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SUPPLEMENT TO BACKGROUND PAPER ON SEXUAL AND REPRODUCTIVE HEALTH AND RIGHTS: AN ESSENTIAL ELEMENT OF UNIVERSAL HEALTH COVERAGE

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REVIEWING THE ELEMENTS OF AN ESSENTIAL PACKAGE OF SEXUAL AND REPRODUCTIVE HEALTH AND RIGHTS INTERVENTIONS.

There is a strong case for taking a comprehensive approach to sexual and reproductive health and rights (SRHR) to achieve universal access. Sufficient evidence exists that identifies people's sexual and reproductive health needs and there are effective ways to address them, including the provision of an essential set of sexual and reproductive health interventions.

Overall, investments in SRHR have been shown to provide good value for money. These benefits are manifested at different levels and over different periods of time. In addition to improving health and well-being and enhancing human rights, investments yield economic benefits, for instance decreased expenditure on health services as a result of an expanded focus on prevention. The social and economic benefits resulting from improved SRHR will continue to pay dividends over time as women's children's and adolescents' health and well-being improve.

In this supplement, we present evidence supporting the need for and cost-effectiveness of the interventions included in the essential SRHR package proposed by the Guttmacher–*Lancet* Commission (Figure 1). The review is not exhaustive, but is intended to provide a starting point to gain an understanding of the level and quality of the existing research evidence supporting the different interventions. For those interested in more detailed information, a reference list of journal articles and books is provided at the end of this supplement.

COMPREHENSIVE SEXUALITY EDUCATION

Access to comprehensive and evidence-based information about sex and sexuality is crucial for sexual health and well-being. Based on the original phrasing provided in the International Conference on Population and Development (ICPD) Programme of Action, comprehensive sexuality education (CSE) is defined as an "age-appropriate, culturally relevant approach to teaching about sexuality and relationships by providing scientifically accurate, realistic, non-judgemental information" (UNESCO, 2018). Ensuring effective implementation of and access to such education for children and adolescents is essential for meeting their needs and, especially, for improving adolescent girls' empowerment and well-being. Beginning at a young age, this approach enables individuals to make informed choices about and assume control of their sexual and reproductive health, thus taking account of the fact that experiences early in an individual's life course may have long-term consequences (WHO, 2015a). Evidence shows that CSE taught by pedagogically trained teachers can lead to improved sexual and reproductive health knowledge and outcomes (e.g. delayed onset of sexual activity, reduced sexual risk-taking and increased contraception use) and can provide a platform to raise awareness about sexist, humiliating and distorted representations of sex and restrictive gender norms (UNESCO, 2018).

On these grounds, CSE is an essential part of the integrated package of SRHR services that should be made universally available in countries that have embarked towards universal

Figure 1. Essential package of SRHR interventions.

health coverage (UHC). By definition, looking at SRHR through a UHC lens places the focus on the health sector; however, an intersectoral approach with deliberate and concerted actions across multiple sectors is key for meeting children's and adolescents' right to CSE. For example, schools, through Ministries of Education, provide an important opportunity to deliver CSE to a great number of children and adolescents and can serve as an important platform to promote health and well-being (Patton and others, 2016; UNESCO, 2018). In this

regard, a United Nations Educational, Scientific and Cultural Organization (UNESCO) review of policies and strategies to promote sexuality education in Asia and the Pacific found that a number of countries have made direct reference to the education sector in their sexual and reproductive health plans and/or strategies or have specified multisectoral plans on sexuality education, albeit with varying granularity (UNESCO Bangkok, 2012). The Colombian PESCC programme (Project for Sexuality Education and the Construction of Citizenship), implemented by the Colombian Ministry of Education with the assistance of UNFPA, provides a practical example of the operationalization of multisectorality (Gobierno de Colombia, 2019). Aimed at developing critical thinking, the programme is rights based and gender focused and provides training on delivering sexuality education, human rights and school-based violence prevention and mitigation (Gobierno de Colombia, 2019).

CSE has also been shown to be cost-effective. In 2011, UNESCO assessed the cost-effectiveness of sexuality education programmes in six countries: Estonia, India, Indonesia, Kenya, Nigeria and the Netherlands. The analysis suggested that sexuality education programmes are highly effective, cost-effective and even cost-saving, depending on context and programme characteristics (e.g. part of the curriculum, comprehensive, nationally rolled out, delivered in conjunction with youth-friendly services) (UNESCO, 2011). In addition, a school-based education programme aimed at reducing HIV infection, sexually transmitted infections (STIs) and unintended pregnancies among adolescents in the USA was found to be both effective, in that it significantly increased contraceptive usage, and cost-effective or cost-saving; it was estimated that US$2.65 would be saved for every US$1 spent (Wang and others, 2000).

COUNSELLING AND SERVICES FOR A RANGE OF MODERN CONTRACEPTIVES, WITH A DEFINED MINIMUM NUMBER OF DIFFERENT METHODS

The introduction of effective modern contraceptive methods has made it possible to separate sex from reproduction, allowing women and couples to determine the number of children that they have and the spacing of their children, as well as averting unintended pregnancies and abortions. Contraceptive methods are also essential in the prevention of STIs, including HIV infection. The ICPD Programme of Action set a target of 100 per cent availability of voluntary quality family planning services by 2015 (United Nations Population Fund, 1994), and the proportion of women having their demand for family planning met with modern contraception is also a key indicator of global progress towards universal access to sexual and reproductive health included under Sustainable Development Goal (SDG) 3 (Guttmacher Institute, 2015; United Nations, 2015). In 2017, approximately half of the 1.6 billion women of reproductive age (15–49 years) in developing parts of the world wanted to avoid a pregnancy and consequently were in need of modern contraception. However, 214 million – approximately one-quarter – of these women were not using modern contraceptive methods and are thus considered to have an unmet need for modern contraception (Darroch and others, 2017). Among sexually active adolescent women aged 15–19 years, the proportion with an unmet need was even higher, with 60 per cent, or 23 million women, not using a modern contraceptive method (Darroch and others, 2016). These figures clearly show that the global unmet need for contraception remains too high. The reasons for this include legal, policy, social, cultural and other structural barriers that deter women, and men, from using contraceptives even when available. Fulfilling the unmet need for contraceptives would result in substantial benefits, including an estimated additional 67 million unintended pregnancies averted and about 76,000 fewer maternal deaths (Darroch and others, 2017).

