].

Ensuring access to and availability of these basic services for the most vulnerable women, adolescents and newborns is necessary, and remains one of the most pressing issues to address the high risk of death from causes related to pregnancy and childbirth that millions of women and girls in SSA face on a daily basis. Moreover, prioritising provision of equitable access to reproductive, maternal and perinatal healthcare is a prerequisite to achieve the SDG3 targets associated with maternal, reproductive health and other related issues such as SDG5, gender equality or SDG10, reduced inequalities (see Box 1, Chapter 1).

The main circumstance that poses a major barrier to the health and wellbeing of women and girls in most opportunities analysed is the unequal distribution of wealth. Thus, efforts to increase the incomes of the poorest segments of the population may have a significant impact on maternal mortality reduction in all settings. Furthermore, the pathway towards universal health coverage (UHC) – defined by the World Health Organization (WHO) as the situation in which "all people receive the health services they need without suffering financial hardship when paying for them"[15] –, appears as the goal to work for to alleviate the financial constraints that deter less affluent women and girls from seeking and accessing health services.

An approach towards progressive universalisation can advance the RMNCAH agenda by ensuring focus on and acceleration of effective coverage of key lifesaving interventions (e.g. childbirth attended by skilled personnel, emergency obstetric care). Additionally, those efforts should be driven by locally designed and tailored policies oriented to favour first the poorest and most excluded subsets, especially for those services where baseline inequalities are very marked, to ensure that the most vulnerable women's needs are addressed and prioritised[16] (e.g. marginalised groups could be exempted from or receive subsidies for user fees, premiums or co-payments, transportation subsidized, etc.). The present situation in SSA countries is far from UHC, and thus governments and stakeholders should prioritise actions towards scaling-up coverage of quality maternal and reproductive health services with the above-mentioned pro-poor approach aimed to curb

inequalities. This requires political will and mobilisation, sustained financing for health systems strengthening as well as new tools and knowledge.

The financial gap to scale-up coverage of an essential package of reproductive, maternal and newborn health services poses a major but attainable challenge that can secure large health, social, and economic returns[17]. The Global Financing Facility launched in 2015 offers a window of opportunity for increased coordination and dialogue between donors and LMICs to address the resource gap and guarantee sustainable financing mechanisms for woman, child and adolescent health over the next years[18].

As we transition to the SDGs era, a number of external factors can influence the progress of the new agenda[16]. Challenges range from future humanitarian crises, global health governance issues, political instability, ensuring sustained momentum for RMNCAH among many competing health targets, to LMICs ability to increase their domestic fiscal space for health. The ability of the RMNCAH community to navigate such complex issues will determine effective and equitable provision of maternal and reproductive health that leaves no one behind.

Finally, research is a central component to advance the post-2015 agenda in a more equitable way. Commensurate with the magnitude of the problem, more efforts and resources should be devoted to the evaluation of inequalities in access to health services and health outcomes. It is imperative to measure the extent of gaps in access to maternal-perinatal and reproductive health services and outcomes between population groups and the determinants of (or contributors to) these gaps, as well as tracking how coverage and inequalities for interventions change over time. Moreover, there is a need to generate more data concerning highly vulnerable groups such as migrant women and adolescents including younger adolescents and women in humanitarian crisis settings.

Box 10. Data gaps identified

Despite notable progress in recent years, important gaps remain in the availability of data collected through DHS:

- Data about younger adolescent girls (10-14 years old) are missing. Unlike data on older adolescent girls (15-19 years old), which are routinely recorded in the DHS as well as in other household surveys, information on younger adolescents is almost always obtained through retrospective questions asked to women 15 and older. DHS and other household surveys funders and stakeholders need to make an effort to include this subset of younger adolescent girls in their surveys to enable new data generation that identifies their needs.

- Indicators related to newborn health opportunities, such as newborn checkup within hours after delivery, are included in the DHS, but are of poor quality in many countries. Frequently, values are missing for questions regarding the first hours after birth that may be due to respondents' inability to recall information or the low number of women attending the newborn checkup within hours after delivery. While these data gaps are not filled, possible alternatives to obtain quality information about newborn health opportunities could be obtained through health facility survey data and records.

- Six out of the 29 SSA countries included in this report do not have available data on anaemia for women of reproductive age. Additionally, domestic violence and migration status indicators – two circumstances that can drive inequalities – were not included in the analysis because of lack of data (see Chapter 2).

- This report covers around 79 percent of the SSA population. The DHS do not have available data on the other 21 percent for the period 2010 and later, although some surveys are currently being carried out. These and other existing gaps highlight the need for innovative measurement approaches and support to SSA countries to upgrade their capacity to develop and implement better and sound measurement approaches.

Key messages

- Despite notable progress achieved in the last decade, overall reproductive and maternal health opportunities for women and girls in SSA are scarce and unequally distributed. As a result, a lack of services and a major burden of disease are more concentrated among the worst-off, the less-educated and those living in rural settings.

- Further progress in improving women's and adolescents' health and well-being can only be achieved by expanding coverage and reducing inequalities. This requires scale-up of needed services currently unavailable to large proportions of women and girls, while targeting first underserved populations in order to curb the inequality gaps that can otherwise impede acceleration of overall progress and the achievement of the SDGs targets. SSA countries and the RMNCAH community at large need political mobilisation and sustained financing for health system strengthening.

- Ensuring access for all women everywhere to skilled attendance in childbirth is key to addressing the high risk of death from causes related to pregnancy and childbirth; this is especially critical for the poorest and most marginalised women, girls and newborns, and thus, they should be prioritised. However, this is one of the biggest obstacles that lies ahead because of the challenge to provide access to quality care 24/7 in the context of weak health systems poses.

- Adolescent girls are a highly vulnerable group among women of reproductive age with very poor results in terms of access to reproductive health services and educational achievements. Early marriage is the main contributor to poor maternal and reproductive health indicators and outcomes for this group.

- Ensuring equitable expansion of health coverage should be the cornerstone of efforts to meet SDG3 – including the reproductive, maternal and child health targets – and the ultimate goal of achieving universal health coverage.

- Actions outside the health system focused on poverty reduction, raising educational achievements and improving communities' physical access to healthcare or ending child marriage have the potential to reduce inequalities in maternal and reproductive health, and highlight the need to strengthen inter-sectorial co-operation and coordination mechanisms among health and other sectors concerned.

- Research has a key role to play to further ascertain the levels and causes of inequalities, bridge the existing data gaps for specific subgroups of vulnerable women and girls, as well as for monitoring and accountability purposes.

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