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Universal access to sexual and reproductive health services in Thailand: achievements and challenges

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Background

All UN Member States have adopted the Sustainable Development Goals (SDGs) and committed to their achievement by 2030. In particular, SDG3.7 ensures universal access to sexual and reproductive health services (SRHS), including family planning, information and education, as well as the integration of reproductive health into national strategies and programmes. Other related commitments also include SDG3.1 on reduction of maternal mortality, SDG3.2 on prevention of deaths of newborns and children under five years of age, SDG3.3 on ending AIDS, and SDG5 on gender equality and empowerment of all women and girls.¹

While significant progress has been made, challenges remain. Globally, contraceptive prevalence using modern methods among women ages 15–49 has regressed from 55.3% to 49.4% between 2000 and 2014,² and while the maternal mortality ratio decreased from 385 per 100,000 live births in 1990 to 216 in 2015, there is a long way to go to reach the committed target of less than 70 by 2030.³ The inconsistency in progress towards SDG3.7 is a result of limited access to SRHS, in particular among low- and middle-income countries. The United Nations Population Fund (UNFPA) suggests a comprehensive SRHS package using a life course approach, to be delivered through primary health care with adequate referrals.⁴ In addition to ensuring universal coverage of SRHS, quality is equally important. Evidence shows that 60% of worldwide mortalities from conditions amenable to health care are due to poor quality

services, while 40% of all deaths are caused by non-utilisation of the health system.⁵

Thailand achieved Universal Health Coverage (UHC) in 2002 when the Universal Coverage Scheme (UCS) was launched and covered all remaining populations not insured by the two existing schemes: Civil Servant Medical Benefit Scheme (CSMBS) and Social Health Insurance (SHI).⁶ Although high coverage of SRHS had been achieved earlier, UHC bolstered the comprehensiveness of the SRHS package and fostered financial protection. Overall, the maternal mortality ratio (modelled estimates) has decreased from 43 per 100,000 live births in 2000 to 37 in 2017; a rate lower than the upper middle-income countries average of 43 per 100,000 live births in the same period.³

This commentary reviews the trend of key reproductive health indicators and service coverage, explains how these were achieved through district level primary health care and gradual targeted extension of financial risk protection towards UHC,⁶ identifies emerging challenges and recommends policies for improvement. The lessons from Thailand can provide valuable insights for other low- and middle-income countries in their quests for universal access to SRHS.

Primary health care and financial risk protection: two foundations for universal access to SRHS without financial hardship

Since the early 1970s, well before the 1978 Alma Ata Declaration on primary health care, Thailand

had been strengthening primary health care services. The Indochina War instilled fear of communism in Thailand, pushing the government to respond by adopting policies which focused on comprehensive rural development including education, health, agriculture and infrastructure development.⁷ The district health system roadmap was adopted in 1975, with a nationwide target of at least one district hospital in every district and a health centre in every sub-district. This was achieved through two decades of sustained investments. At the same time, expansion of health professional training in universities and the Ministry of Public Health (for nurses and other paraprofessionals) had increased the number and competencies of the health workforce.⁸

Additionally, comprehensive interventions ensured rural retention in district hospitals, including the 1975 three-year rural service policy for all newly graduated doctors, nurses, pharmacists and dentists in return for publicly subsidised health professional education; the 1980s policies on recruitment of rural students for training and hometown placement; and provision of financial and non-financial incentives.⁹ These interventions increased the quality of services provided by district health systems, which built trust and compliance with public health interventions among local communities. The full geographical coverage of the health system was a strong platform for implementing integrated prevention, health promotion, and curative services, and infectious disease surveillance including SRHS. Supported by a team of qualified health professionals including doctors, nurses, pharmacists, dentists and other allied personnel and the availability of essential medicines and medical supplies to boost the quality of care, the district health system has become the backbone of the Thai health system, with favourable and equitable outcomes.⁸

In parallel to the development of the district health system, the expansion of financial risk protection targeting low-income households was launched in 1975 and gradually extended to elderly people aged over 60 years and persons with disabilities, increasing the accessibility of health services for these vulnerable groups.¹⁰ The voluntary insurance scheme was introduced to cover the informal sector, while SHI was introduced in 1990 to cover formal private sector employees, and CSMBS for government employees and their dependents. However, despite the consistent expansion of financial risk protection, by

the late 1990s nearly one third of the population was still uninsured. Consequently, the National Health Security Act 2002 was enacted following the 2001 general election, leading to the establishment of UCS, managed by the National Health Security Office (NHSO). Together, the three schemes: SHI, CSMBS and UCS provided health coverage to the whole Thai population.