In 2001, the Commission on Macroeconomics and Health proposed criteria for selecting essential interventions to include in a country's health benefits package: technically efficient and successful service delivery; target areas that constitute a large burden on society; social

benefits exceed intervention costs; and particular emphasis on the needs of the poor (WHO, 2001). Family planning, including counselling and services for modern contraceptives, clearly meets these criteria and thereby it makes sense to include family planning in a comprehensive UHC benefits package. In Rwanda, through the introduction of a community-based health insurance scheme, Mutuelles de Santé, substantial improvements in health insurance coverage, uptake of family planning and, correspondingly, the contraceptive prevalence rate were made within a short time (Muhoza and others, 2016). This example shows how health insurance and the inclusion of family planning into a country's prioritized package of essential services, in combination with a strong family planning programme, can make important contributions to tackling and possibly removing socioeconomic, cultural and other barriers that restrict individuals' access to contraceptive services (Muhoza and others, 2016).

A number of economic evaluations estimated the cost-effectiveness of family planning using different modern contraceptive methods and consistently found the intervention to be cost-effective. This is in line with the results from the global Disease Control Priorities Project, which found family planning to be among the most cost-effective of all health interventions (Horton and Levin, 2016). A 2016 systematic review summarized studies assessing the cost-effectiveness of improving family planning to reduce unmet modern contraception need in the general population in a number of low- and middle-income countries (LMICs), namely Afghanistan, India, Mexico, Nigeria, Uganda, and the Pacific Island countries; the results among studies were similar and indicated that reducing unmet need for family planning and contraceptives is highly cost-effective based on the World Health Organization (WHO) threshold of less than three times the per capita GDP per DALY averted (Zakiyah and others, 2016). A 2009 study conducted in Uganda estimated that every US$1 spent on family planning and reducing women's unmet need for contraceptives would incur savings of about US$3 and greatly reduce the rates of induced abortions and maternal mortality (Vlassoff and others, 2009). This is in line with a 2014 study by the Guttmacher Institute reporting US$1.47 savings in pregnancy-related care, including care for women living with HIV, for every US$1 invested in contraceptives (Singh and others, 2014), as well as with findings by the United Nations Population Division of savings between US$2 and US$6 for every US$1 spent on family planning (United Nations Population Division, 2009).

ANTENATAL, CHILDBIRTH AND POSTNATAL CARE, INCLUDING EMERGENCY OBSTETRIC AND NEWBORN CARE

Pregnancy and childbirth are important events in many women's life course. Women's health and well-being during these events affect their health at all future stages and also have a direct bearing on the next generation. Ensuring that every woman has access to quality antenatal, childbirth and postnatal care, including emergency obstetric and newborn services, is therefore essential within a comprehensive approach to SRHR. Globally, progress has been made in reducing the numbers of maternal deaths between 1990 and 2015. The maternal mortality ratio decreased by 38 per cent, from 342 in 2000 to 211 deaths per 100,000 live births in 2017, which corresponds to 295,000 maternal deaths in 2017 (Trends in maternal mortality 2000 to 2017, 2019). This progress helped spur improvements in neonatal deaths, which decreased by about 42 per cent during the same period, from 4.6 million in 1990 to 2.6 million in 2015 (GBD 2015 Child Mortality Collaborators, 2016). Maternal and newborn mortality are increasingly concentrated in resource-poor countries, hence emphasizing the profound inequities between countries and regions. In 2015, two-thirds of global maternal deaths occurred in sub-Saharan Africa (Alkema and others, 2016) and the stillbirth rate was more than eight times greater than in developed regions (Lawn and others, 2016). Severe maternal morbidities resulting from pregnancy-related complications are even more common in developing countries than maternal deaths. Beyond the consequences for the mothers

themselves, these have significant implications for fetal, newborn and infant deaths. As the majority of maternal and newborn deaths and ill health are preventable and treatable, this represents an excess burden of disease and reflects the gaps in coverage and quality of the continuum of care of essential maternal and newborn health services persisting in many developing regions.

The current quest for UHC provides a unique opportunity to create an enabling policy environment for improving the availability and accessibility of these services. Each country will map its own path and adopt a distinct UHC package; however, in all cases, implementing UHC with long-term commitments to comprehensive quality maternal and newborn care in line with recommended, evidence-based interventions is more likely to be successful (WHO, 2015c). In this regard, a systematic review on the effect of health insurance on the usage and provision of maternal health services in LMICs found positive relationships between health insurance and the number of women delivering in a health facility with a skilled attendant, the probability of women receiving any and/or at least four antenatal care visits and the proportion of women receiving postnatal care (Comfort and others, 2013). Although further research is needed on the quality and health outcomes of the provided services, these findings substantiate the call for a comprehensive UHC approach to sexual and reproductive health service delivery as a means of promoting access to essential maternal and newborn health services.

Cost-effectiveness studies in Afghanistan, India, Mexico and Nigeria have evaluated different integrated packages of maternal and newborn services (e.g. antenatal and post-partum care with skilled birth attendants, family planning and safe abortion) and reported estimates per disability-adjusted life-year (DALY) averted below WHO-recommended cost-effectiveness benchmarks (range US$150–1000)[1] (Carvalho and others, 2013; Erim and others, 2012; Goldie and others, 2010; Hu and others, 2007). Adam and others (2005) presented an "expansion path" for an essential package of maternal and newborn interventions (representing the order at which interventions would be purchased at given levels of resource availability using cost-effectiveness as the only criterion) in two regions with high rates of maternal and child mortality. The cost-effective intervention mix was newborn care at the community level followed by specific antenatal care interventions, skilled birth attendance, first-level maternal and neonatal care and more complex interventions requiring referral to higher-level facilities. Goldie and others (2010) similarly presented an "expansion path" for India and suggested starting with family planning and safe abortion, followed by increasing the availability of skilled attendants at birth, improving antenatal and post-partum care, shifting births to facilities and eventually improving referral to higher-level facilities for complicated cases.

SAFE ABORTION SERVICES AND TREATMENT OF THE COMPLICATIONS OF UNSAFE ABORTION

Globally, some 44 per cent of all pregnancies were unintended in 2010–2014, and an estimated 56 per cent of these ended in abortion (Bearak and others, 2018), which translates into 56.3 million induced abortions annually in this period (Sedgh and others, 2016). Substantial declines in unintended pregnancy and abortion rates have been seen in developed regions in line with the growing use of contraceptives. Both rates have remained high in developing regions, reflecting, among other things, the growing desire for small families and the limited access to and usage of modern contraceptives (Bearak and others, 2018). When executed in compliance with medical guidelines, abortion is a very safe intervention; however, significant barriers to accessing safe and timely abortion services (e.g. stigma, providers' attitudes, programmatic, legal and regulatory factors) persist in

1 2012 US$.

many countries and result in a high annual incidence of about 25 million unsafe abortions, with much variation among countries and regions (Ganatra and others, 2017). Performed by unqualified providers or with outdated or harmful methods, unsafe abortions entail a high risk of severe complications and death.

