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Developments in Reproductive Health and Reproductive Sciences Infertility

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Abstract:

Four Arab nations—Egypt, Jordan, Morocco, and the Kingdom of Saudi Arabia—were chosen for this research on their preparedness for accomplishing the Sustainable Development Goals pertaining to sexual and reproductive health. The evaluation identified a number of common obstacles to reaching the targets of the SRH-related SDGs, such as the fragmentation of health care systems, limitations in the SRH services offered and the populations reached, deficiencies in the health workforce, and differences in health outcomes among various population segments.

The study offers suggestions for resolving these and other issues that must be tailored to the unique circumstances of each nation. These should include rearranging public spending to address SRH issues, coming up with creative ways to increase health equity, strengthening the role of civil society in tracking and assessing the provision of health services, improving health information systems, and utilising technology more effectively to enhance sexual and reproductive health. The workforce of midwives, family planning programs and reproductive health security, and data creation for equity analysis to guide focused programming and interventions are a few examples.

Keywords: Arab states; Egypt; Gender equality; Inequalities; Jordan; KSA; Morocco; SDGs; Sexual and Reproductive Health

Introduction:

The Sustainable Development Goals (SDGs) were approved by global leaders in 2015 as part of a comprehensive agenda that included social development, environmental preservation, inclusive and equitable development, and the elimination of poverty. Two of the 17 objectives to be accomplished by 2030 are directly related to sexual and reproductive health (SRH), underscoring its significance for social and economic advancement. Goal 5 demands gender equality and the empowerment of women and girls, whereas Goal 3 seeks to guarantee healthy lives and promote wellness for everyone.

Countries are required to fulfill certain criteria under each goal by 2030, some of which call for universal access to SRH services and the realisation of reproductive rights.

The international community demanded, among other things, that universal access to SRH services be ensured in order to reduce maternal death and disability, enhance the availability of family planning services and SRH information and education, and incorporate reproductive health into national and regional strategies, policies, and programs in order to accomplish Goal 3. SRH services should be offered as part of Universal Health Coverage (UHC) so that everyone has access to a nationally set package of medical care and necessary medications without discrimination and regardless of their financial situation.

The eradication of harmful practices against women, such as child, early, and forced marriage, as well as female genital mutilation, is an objective of Goal 5, which aims to achieve gender equality. Ensuring "universal access to sexual and reproductive health and reproductive rights" is another objective under this aim.

Reducing inequality both inside and between nations is another need of Goal 10. This is significant for SRH since meeting national health goals is insufficient; some demographic segments may surpass goals while others fall far short. There may be differences based on factors such as wealth, gender, location, marital status, handicap, or displacement status. In order

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to achieve the SDGs, which require nations to "leave no one behind," monitoring inequities is crucial.

Universal access to SRH is still an unfulfilled objective in the Arab States area. The majority of nations have implemented national plans and strategies that align with international accords that set SRH targets, most notably the Millennium Development targets and the 1994 International Conference on Population and Development. However, among other reasons, insufficient finance and flaws in health systems have prevented the implementation of several SRH components. There are still many barriers to women's empowerment and gender equality, such as sociocultural norms, uneven power dynamics between men and women, and restrictive legislative frameworks.

The Arab States are now at a crossroads between preserving and expanding on what has been accomplished and changing what needs to change after going through significant political, economic, and social changes in recent years. Making complete SRH services widely accessible is hampered by a number of issues facing the whole area. Even while the area has improved health outcomes generally, there are still disparities and inequities in performance across and within nations. Health services in certain nations are under pressure to meet the requirements of a significant number of persons who have been forcefully displaced by violence. A significant portion of these groups are women and girls, who are more vulnerable to threats to their sexual and reproductive health in precarious and insecure environments.

Methodology:

A team of experts from each of the four nations used standardised data-collection tools created by the Middle East and North Africa/Health Policy Forum (MENA/HPF) and the United Nations Population Fund/Arab States Regional Office (UNFPA/ASRO) to evaluate health systems' preparedness to meet the SRH-related SDGs targets (shown in Table 1) by 2030.