UHC in 2002: bolstering extension of SRHS

Full population coverage by the public health insurance systems and comprehensive benefits package including SRHS – which is free at the point of delivery and includes high cost services such as reproductive cancer treatment, surgery, radiation and chemotherapy – has resulted in low out-of-pocket payments. A comprehensive benefit package, including all SRHS, and no co-payment whatsoever at the point of delivery, results in low incidence of financial catastrophic and medical impoverishment,¹¹ and improved equity in maternal and child health status.¹² Out-of-pocket expenditure by household had reduced from 34% of Current Health Expenditure in 2001 prior to the launch of the UCS to 12.1% in 2016.¹³ Furthermore, the incidence of catastrophic health expenditure (more than 10% of household consumption or income on health care expenditure) reduced from 6.7% in 1994 to 2.2% in 2007.¹⁴ Noted that there is no study on catastrophic expenditure from use of SRHS. While NHSO adopted the SRHS that had been provided since the 1970s, it has continued to expand, incorporating additional interventions into the UCS benefits package. Additionally, NHSO is tasked to manage all prevention and health promotion services including SRHS for the whole population, while the CSMBS and SHI focus on curative interventions.

Despite protracted political conflicts, successive governments have maintained the political commitments to the population's health through continued support of funding for the comprehensive benefits package.¹⁵ This is reflected in the increase in domestic health expenditure, from 13.3% of general government expenditure in 2000 to 15.3% in 2016.¹⁶ Although data on government expenditure on SRHS cannot be distinguished from the aggregated figures on prevention and health promotion, there has been a 160% increase in total spending on health promotion and prevention; from 8,050 million Baht (US\$ 268 millions) in

2003 to 20,957 million Baht (US\$ 699 millions) in 2018. Government spending on HIV/AIDS, of which SRHS is a major component, also increased, from 2,796 million Baht (US\$ 93.2 millions) in 2006, when universal antiretroviral therapy (ART) was introduced, to 3,218 million Baht (US\$ 107.3 millions) in 2018.¹⁷

All health promotion and prevention services including immunisation, contraception, and child development were paid through capitation. However, capitation can result in under-provision of health services.¹⁸ To rectify this weakness, NHSO introduced a fee schedule for specific activities with the aim of increasing access, especially to SRHS. The SRHS package has since expanded to cover screening for Down's syndrome, thalassaemia, cervical cancer, thyroid hormone deficiency in newborns and risks for premature labour, as well as long-acting contraception, including implants and intra-uterine devices, HPV vaccines for all fifth grade girls, and pregnancy termination. Additionally, a national campaign for iron and folate supplementation in all women of childbearing age was launched in 2017 to address anaemia in pregnancy and congenital birth defects.

Although SRHS focus mainly on women, the benefit package also includes specific services for men and adolescent boys such as male sterilisation, free condom distribution, male cancer treatment, sexually transmitted infection treatment, and HIV/AIDS prevention among MSM. These interventions are in line with recommendations by UNFPA.^{19,20}

The Tambon (sub-district) health fund, comprised of NHSO's block grant of 45 Baht (US\$ 1.5) per capita population in the sub-district which is matched by the sub-district local government, was established to ensure local government engagement. The fund is used to respond to local health challenges identified by the local communities, which are often SRHS related activities. Key activities have included prevention of adolescent pregnancy through multisectoral actions, prevention of violence against women, girls and children, empowerment of women and the "no-tolerance to violence" movement.

The National Reproductive Health Development Committee (NRHDC), comprising representatives from six ministries, Royal Colleges related to reproductive health and SRHS experts, and chaired by the Minister of Public Health, was established in 2009 to strengthen multi-sectoral collaboration to support SRHS. The committee serves to facilitate

cross-sectoral policy and implement SRHS programmes. The first National Reproductive Health Development Policy and Strategy (2010–2014) was adopted to support safe quality births by promoting good reproductive health for both women and men through a life course approach, and the second National Reproductive Health Development Policy and Strategy (2017–2026) aimed to promote and sustain quality birth and growth.²¹ In addition, the Prevention and Solution of the Adolescent Pregnancy Problem Act, B.E. 2559 (2016) was adopted by the Parliament to reduce adolescent pregnancy and birth rates through involvement of both the public and private as well as health and non-health sectors.