As the global push towards UHC intensifies, safe abortion services and treatment of the complications of unsafe abortion need to be acknowledged as an essential part of the full gamut of sexual and reproductive health services; the inclusion of safe abortion in countries' UHC plans will have positive effects on women's reproductive health. Not including safe abortion threatens to derail efforts to achieve both UHC and the global community's commitment to SDG 3.7 for universal access to sexual and reproductive health-care services (United Nations, 2015). In addition, the "rights" component of SRHR requires special attention in relation to abortion. By definition, UHC is aimed at ensuring "that all people obtain the health services they need" (WHO, 2015b) and UHC strategies that do not include abortion care would fall short of achieving this aim.

Where necessary, an important basis for improvements in universal access to comprehensive abortion care is to ensure that high-quality safe abortion services and treatment of the complications of unsafe abortion services are available to the full extent permitted by applicable law and that girls and women seeking such services, as well as providers, are not prosecuted. On this basis, essential abortion law and policy reforms to liberalize and extend conditions under which abortion is permitted should be undertaken. In Nepal, for instance, a sharp decline in severe abortion complications and maternal mortality was observed following the legalization of abortion in 2002 (Henderson and others, 2013). This case is instructive for a successful roll-out of safe legal abortion based on public health evidence-based policy-making (see country example on Nepal in the *Background document for the Nairobi summit on ICPD25-Accelerating the promise*). The Nepalese government has since made further commitments with respect to expanding access to sexual and reproductive health services, including safe abortion, through the Safe Motherhood and Reproductive Health Rights Act passed in 2018 and the inclusion of safe abortion care in its most recent National Family Planning Costed Implementation Plan (Government of Nepal, Ministry of Health and Population, 2015). In addition, a 2009 landmark decision by the Supreme Court emphasized the right to abortion as part of reproductive rights and thus human rights (Supreme Court of Nepal, 2009).

The provision of safe abortion was found to be cost-saving compared with unsafe abortion and was further associated with reductions in complications and mortality (Hu and others, 2009, 2010). Of the methods for safe abortion evaluated, clinic-based manual vacuum aspiration was most cost-effective for safe first-trimester pregnancy termination in Mexico and Nigeria (Hu and others, 2009, 2010). Medical abortion with misoprostol was the most cost-effective option for safe abortion in Ghana (Hu and others, 2010). Particularly in resource-poor settings with limited surgical capacities, medical abortion could enhance access to safe abortion and at the same time free up resources and decrease total costs (Prinja and others, 2015). In addition, a study in a high-resource setting found that the provision of safe first-trimester medical abortion (with mifepristone and misoprostol) by nurses/midwives compared with physicians was equally effective and cost-saving (Sjöström and others, 2016). In addition, the women treated by nurses/midwives were significantly more likely to have long-acting reversible contraceptives inserted within 3 weeks of the abortion, which has been found to reduce the number of repeat abortions.

PREVENTION AND TREATMENT OF HUMAN IMMUNODEFICIENCY VIRUS AND OTHER SEXUALLY TRANSMITTED INFECTIONS

According to the Joint United Nations Programme on HIV/AIDS (UNAIDS), 36.9 million people were living with HIV in 2017 and an additional 1.8 million people were newly infected, a 16 per cent decline in new infections since 2010 (UNAIDS, 2018). Thanks to the sustained scale-up of antiretroviral therapy during the last decades, global AIDS-related deaths have declined by 34 per cent since 2010, to about 940,000 in 2017 (UNAIDS, 2018). There is no room for complacency, however, and accelerated progress needs to be made to achieve the 2020 Global Prevention Targets and Commitments of reducing both AIDS-related deaths and new HIV infections to fewer than 500,000 globally (UNAIDS, 2016). Furthermore, STIs other than HIV infection have received considerably less global attention and most remain undiagnosed and untreated, despite their large proportion of the global burden of sexual and reproductive ill health. In 2016, the four major curable bacterial STIs (syphilis, gonorrhoea, chlamydia and trichomoniasis) accounted for about 376 million new infections (WHO, 2019b). In addition, more than 500 million people are living with genital herpes and about 300 million women are living with a human papillomavirus (HPV) infection, two of the most prevalent viral STIs (WHO, 2019b).

In light of this high disease burden, expanded and more effective global – and national – health sector responses to HIV and AIDS and to STIs overall are critical to achieving UHC. Motivated by the UHC movement, there is a transformative opportunity for taking a comprehensive approach to sustain and strengthen the HIV and AIDS response, while also recognizing other essential STI services as key elements of a comprehensive UHC benefits package. Examples of such integrated responses to HIV infection and other STIs can be found in Cuba and Thailand, both of which have successfully eliminated mother-to-child transmission of HIV and syphilis (Ishikawa and others, 2016). These successes reflect the countries' consistent progress towards UHC and can be attributed, among other things, to the following characteristics common to both countries' approaches: strong political commitment, integration of routine HIV and syphilis testing and prevention services in antenatal care packages, well-functioning health management information systems and access to quality HIV and syphilis diagnostic services free of charge (Ishikawa and others, 2016). In addition, both countries place emphasis on human rights and gender equality and promote equity and inclusiveness in health service delivery (Ishikawa and others, 2016).

The cost-effectiveness of HIV preventive interventions depends on the risk of acquiring HIV, which is highly variable over time and across populations and individuals and in turn depends on treatment coverage and intensity. This makes evaluating the cost-effectiveness of HIV preventive interventions difficult. Generally, the higher the HIV incidence would be without the preventive strategy, the higher the cost-effectiveness of prevention. Targeting high-risk individuals is likely to be cost-effective. Galárraga and others (2009) systematically reviewed a wide range of behavioural, biomedical and structural HIV preventive strategies and reported HIV prevention to be very cost-effective compared with treatment; most strategies had costs per DALY averted of one times per GDP capita. Vassall and others (2014) performed an economic evaluation of a large-scale HIV prevention project in 22 Indian high-prevalence districts and found the intervention to be cost-effective and potentially cost-saving in the long run. Uthman and others (2010) conducted a systematic review of economic evaluations assessing voluntary medical male circumcision to prevent HIV acquisition in heterosexual men; all included studies reported the intervention to be cost-effective or cost-saving using generally established cost-effectiveness thresholds. Results from a 2016 study confirm these results for 14 priority countries in Eastern and Southern Africa, even after the considerable voluntary medical male circumcision scale-up in recent years (Kripke and others, 2016a). Moreover, analyses in Mozambique, South Africa, Swaziland, Tanzania and Uganda found voluntary

medical male circumcision to be most cost-effective when targeting the age group of 15–34 years (Dent and others, 2019; Kripke and others, 2016b–e).