Goal/ Target	Indicator
Goal 3. Ensure healthy lives and promote well-being for all	
Target 3.1: Reduce the global maternal mortality ratio to less than 70 per 100,000 live births.	3.1.1 Maternal mortality ratio
	3.1.2 Proportion of births attended by skilled health personnel
Target 3.2: By 2030, end preventable deaths of newborns and children under 5 years of age	3.2.1 Under-five mortality rate
	3.2.2 Neonatal mortality rate
Target 3.3: By 2030, end the epidemics of AIDS, tuberculosis, malaria and other communicable diseases.	3.3.1 Number of new HIV infections per 1,000 uninfected
Target 3.7: By 2030, ensure universal access to sexual and reproductive health-care services, including for family planning, information and education, and the integration of reproductive health into national strategies and programs.	3.7.1 Proportion of women of reproductive age (aged 15–49 years) who have their need for family planning satisfied with modern methods
	3.7.2 Adolescent birth rate (aged 10–14 years; aged 15–19 years) per 1,000 women in that age group
Target 3.8: Achieve universal health coverage, including financial risk protection	3.8.1 Coverage of essential health services (service capacity and access to reproductive, maternal, newborn and child health, infectious diseases, non-communicable diseases)
Goal 5. Achieve gender equality and empower all women and girls	

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Target 5.2: Eliminate all forms of violence against all women and girls in the public and private spheres, including trafficking and sexual and other types of exploitation.	5.2.1 Proportion of ever-partnered women and girls aged 15 years and older subjected to physical, sexual or psychological violence by a current or former intimate partner in the previous 12 months, by form of violence and by age
	5.2.2 Proportion of women and girls aged 15 years and older subjected to sexual violence by persons other than an intimate partner in the previous 12 months, by age and place of occurrence
Target 5.3: Eliminate all harmful practices, such as child, early and forced marriage and female genital mutilation.	5.3.1 Proportion of women aged 20–24 years who were married or in a union before age 15 and before age 18
	5.3.2 Proportion of girls and women aged 15–49 years who have undergone female genital mutilation/cutting
Target 5.6: Ensure universal access to sexual and reproductive health and reproductive rights.	5.6.1 Proportion of women aged 15-49 years who make their own informed decisions regarding sexual relations, contraceptive use and reproductive health care
	5.6.2 Number of countries with laws and regulations that guarantee women aged 15-49 access to SRH care, information and services

Table 1: Goals, Targets, and Indicators for SRH-related SDGs.

The tool includes five modules to cover different aspects related to the readiness of the health system for provision of sexual and reproductive health services in the country including the health services, the health workforce, health equity, and information gaps.

Module A	Country profile & baseline assessment of targets
	Module A.1 Country profile
	Module A.2 Health policies
	Module A.3 Baseline indicators
	Module A.4 Major sources of health and population data
	Module A.5 Data coverage
Module B	Accessibility & coverage of health system
	Module B.1 Minimum benefits package
	Module B.2 Infrastructure and planning models
	Module B.3 Norms for coverage
	Module B.4 Overall assessment of coverage

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Module C	Health workforce availability
	Module C.1 Availability of workforce
	Module C.2 Roles and responsibility
	Module C.3 Education and capacity building
	Module C.4 Overall assessment of workforce
Module D	Health equity
Module E	Information gap analysis

The teams evaluated each nation's preparedness to combat Gender Based Violence (GBV), attain Universal Health Coverage (UHC), and offer reproductive, maternal, neonatal, and child health care, identifying the biggest obstacles that each nation faces.

Data was Collected through Various Channels Including:

The most current papers, scientific studies, policy documents, sectoral plans, surveys, health information systems, interviews, and meetings with key stakeholders, including government and non-government partners, are all reviewed. examination of reports, other sources, and international databases (DHS, PAPFAM, MICS, etc.).

The United Nations' estimates of the number of births and women of reproductive age by 2030, based on various fertility forecasts, were used to determine the extent of SRH services required in each nation.

The teams evaluated the data and then assessed the SDG objectives based on how difficult it would be for each nation to meet them by 2030. The ranking process was repeated for the health workforce, health equality, and accessibility and coverage of the health system. In order to provide a regional perspective on the most urgent health care shortages and difficulties, the evaluation findings from each country team were combined into a scorecard style. (Table 2).