The Disease Control Priorities Project systematically reviewed cost-effectiveness studies evaluating HIV testing services to identify both HIV-positive persons who need care and at-risk HIV-negative individuals (Harripersaud and others, 2017). Voluntary counselling and testing was reported to be a cost-effective strategy in several Eastern African countries and offering free services was found to be highly cost-effective; as costs are influenced by utilization levels, creating demand for such services was stated to be important to further cost-effectiveness (Harripersaud and others, 2017). As for HIV testing, the Disease Control Priorities Project conducted a systematic review of studies evaluating the cost-effectiveness of treatment and presented highly favourable cost-effectiveness results for expanding access to antiretroviral treatment in various settings and populations in both high-income countries and LMICs.

Interventions for the prevention of mother-to-child transmission of HIV were found to be cost-effective using established international benchmarks across a variety of lower-resource countries, particularly in high-prevalence settings (Johri and Ako-Arrey, 2011). Several studies were conducted on the cost-effectiveness of syphilis screening and treatment for the prevention of mother-to-child transmission across a wide range of countries. In low-prevalence settings, the interventions were found to be highly cost-effective according to WHO-defined standards, whereas, in high-prevalence settings, cost-savings were found (Blandford and others, 2007; Kahn and others, 2014; Kuznik and others, 2013, 2015). Furthermore, integrating both HIV and syphilis mother-to-child transmission preventive services was found to be cost-effective in low-prevalence settings (Owusu-Edusei and others, 2014) and cost-effective (Schackman and others, 2007) or cost-saving (Bristow and others, 2016) in high-prevalence settings.

PREVENTION OF, DETECTION OF, IMMEDIATE SERVICES FOR AND REFERRALS FOR CASES OF SEXUAL AND GENDER-BASED VIOLENCE

Sexual and gender-based violence refers to any act of violence and coercion that is committed against a person's will because of gender norms and power inequalities and is a violation of human rights and fundamental freedoms (UN Women, 1992). Sexual and gender-based violence affects women, girls, men and boys. It can be physical, sexual, emotional and psychological in nature and includes, among other things, harmful practices such as child marriage, trafficking and sexual exploitation, sexual assault, harassment and abuse, female genital mutilation, honour killings and sex-selective abortion (UN Women, 1992). Sexual and gender-based violence, particularly violence against women, is a long-standing problem and the consequences for girls' and women's physical, mental and reproductive health are well known. Nevertheless, implementation and scale-up of prevention efforts, and in many regions also of services for women experiencing violence, have been slow. Globally, 35 per cent of women – more than one-third – experience intimate partner violence or non-partner sexual violence across their life course (WHO, London School of Hygiene & Tropical Medicine, South African Medical Research Council, 2013), making violence against women a serious global public health issue. An estimated 200 million girls and women have been exposed to female genital mutilation (WHO, 2019a), a particularly harmful practice associated with serious short- and long-term health risks and even death.

The ICPD Programme of Action was a landmark consensus document in furthering women's rights in that it called for the elimination of all discriminatory practices against women and declared gender equality and equity, as well as women's empowerment, mainstays of population and development programmes (United Nations Population Fund, 1994). To comply with this call and realize the human rights of those affected, it is essential to intensify efforts

towards the prevention and elimination of violence against women and any act of sexual and gender-based violence in general. The global drive towards UHC provides a critical opportunity to aim for universal access to services for the prevention, detection and treatment of and referrals for sexual and gender-based violence through the inclusion of these services in a comprehensive UHC benefits package. Furthermore, UHC is based on the principle of universality from a rights perspective. UHC reforms that take adequate account of values such as gender and equity will contribute to disrupting gender inequalities and entrenched gender norms.

An economic evaluation conducted in South Africa assessed the cost-effectiveness of a joint economic and health intervention that combined microfinance with gender and HIV training to prevent intimate partner violence (Jan and others, 2011). The strategy was found to be very cost-effective in the initial scale-up phase and suggested that there would be major improvements in cost-effectiveness with further scale-up to a greater number of people. Similarly, a community mobilization intervention intended to prevent intimate partner violence in Uganda was found to be cost-effective in comparison with a "do nothing alternative" (Michaels-Igbokwe and others, 2016). Furthermore, three studies conducted in the UK evaluated the cost-effectiveness of intimate partner violence interventions in primary care, aimed at improving the response to women who have experienced domestic violence, and found that the interventions were cost-effective and cost-saving compared with standard care (Barbosa and others, 2018; Mallender and others, 2013; Norman and others, 2010).

A systematic review of the cost-effectiveness of effective gender-responsive HIV interventions (i.e. considering the different needs of women/girls and boys/men or aiming to reduce harmful gender norms and inequalities between sexes) indicated that the following interventions are cost-effective using WHO's threshold: couple counselling for the prevention of vertical HIV transmission; gender empowerment community mobilization for female sex workers; female condom promotion for female sex workers; expanded female condom distribution; and post-exposure prophylaxis for rape survivors (Remme and others, 2014).

PREVENTION, DETECTION AND MANAGEMENT OF REPRODUCTIVE CANCERS, ESPECIALLY CERVICAL CANCER

Reproductive cancers affect both sexes and include prostate, testicular and penile cancer in men and gynaecological and breast cancer mainly in women (Ferlay and others, 2014). The *Lancet* Series on reproductive cancers highlighted women's cancers especially as a threat to national health outcomes and development and emphasized their importance within global and public health policy and for achieving UHC (Ginsburg and others, 2017). The global incidence of women's cancers is 2.7 million each year, with over a million women dying as a result, the majority of whom live in less developed countries (Ferlay and others, 2014). With some 528,000 new cases and 266,000 deaths (2012 estimates) (Ferlay and others, 2014), cervical cancer, especially, is a priority concern. The causes and progression of the disease are well researched and widely understood and very effective primary and secondary preventive strategies exist for countries at all stages of economic development and are part of WHO's set of "best buy" interventions (WHO, 2013). However, comprehensive access to preventive and curative care for cervical cancer is still highly inequitable and disease incidence and mortality rates therefore vary widely across different regions of the world. Almost 9 out of 10 cervical cancer deaths in 2012 occurred in less developed regions (Ferlay and others, 2014).

Within the scope of a comprehensive approach to SRHR, there is strong evidence supporting prioritizing key cervical cancer services in the definition of an essential UHC service package. Following a woman's life course trajectory, services should include vaccinating all girls aged 9–13 years against HPV, as well as screening and treating women aged over 30 years for precancerous

lesions (WHO, 2014a). In Mexico, for instance, screening and treatment for cervical and breast cancer were included in the essential health benefits package covered under "Seguro Popular", a national health insurance programme targeted towards increasing insurance coverage for the poor and uninsured, which led to marked reductions in catastrophic and impoverishing health expenditures and, at the same time, increased access and adherence to treatment (Knaul and others, 2012). This case thus illustrates that cervical and breast cancer services clearly fit into the UHC value framework and the proposed pro-poor progressive universalism approach aimed at achieving both improved health outcomes and financial protection.

Several systematic reviews and modelling studies conducted across a wide range of LMICs have reported the prevention of cervical cancer through HPV vaccination in adolescent girls to be very cost-effective or cost-effective, provided that the costs per vaccinated girl are sufficiently low and that high coverage of adolescent girls is possible (Campos and others, 2012; Goldie and others, 2008a,b; Jit and others, 2014). Visual inspection with acetic acid (one to three times per lifetime) has been shown to be very cost-effective in LMICs if it is used within the scope of a screening and treatment approach (Campos and others, 2015a; Denny and others, 2016; Ginsberg and others, 2012; Goldie and others, 2001, 2005; Praditsitthikorn and others, 2012). Similarly, provider-collected HPV testing (one to three clinical visits) has been found to be very cost-effective compared with "do nothing" alternatives or conventional cytology-based screening programmes, especially in combination with treatment of screen-positive women (Campos and others, 2015a,b, 2015; Denny and others, 2016; Ginsberg and others, 2012; Goldie and others, 2001, 2005; Levin and others, 2010).

In addition, cervical cancer control has been impeded by low screening uptake. Against this background, self-collected HPV testing was suggested to be a cost-effective alternative to provider-collected testing, but its effects depend on the achieved population screening coverage (Campos and others, 2015a,b; Mezei and others, 2017).

INFORMATION, COUNSELLING AND SERVICES FOR SUBFERTILITY AND INFERTILITY

Information and counselling on, and prevention and treatment of, infertility have received little attention within SRHR, despite the fact that infertility services have been included in the definition of reproductive health care since the ICPD in 1994 (United Nations Population Fund, 1994) and are supported by the reproductive rights definition. Infertility services are hence a significant element of the UHC agenda and should be included in a comprehensive approach to SRHR. Globally, it is estimated that between 48.5 million (Rutstein and others, 2004) and 186 million (Ezeh and others, 2016) couples are affected by primary or secondary infertility. Evidence on the causes of infertility is sparse for women living in low-income countries, but possible reasons include tubal occlusions, for instance because of STIs, post-partum pelvic infections or unsafe abortions, anovulation and other genetic and environmental influences (Asemota and Klatsky, 2015). This highlights the importance of the prevention of infertility at different stages of a woman's life, using effective strategies such as CSE, counselling, health education, care for infections, access to contraceptives, safe delivery and abortion care. However, because of the low priority in global public health, limited funding at both domestic and international levels and high treatment costs, the availability of and access to quality infertility services are inadequate in a large number of countries, particularly in resource-poor settings (Asemota and Klatsky, 2015). Moreover, assisted reproductive technology is often not acknowledged as part of countries' essential health benefits packages or reimbursed by insurance schemes and is practically non-existent in resource-poor countries because of the often prohibitive costs. A 2019 study evaluated the impact of universal coverage of in vitro fertilization in a Canadian province and found an eightfold return on investment when

considering the average lifetime contributions in income tax made by the children born as a result of this programme (Bissonette and others, 2019). Providing universal access to assisted reproductive technology and other infertility treatments might exceed the current financial possibilities of many LMICs. It is nonetheless important to acknowledge and refocus attention on the full set of infertility interventions and rights as an integral part of a comprehensive SRHR approach. Important starting points are to enhance awareness-raising and preventive efforts, as well as to counsel affected couples (Gerrits and others, 2017; Starrs and others, 2018).

INFORMATION, COUNSELLING AND SERVICES FOR SEXUAL HEALTH AND WELL-BEING

Information, counselling and services for sexual health and well-being cut across a spectrum of interventions described in the previous sections. SRHR needs are universal to all people – regardless of age, marital and socioeconomic status, ethnicity, religion, gender, cross-gender identity or expression, sexual orientation or disability. On these grounds, sexual health and well-being presupposes that, throughout the entire life course, all people have access to accurate and evidence-based information, counselling and services related to sexuality, sexual identity and relationships; psychosexual counselling; and treatment for sexual dysfunction and disorders (WHO, 2017; World Association for Sexual Health, 2014). Although there are few cost-effectiveness data on information, counselling and services for sexual health and well-being specifically, providing these services is essential for the effective delivery of several other SRHR interventions.

Including sexual well-being and taking a comprehensive approach to SRHR marks a shift from the traditional disease perspective to a more positive stance towards sexual health and acknowledges the importance of sexual satisfaction and pleasure. A range of legal, cultural, social, gender and other obstacles still prevent many people and even entire groups, particularly women, adolescents and lesbian, gay, bisexual, transgender, intersex and other sexuality, sex and gender diverse (LGBTI+) persons, from seeking and obtaining the high-quality sexual and reproductive health information, counselling and services they need. Such obstacles infringe the right to health, which implies that essential services must be available, accessible, acceptable, of good quality and provided by trained professionals without any coercion, discrimination and violence (WHO, Office of the United Nations High Commissioner for Human Rights, 2007). Regarding counselling in particular, privacy and confidentiality, as well as patient-centeredness and participation, are further key principles of high-quality provision (WHO, 2014b). UHC can contribute substantially to the realization of the right to health, especially by promoting comprehensive health-care services and the principle of progressive realization, which prioritizes the worse-off (WHO, 2015a). If properly harnessed, digital media (mobile phones, tablets and personal computers) and the mass media (television, radio, the internet and magazines) provide possibilities for counselling and for providing accurate information about SRHR and well-being. Their broad reach can increase access for a great number of people and they can hence be used as a tool for mobilizing society and changing entrenched social and gender norms.

REFERENCES

Adam, Taghreed, and others (2005). Cost effectiveness analysis of strategies for maternal and neonatal health in developing countries. *BMJ*, vol. 331, p. 1107.

Alkema, Leontine, and others (2016). Global, regional, and national levels and trends in maternal mortality between 1990 and 2015, with scenario-based projections to 2030: a systematic analysis by the UN Maternal Mortality Estimation Inter-Agency Group. *Lancet*, vol. 387, pp. 462–74.

Asemota, Obehi and Peter Klatsky (2015). Access to infertility care in the developing world: the family promotion gap. *Seminars in Reproductive Medicine*, vol. 33, pp. 17–22.

Barbosa, Estela Capelas, and others (2018). Cost-effectiveness of a domestic violence and abuse training and support programme in primary care in the real world: updated modelling based on an MRC phase IV observational pragmatic implementation study. *BMJ Open*, vol. 8, p. e021256.