Target	Sub-target	Egypt	Jordan	Morocco	KSA
3.1	Antenatal care	2	2	5	4
	Obstetric care	4	3	7	3
3.2	Newborn care	6	3	7	4
	Immunization	1	1	1	0
	Child preventative and curative care	3	2	2	2
3.3	Prevention of mother-to-child transmission of HIV	6	5	4	7
	HIV counselling and testing	7	7	5	8
	HIV treatment	5	4	3	5
	HIV care and support	6	6	6	9
	Sexually transmitted infections control	7	7	5	10
3.7	Providing modern family planning methods	1	1	1	1
	Family planning counselling	5	2	1	4
	Information on sexual and reproductive health available for dissemination	7	3	5	0
	Adolescent health	8	7	9	6
3.8	Achieve universal health coverage of essential services	8	4	9	2
5.2	Eliminate physical, sexual or psychological violence by intimate partner	7	7	9	-
	Eliminate sexual violence by persons other than partner	7	6	9	-

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5.3	Eliminate child, early and forced marriage	6	8	10	10
	Eliminate female genital cutting	6	NA	NA	NA
5.6	Enabling women to make own informed decisions regarding sexual relations, contraceptive use and reproductive health care.	5	-	4	5
Cut-off scores for low, medium and high challenge		1-4	1-3	1-3	0-2
		5-6	4-6	4-6	3-6
		7-10	7-8	7-10	7-10
Notes: Challenges are ranked from 0 to 10, with “0” reflecting the lowest challenge and “10” reflecting the highest. Red refers to most challenging; yellow refers to somewhat challenging; white refers to least challenging; NA refers to not applicable. The cut-off scores by country differ to standardize the results.					

Table 2: Health service challenges to achieving SRH-related SDG targets by 2030, ranked according to priority, by country. **(Source):** Based on M. Osman et al., Readiness Analysis to Meet Sexual and Reproductive Health-Related Sustainable Development Goals in Selected Arab Countries, Cairo,

Findings / Results:

These nations have comparatively advanced reproductive, maternal, infant, and paediatric healthcare systems. All four nations are anticipated to do this at the national level by 2030. Targets 3.1 and 3.2 are to lower the global maternal mortality ratio to 70 per 100,000 and 12 per 1,000 live births for neonates and 25 per 1,000 live births for children under five, respectively. Responding to HIV and AIDS presents difficulties for all four nations (objective 3.3). Despite having national strategic goals on HIV/AIDS, the SRH service package still does not completely include prevention and treatment. The prevention of HIV transmission from mother to child, HIV counselling and voluntary testing programs, and the management of sexually transmitted illnesses all need more focus.

According to the evaluation, it is possible to meet the demands for counselling and contemporary family planning techniques by 2030 in terms of universal access to SRH services (goal 3.7).

However, adolescent health is a problem in many nations, as seen by the age-specific fertility rate among teens. The issue of having big, young populations is exacerbated by high teenage birth rates, which place nations on a trajectory of ongoing, fast population expansion. Countries differ in their capacity to reach UHC (goal 3.8). Achieving UHC requires shielding families from financial hardship brought on by medical costs; providing access to high-quality SRH care services; and ensuring that everyone has access to safe, efficient, high-quality, and reasonably priced needed medications and immunisations. The teams discovered that although the goal could be attainable in the Kingdom of Saudi Arabia and, to a lesser extent, in Jordan, it will be very difficult in Egypt and Morocco using data on general health insurance as a replacement measure for SRH-related insurance coverage.

Eliminating domestic and sexual violence against women is a significant problem in all four nations when it comes to the goal of eradicating all kinds of violence against all women and girls (objective 5.2). Eliminating child, early, and forced marriage is very difficult in Morocco and the Kingdom of Saudi Arabia, and relatively difficult in Egypt. This problem is quite difficult for refugees and asylum seekers in Jordan. In Egypt, female genital cutting is still a problem; in the other three nations, it is often not done.

Health System Accessibility and Coverage

For reproductive, maternity, neonatal, and child health care, each of the four nations has a set minimum benefits package. The networks of hospitals and basic healthcare institutions run by the health ministries are mostly used to provide the services. Military institutions, private sector companies, and voluntary organisations also provide services to varied degrees.

The nations under consideration have good coverage of essential services, according to statistics available from 2011 to

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2016. For instance, 83% of pregnant women in Egypt had at least four follow-up visits, and 90% had at least one prenatal visit [1]. Almost all births in Jordan are attended by trained medical professionals [2]. According to reports, 74% of births in Morocco are attended by qualified medical professionals [3]. In the Kingdom of Saudi Arabia, 99 percent of newborns are attended by qualified medical professionals. All four nations, however, have inadequate or poorly executed services. Examples include the use of surfactants to avoid respiratory distress syndrome in preterm infants, voluntary HIV testing and treatment, post-abortion care, surgical family planning options (such as female and male sterilisation), and prophylactic antiretroviral therapy for neonates exposed to HIV. All four nations have similar problems with their health systems, including fragmentation, a lack of integrated care that results in inefficiency and ineffectiveness, unregulated private and nongovernmental service providers, significant health disparities and inequities, and a weakness in the governance of the health system.

Health Workforce Readiness

The assessment revealed that health workforce challenges are closely correlated with health service challenges, and thus align closely with the results shown in (Table 2). The health workforce needs strengthening in all four countries, although the specific challenges vary (Table 3).

Challenge	Egypt	Jordan	Morocco	Saudi Arabia
Lack of or ineffective human resources strategic planning				
Notable mal-distribution of health care workers, or inequitable distribution				
Ineffective retention policies and high staff turnover				
Poor remuneration of staff and dual practice due to poor incentives in the public sector				
Centralized decision making in human resources management				
Chronic absenteeism				
Poor quality and comprehensiveness of the education and training of medical and para-medical staff as well as pre- and in-service training				
Weak human resources information system, especially for the private sector				
Limited practice of family medicine specialty				
The absence of the Higher Health Council role in drawing up health education policy				

Table 3: Scorecard of health workforce challenges by country.

Source: Middle East and North Africa Health Policy Forum, Cairo, Egypt; M. Osman et al., Readiness Analysis to Meet Sexual and Reproductive Health-Related Sustainable Development Goals in Selected Arab Countries, 2017.

There may be shortages in the quantity of people or specialties available, in the allocation of workers among regions of need, in the quality of SRH training, or in any combination of these. These issues are further made worse by the "brain-drain," or skilled professionals leaving the country. Furthermore, as the population grows, there will be more women of reproductive age, which will place greater strain on health systems and enhance the urgency of primary health care workforce changes.

Egypt's health workforce's present skill mix could not be sufficient to meet the country's growing healthcare needs [5,6]. To maximise the potential of the present workforce, creative solutions are thus required. For instance, with the right training, skilled nurses might carry out basic medical treatments in Upper Egypt, where doctors are hard to come by [7].

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Incentives for the workforce should also be pursued; performance-based compensation to providers, for instance, have been helpful in raising the standard of treatment. In order to provide high-quality healthcare services and support social welfare and development, Jordan must strategically invest in human resources for health. A short- and long-term human resources strategy must be created and implemented, with a focus on increasing academic and vocational training for critical specialties including family medicine, nursing, and midwifery [8]. Morocco has to work more to enhance performance, devolve administrative tasks, lessen gender inequality, and redistribute the number of public sector employees. Morocco's shortage of human resources, which is now estimated to be over 6,000 doctors and over 9,000 nurses, is made worse by the expansion of certain hospital treatment.

Equity in Health Outcomes

Large disparities in health outcomes among different socioeconomic sectors provide a serious issue in all four countries, even in areas where national progress is apparent, such as decreased maternal and neonatal mortality. The complicated problem of inequality is exacerbated by a lack of resources, inadequate planning and vision, a shortage of health professionals, and/or poor governance. It is also linked to external factors like forced in-migration, just as in the case of Jordan.

For a number of health outcomes, there is a significant gap between affluent and marginalised groups of people. The mortality risk of the marginalised minority is often double that of the affluent majority. This is true for newborn mortality in Egypt when comparing the richest 20% and poorest 20%, as well as maternal mortality in Morocco when comparing urban and rural areas [1]. Data describing discrepancies in health outcomes is scarce. However, women and adolescent girls from vulnerable subpopulations—especially forced migrants—would surely be most affected by early marriage, illiteracy, ignorance, and lack of empowerment. They are the first victims of unwanted pregnancies, abortions, violence, and HIV/AIDS, and they may have little or no health insurance or the resources to pay for medical care.