Bearak, Jonathan, and others (2018). Global, regional, and subregional trends in unintended pregnancy and its outcomes from 1990 to 2014: estimates from a Bayesian hierarchical model. *Lancet Global Health*, vol. 6, p. e380–9.

Bissonette, François, and others (2019). Impact of government health coverage for ART: the results of a 5-year experience in Quebec. *Reproductive Biomedecine and Society Online*, vol. 8, pp. 32–7.

Blandford, John, and others (2007). Cost-effectiveness of on-site antenatal screening to prevent congenital syphilis in rural eastern Cape Province, Republic of South Africa. *Sexually Transmitted Diseases*, vol. 34 (7 suppl.), pp. S61–6.

Bristow, Claire, and others (2016). Cost-effectiveness of HIV and syphilis antenatal screening: a modelling study. *Sexually Transmitted Infections*, vol. 92, pp. 340–6.

Campos, Nicole, and others (2012). Health and economic impact of HPV 16/18 vaccination and cervical cancer screening in Eastern Africa. *International Journal of Cancer*, vol. 130, pp. 2672–84.

Campos, Nicole, and others (2015a). Cervical cancer screening in low-resource settings: a cost-effectiveness framework for valuing tradeoffs between test performance and program coverage. *International Journal of Cancer*, vol. 137, pp. 2208–19.

Campos, Nicole, and others (2015b). The comparative and cost-effectiveness of HPV-based cervical cancer screening algorithms in El Salvador. *International Journal of Cancer*, vol. 137, pp. 893–902.

Campos, Nicole, and others (2015). When and how often to screen for cervical cancer in three low- and middle-income countries: a cost-effectiveness analysis. *Papillomavirus Research*, vol. 1, pp. 38–58.

Carvalho, Natalie, Ahmad Shah Salehi and Sue Goldie (2013). National and sub-national analysis of the health benefits and cost-effectiveness of strategies to reduce maternal mortality in Afghanistan. *Health Policy and Planning*, vol. 28, pp. 62–74.

Comfort, Alison, Lauren Peterson and Laurel Hatt (2013). Effect of health insurance on the use and provision of maternal health services and maternal and neonatal health outcomes: a systematic review. *Journal of Health, Population and Nutrition*, vol. 31 (4 suppl. 2), pp. 81–105.

Darroch, Jacqueline, and others (2016). *Adding It Up: Costs and Benefits of Meeting the Contraceptive Needs of Adolescents*. New York, Guttmacher Institute.

Darroch, Jacqueline, Elizabeth Sully and Ann Biddlecom (2017). *Adding It Up: Investing in Contraception and Maternal and Newborn Health*. New YorkGuttmacher Institute.

Denny, Lynette, and others (2016). Interventions to close the divide for women with breast and cervical cancer between low-income and middle-income countries and high-income countries. *Lancet*, vol. 389, pp. 862–70.

Dent, Juan, and others (2019). Age targeting and scale-up of voluntary medical male circumcision in Mozambique. *PLOS ONE*, vol. 14, p. e0211958.

Erim, Daniel, Stephen Resch and Sue Goldie (2012). Assessing health and economic outcomes of interventions to reduce pregnancy-related mortality in Nigeria. *BMC Public Health*, vol. 12, p. 786.

Ezeh, Alex, and others (2016). Burden of reproductive ill health. In *Reproductive, Maternal, Newborn, and Child Health: Disease Control Priorities*, 3rd ed. Vol 2, Robert Black and others, eds. Washington, D.C. The International Bank for Reconstruction and Development / The World Bank;

Ferlay, Jacques, and others (2014). Cancer incidence and mortality worldwide: sources, methods and major patterns in GLOBOCAN 2012. *International Journal of Cancer*, vol. 136, pp. E359–86.

Galárraga, Omar, and others (2009). HIV prevention cost-effectiveness: a systematic review. *BMC Public Health*, vol. 9 (suppl. 1), p. S5.

Ganatra, Bela, and others (2017). Global, regional, and subregional classification of abortions by safety, 2010–14: estimates from a Bayesian hierarchical model. *Lancet*, vol. 390, pp. 2372–81.

GBD 2015 Child Mortality Collaborators (2016). Global, regional, national, and selected subnational levels of stillbirths, neonatal, infant, and under-5 mortality, 1980–2015: a systematic analysis for the Global Burden of Disease Study 2015. *Lancet*, vol. 388, pp. 1725–74.

Gerrits, Trudie, and others (2017). Infertility in the Global South: raising awareness and generating insights for policy and practice. *Facts Views and Vision in ObGyn*, vol. 9, pp. 39–44.

Ginsberg, Gary, and others (2012). Cost effectiveness of strategies to combat breast, cervical, and colorectal cancer in sub-Saharan Africa and South East Asia: mathematical modelling study. *BMJ*, vol. 344, p. e614.

Ginsburg, Ophira, and others (2017). Changing global policy to deliver safe, equitable, and affordable care for women's cancers. *Lancet*, vol. 389, pp. 871–80.

Gobierno de Colombia (2019). Programa de Educación para la sexualidad construcción ciudadanía. Available from: http://colombiaaprende.edu.co/html/docentes/1596/w3-article-345811.html (accessed 25 June 2019).

Goldie, Sue, and others (2001). Policy analysis of cervical cancer screening strategies in low-resource settings. clinical benefits and cost-effectiveness. *JAMA*, vol. 285, pp. 3107–15.

Goldie, Sue, and others (2005). Cost-effectiveness of cervical-cancer screening in five developing countries. *New England Journal of Medicine*, vol. 353, pp. 2158–68.

Goldie, Sue, and others (2008a). Benefits, cost requirements and cost-effectiveness of the HPV16,18 vaccine for cervical cancer prevention in developing countries: policy implications. *Reproductive Health Matters*, vol. 16, pp. 86–96.

Goldie, Sue, and others (2008b). Health and economic outcomes of HPV 16,18 vaccination in 72 GAVI-eligible countries. *Vaccine*, vol. 26, pp. 4080–93.

Goldie, Sue, and others (2010). Alternative strategies to reduce maternal mortality in india: a cost-effectiveness analysis. *PLOS Medicine*, vol. 7, p. e1000264.

Government of Nepal, Ministry of Health and Population (2015). National Family Planning Costed Implementation Plan 2015–2020. Available from: http://ec2-54-210-230-186.compute-1.amazonaws.com/wp-content/uploads/2016/03/FP-Costed-Implementation-Plan-nepal.pdf (accessed 20 June 2019).