Adolescent health equality is an issue in all four countries due to early marriage and births among certain demographic groups. Jordan and the Kingdom of Saudi Arabia confront major obstacles in achieving equity with respect to HIV prevention, counselling, and treatment, whilst Egypt and Morocco have considerable difficulties in achieving universal coverage of essential health care.

The nation evaluations found information gaps that need to be filled so that governments can routinely track and analyse SRH-related SDG accomplishments. One major issue is the lack or inconsistency of household-based health surveys. Surveys like the Pan Arab Family Health Survey (PAPFAM), the Demographic and Health Surveys (DHS), and the Multiple Indicator Cluster Surveys (MICS) must be carried out and adjusted to gather data on groups who are presently overlooked, such as teenagers and single mothers. Data must also be gathered and examined in a fashion that permits disaggregation to the lowest administrative levels.

To gather information on subjects that are taboo, including HIV/AIDS and violence against women, a paradigm change must be implemented. Furthermore, it is necessary to create health registries and utilise the data to guide decision-makers and create evidence-based policies. To guarantee quality, consistency, and inclusion of the commercial sector and other governmental organisations that provide health services, such as the military, police, universities, and insurance companies, national health information systems must be strengthened. In order to track the advancement of health objectives, health information systems must be able to gather and distribute national health data and indicators.

Recommendations

The results of this assessment are relevant for countries with similar health systems or similar political, economic, and health challenges. Achieving the 2030 SDGs depends to a large extent on health system strengthening, particularly improving human resource capacities and the availability and accessibility of quality services.

Urgent and comprehensive reforms must be made to address fragmentation and resulting inefficiencies in health systems, and wide disparities in health service management, financing, and provision. A related challenge is the shift toward privatization of health services without a clear vision on how to achieve public health goals. This process could reduce the

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chances of achieving equitable health services and outcomes within countries.

Working toward UHC is crucial to overcoming the current shortcomings facing health systems in the region today. Policymakers should:

Create a clear plan and strategy for a methodical approach to UHC, focusing on the most vulnerable groups and establishing evidence-based priorities.

Assure access to a necessary set of services, including SRH, under a financing arrangement that lowers out-of-pocket expenses and protects against financial risk. One tactic for enhancing service coverage, equality, and quality is social health insurance. Increase the services' geographic reach while concentrating on underserved and distant locations.

Invest in primary care and bolster the role of family doctors in providing easily accessible, all-encompassing, ongoing, and individualised treatment, with referrals to specialists as necessary.

To accomplish national health objectives, form alliances with the business sector and encourage complementarity between the public and private sectors. To guarantee that they adhere to the national policies, regulations, and recommendations of health ministries, non-governmental and private health care providers must be controlled.

In order to deliver higher-quality SRH care, expand the workforce and improve its skill mix. Make plans for the health workforce based on current and future demands.

In distant locations or in places where there is a shortage of gender-specific or specialised providers, consider contracting out the necessary health personnel from already-existing NGOs or commercial providers. The current laws might be changed to allow for creative solutions to make up for the shortage or unequal distribution of medical personnel.

Create SRH indicators at the regional and local levels that quantify differences in SRH outcomes according to factors such as residency, education, income, gender, ethnic group, displacement status, and disability. In order to track health inequalities as outcomes, performance indicators need also be created.

To guarantee that all demographic groups, irrespective of their legal status, have access to high-quality SRH information and services,

current laws and regulations should be reviewed and amended.

Conclusion

In order to achieve the SRH-related goals of the SDGs and ensure that "no one is left behind," a range of strategies and plans of action are needed. Examples of country-specific interventions include reprioritising public spending to address SRH issues, developing innovative strategies to improve health equity, bolstering the role of civil society in monitoring and evaluating the delivery of health services, enhancing health information systems, and making better use of technology to improve sexual and reproductive health. Examples include the midwife workforce, family planning programs and reproductive health security, and data generation for equity analysis to inform targeted interventions and programming.

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