Guttmacher Institute (2015). Sexual and reproductive health and rights indicators for the SDGs. Recommendations for inclusion in the Sustainable Development Goals and the post-2015 development process. Available from: https://www.guttmacher.org/sites/default/files/report_pdf/srhr-indicators-post-2015-recommendations.pdf (accessed 18 June 2019).

Harripersaud, Katherine, and others (2017). HIV care continuum in adults and children: cost-effectiveness considerations. In *Disease Control Priorities*, 3rd ed., vol. 6, *Major Infectious Diseases*, King Holmes and others, eds. Washington, D.C.: International Bank for Reconstruction and Development and World Bank.

Henderson, Jillian, and others (2013). Effects of abortion legalization in Nepal, 2001–2010. *PLOS ONE*, vol. 8, p. e64775.

Horton, Susan and Carol Levin (2016). Cost-effectiveness of interventions for reproductive, maternal, neonatal, and child health. In *Disease Control Priorities*, 3rd ed., vol. 2, *Reproductive, Maternal, Newborn, and Child Health: Disease Control Priorities*, Robert Black and others, eds. Washington, D.C.: International Bank for Reconstruction and Development and World Bank.

Hu, Delphine, and others (2007). The costs, benefits, and cost-effectiveness of interventions to reduce maternal morbidity and mortality in Mexico. *PLOS ONE*, vol. 2, p. e750.

Hu, Delphine, and others (2009). Cost-effectiveness analysis of alternative first-trimester pregnancy termination strategies in Mexico City. *British Journal of Obstetrics and Gynaecology*, vol. 116, pp. 768–79.

Hu, Delphine, and others (2010). Cost-effectiveness analysis of unsafe abortion and alternative first-trimester pregnancy termination strategies in Nigeria and Ghana. *African Journal of Reproductive Health*, vol. 14, pp. 85–103.

Ishikawa, Naoko, and others (2016). Elimination of mother-to-child transmission of HIV and syphilis in Cuba and Thailand. *Bulletin of the World Health Organization*, vol. 94, pp. 787–787A.

Jan, Stephen, and others (2011). Economic evaluation of a combined microfinance and gender training intervention for the prevention of intimate partner violence in rural South Africa. *Health Policy and Planning*, vol. 26, pp. 366–72.

Jit, Mark, and others (2014). Cost-effectiveness of female human papillomavirus vaccination in 179 countries: a PRIME modelling study. *Lancet Global Health*, vol. 2, pp. PE406–14.

Johri, Mira and Denis Ako-Arrey (2011). The cost-effectiveness of preventing mother-to-child transmission of HIV in low- and middle-income countries: systematic review. *Cost Effectiveness and Resource Allocation*, vol. 9, p. 3.

Joint United Nations Programme on HIV/AIDS (2016). *HIV Prevention 2020 Road Map*. Geneva.

Joint United Nations Programme on HIV/AIDS (2018). *UNAIDS Data 2018*. Geneva.

Kahn, James, and others (2014). The cost and cost-effectiveness of scaling up screening and treatment of syphilis in pregnancy: a model. *PLOS ONE*, vol. 9, p. e87510.

Knaul, Felicia Marie, and others (2012). The quest for universal health coverage: achieving social protection for all in Mexico. *Lancet*, vol. 380, pp. 1259–79.

Kripke, Katharine, and others (2016a). Assessing progress, impact, and next steps in rolling out voluntary medical male circumcision for HIV prevention in 14 priority countries in Eastern and Southern Africa through 2014. *PLOS ONE*, vol. 11, p. e0158767.

Kripke, Katharine, and others (2016b). Cost and impact of voluntary medical male circumcision in South Africa: focusing the program on specific age groups and provinces. *PLOS ONE*, vol. 11, p. e0157071.

Kripke, Katharine, and others (2016c). Modeling the impact of Uganda's safe male circumcision program: implications for age and regional targeting. *PLOS ONE*, vol. 11, p. e0158693.

Kripke, Katharine, and others (2016d). The economic and epidemiological impact of focusing voluntary medical male circumcision for HIV prevention on specific age groups and regions in Tanzania. *PLOS ONE*, vol. 11, p. e0153363.

Kripke, Katharine, and others (2016e). Voluntary medical male circumcision for HIV prevention in Swaziland: modeling the impact of age targeting. *PLOS ONE*, vol. 11, p. e0156776.

Kuznik, Andreas, and others (2013). Antenatal syphilis screening using point-of-care testing in sub-Saharan African countries: a cost-effectiveness analysis. *PLOS Medicine*, vol. 10, p. e1001545.

Kuznik, Andreas, and others (2015). Antenatal syphilis screening using point-of-care testing in low- and middle-income countries in Asia and Latin America: a cost-effectiveness analysis. *PLOS ONE*, vol. 10, p. e012739.

Lawn, Joy, and others (2016). Stillbirths: rates, risk factors, and acceleration towards 2030. *Lancet*, vol. 387, pp. 587–603.

Levin, Carol, and others (2010). Cost-effectiveness analysis of cervical cancer prevention based on a rapid human papillomavirus screening test in a high-risk region of China. *International Journal of Cancer*, vol. 127, pp. 1404–11.

Mallender, Jacqueline, and others (2013). *Economic Analysis of Interventions to Reduce Incidence and Harm of Domestic Violence*. London, Matrix.

Mezei, Alex, and others (2017). Cost-effectiveness of cervical cancer screening methods in low- and middle-income countries: a systematic review. *International Journal of Cancer*, vol. 141, pp. 437–46.

Michaels-Igbokwe, Christine, and others (2016). Cost and cost-effectiveness analysis of a community mobilisation intervention to reduce intimate partner violence in Kampala, Uganda. *BMC Public Health*, vol. 16, p. 196.

Muhoza, Dieudonné, Pierre Rutayisire and Aline Umubyeyi (2016). Measuring the success of family planning initiatives in Rwanda: a multivariate decomposition analysis. *Journal of Population Research*, vol. 4, pp. 361–77.

Norman, Richard, and others (2010). Cost-effectiveness of a programme to detect and provide better care for female victims of intimate partner violence. *Journal of Health Services Research and Policy*, vol. 15, pp. 143–9.

Owusu-Edusei, Kwame, and others (2014). Cost-effectiveness of integrated routine offering of prenatal HIV and syphilis screening in China. *Sexually Transmitted Diseases*, vol. 41, pp. 103–10.

Patton, George, and others (2016). Our future: a *Lancet* Commission on adolescent health and wellbeing. *Lancet*, vol. 387, pp. 2423–78.

Praditsitthikorn, Naiyana, and others (2012). Economic evaluation of policy options for prevention and control of cervical cancer in Thailand. *Pharmacoeconomics*, vol. 29, pp. 781–806.

Prinja, Shankar, and others (2015). Costs, effectiveness, and cost-effectiveness of selected surgical procedures and platforms. In *Disease Control Priorities*, 3rd ed., vol. 1, *Essential Surgery*, Haile Debas and others, eds. Washington, D.C.: International Bank for Reconstruction and Development and World Bank.

Remme, Michelle, and others (2014). The cost and cost-effectiveness of gender-responsive interventions for HIV: a systematic review. *Journal of the International AIDS Society*, vol. 17, p. 19228.

Rutstein, Shea and Iqbal Shah (2004). *DHS Comparative Reports 9. Infecundity, Infertility, and Childlessness in Developing Countries*. Calverton.

Schackman, Bruce, and others (2007). Cost-effectiveness of rapid syphilis screening in prenatal HIV testing programs in Haiti. *PLOS Medicine*, vol. 4, p. e183.

Sedgh, Gilda, and others (2016). Abortion incidence between 1990 and 2014: global, regional, and subregional levels and trends. *Lancet*, vol. 388, pp. 258–67.

Singh, Susheela, Jacqueline Darroch and Lori Ashford (2014). *Adding It Up. The Costs and Benefits of Investing in Sexual and Reproductive Health 2014*. New York .

Sjöström, Susanne, and others (2016). Medical abortion provided by nurse-midwives or physicians in a high resource setting: a cost-effectiveness analysis. *PLOS ONE*, vol. 11, p. e0158645.

Starrs, Ann, and others (2018). Accelerate progress – sexual and reproductive health and rights for all: report of the Guttmacher–*Lancet* Commission. *Lancet*, vol. 391, pp. 1642–92.

Supreme Court of Nepal (2009). *Lakshmi Dhikta v. Nepal (2009)*. Available from: https://www.reproductiverights.org/sites/crr.civicactions.net/files/documents/Lakshmi Dhikta - English translation.pdf (accessed 20 June 2019).

United Nations (2015). *Transforming our World: The 2030 Agenda for Sustainable Development*. A/RES/70/1. New York.

United Nations Educational, Scientific and Cultural Organization (2011). *Cost and Cost-effectiveness Analysis of School-based Sexuality Education in Six Countries*. Paris.

United Nations Educational, Scientific and Cultural Organization (2018). *International Technical Guidance on Sexuality Education. An Evidence-informed Approach*. Paris.

United Nations Educational, Scientific and Cultural Organization Bankok (2012). *Review of Policies and Strategies to Implement and Scale Up Sexuality Education in Asia and the Pacific*. Bankok.

United Nations Population Division (2009). *What Would It Take to Accelerate Fertility Decline in the Least Developed Countries?* Policy Brief 2009/1. New York.

United Nations Population Fund (1994). Programme of action adopted at the International Conference on Population and Development, Cairo, 5–13 September, New York, NY.

UN Women (1992). Committee on the Elimination of Discrimination against Women. General recommendations, no. 19. Violence against women. Available from: https://www.ohchr.org/EN/HRBodies/CEDAW/Pages/Recommendations.aspx (accessed 7 October 2019).

Uthman, Olalekan, and others (2010). Economic evaluations of adult male circumcision for prevention of heterosexual acquisition of HIV in men in sub-Saharan Africa: a systematic review. *PLOS ONE*, vol. 5, p. e9628.

Vassall, Anna, and others (2014). Cost-effectiveness of HIV prevention for high-risk groups at scale: an economic evaluation of the Avahan programme in south India. *Lancet*, vol. 2, pp. PE531–40.

Vlassoff, Michael, and others (2009). Benefits of meeting the contraceptive needs of Ugandan women. *Issues Brief (Alan Guttmacher Institite)*, vol. 4, pp. 1–8.

Wang, Li Yan, Margarett Davis and Leah Robin (2000). Economic evaluation of Safer Choices: a school-based human immunodeficiency virus, other sexually transmitted diseases, and pregnancy prevention program. *Archives of Pediatrics and Adolescent Medecine*, vol. 154, pp. 1017–24.

World Association for Sexual Health (2014). Declaration of Sexual Rights. Available from: http://www.worldsexology.org/wp-content/uploads/2013/08/declaration_of_sexual_rights_sep03_2014.pdf (accessed 23 June 2019).

World Health Organization (2001). *Macroeconomics and Health: Investing in Health for Economic Development*. 2001.

World Health Organization (2013). *Global Action Plan for the Prevention and Control of Non-communicable Diseases 2013–2020*. Geneva.

World Health Organization (2014a). *Comprehensive Cervical Cancer Control: A Guide to Essential Practice*, 2nd ed. Geneva.

World Health Organization (2014b). *Ensuring Human Rights in the Provision of Contraceptive Information and Services. Guidance and Recommendations*. Geneva.

World Health Organization (2015a). A life-course approach to sexual and reproductive health. *Entre Nous*, vol. 82.

World Health Organization (2015b). Health in 2015: from MDGs to SDGs. Chapter 3: Universal health coverage. Geneva. Available from: http://www.who.int/gho/publications/mdgs-sdgs/MDGs-SDGs2015_chapter3.pdf?ua=1 (accessed 24 January 2019).

World Health Organization (2015c). *Pregnancy, Childbirth, Postpartum and Newborn Care: A Guide for Essential Practice*, 3rd ed. Geneva.

World Health Organization (2017). *Sexual Health and its Linkages to Reproductive Health: An Operational Approach*. Geneva.

World Health Organization (2019a). Female genital mutilation (FGM). Available from: https://www.who.int/reproductivehealth/topics/fgm/prevalence/en/ (accessed 24 June 2019).

World Health Organization (2019b). Sexually transmitted infections (STIs). Factsheet. Available from: https://www.who.int/news-room/fact-sheets/detail/sexually-transmitted-infections-(stis) (accessed 22 June 2019).

World Health Organization, London School of Hygiene and Tropical Medicine, South African Medical Research Council (2013). *Global and Regional Estimates of Violence against Women: Prevalence and Health Effects of Intimate Partner Violence and Non-partner Sexual Violence*. World Health Organization, Geneva.

World Health Organization, United Nations Children's Fund, United Nations Population Fund, The World Bank Group, and the United Nations (2019). *Trends in maternal mortality: 2000 to 2017. Estimates by WHO, UNICEF, UNFPA, World Bank Group and the United Nationsl Population Division.* World Health Organization, Geneva.

World Health Organization, Office of the United Nations High Commissioner for Human Rights (2007). The right to health. Fact sheet no. 31. Available from: https://www.ohchr.org/Documents/Publications/Factsheet31.pdf (accessed 24 June 2019).

Zakiyah, Neily, and others (2016). Economic evaluation of family planning interventions in low and middle income countries: a systematic review. *PLOS ONE*, vol. 11, p. e0168447.

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