The Labour Protection Act 2019 entitles women to 98 days maternity leave and mandates the employers for 45 days full pay to their employees; the Social Security Scheme pays another 45 days. Government employees are entitled to 90 days maternity leave on full pay and husbands to 15 days paternity leave. There is no paternity leave as yet for private sector employees.²²

Trends of reproductive health outcomes and SRHS coverage

The World Bank Open Data provide an extensive database including key reproductive health outcomes such as total fertility rate, adolescent birth rate, modern method contraceptive prevalence rate, unmet need for contraception, access to antenatal care, and skilled birth attendance.²³ The "National Family Planning Program" was launched by the Thai government in 1970, prompted by the still high total fertility rate that had continued to decrease from 6.1 to 5.8 children per woman between 1960 and 1969. The implementation of the programme resulted in a significant reduction in the total fertility rate prior to achieving UHC, to 1.7 children per woman in 2000, which was further reduced to 1.5 children per woman in 2017. The low fertility rate led to a decline in the average household size, empowered women and improved the quality of life.²⁴ However, the trend in the adolescent birth rate per 1,000 women ages 15–19 has been erratic. While there was a gradual reduction from 60.4 in 1960 to 42 in 2003, it reverted to 51.6 in 2012 then again reduced to 40.9 in 2017. The adolescent birth rate among young girls ages 10–14 years reached 1.8 per 1,000 population in 2012 and further decreased to 1.3 per 1,000 in 2017.

Thailand has witnessed significant improvements in SRHS coverage. Prior to the launch of the National Family Planning Program in 1970, modern method contraceptive prevalence had been low at 14.8%. Within 10 years modern method contraceptive prevalence went up to 56.3% in 1981 and continued to increase, reaching 75.5% in 2016. The high contraceptive prevalence is a result of positive responses from Thai women and the quality of care at the district health level, which provides services close to people's domiciles. The percentage of women ages 15–49 who have their family planning needs satisfied with modern methods increased from 83.0% in 1987 to 89.2% in 2016 (83% among women ages 15–19 in 2016) and unmet contraception need among women ages 15–49 years has decreased from 11.7% in 1987 to 6.2% in 2016. The percentage of women receiving at least four antenatal care visits during pregnancy increased from 80% in 2009 to 91% in 2016, with 95% coverage of institutional births and 99% births attended by skilled birth attendants. This has resulted in very small gaps between urban and rural areas as well as between the richest and the poorest wealth quintiles, as at near universal coverage levels, rich-poor and urban-rural gaps become negligible.²⁵

Comprehensive HIV prevention interventions have been successfully reflected in the 6.5-fold reduction in HIV prevalence among females ages 15–24 years in two decades; from its peak of 1.3% in 1995 to 0.2% in 2018. Universal access to ART coverage, including Prevention of Maternal to Child Transmission (PMTCT), was launched in 2003 and increased coverage of PMTCT in pregnant women living with HIV from 21% in 2000 to 95% in 2018. All women living with HIV enrolled in PMTCT, including their children living with HIV, are provided with ART free of charge for life, financed by the government.²⁶ The high coverage of effective PMTCT interventions using triple ARV has reduced the annual number of children aged 0–14 newly infected with HIV from its peak of 3,800 in 1998 to merely 100 in 2018; and reduced the annual number of children aged 0–14 living with HIV from its peak of 14,000 in 2003 to 3,200 in 2018.

Cancer screening and prevention interventions have also been incorporated into SRHS. Counseling on self-breast examination is provided in all healthcare facilities. In 2017, the coverage of cervical cancer screening using either Pap smear (for women ages 30–59) or visual inspection with acetic

acid (VIA) (for women ages 30–45) was 34.6% of the targeted population. Though cervical cancer screening coverage has yet to reach the national target of 80%, the age-standardised (world) incidence rate of cervical cancer has reduced by almost half, from 24.7 per 100,000 female populations in 1999²⁷ to 16.2 in 2018.²⁸ In 2017, after serious price negotiations with the vaccine industry, the human papillomavirus (HPV) vaccine reached the cost effectiveness threshold. This allowed the government to launch the two-dose regimen school-based HPV vaccination programme for all grade five school girls, financed by general tax. The surveillance report from the Department of Disease Control (DDC), Ministry of Public Health shows that HPV vaccination coverage was as high as 96.8% in 2018, but the routine reporting shows a much lower figure; communication with NHSO found that the discrepancy is probably due to under-reporting and an unclear denominator of target school girls. NHSO is fully aware and corrective actions are underway.

In 2019, in addition to Pap smear and VIA, the NHSO Board approved HPV DNA test for cervical cancer screening. It aims to screen an additional 400,000 women. The board has also approved the pilot project using Pre-Exposure Prophylaxis as an extra prevention choice for all people at substantial risk of HIV, and a condom use campaign. This aims to reduce the annual number of new HIV infections to below 1,000.²⁹

Conclusion and recommendations

Access to quality services provided by the nationwide coverage of district health systems as a “close-to-client service” and the extension of financial risk protection are the two key contributors to universal access to SRHS, leading to small rich-poor and urban-rural gaps and impressive reproductive health indicators and utilisation of SRHS that do not cause financial hardship to the population. The lessons learned from Thailand's experience show that SRHS, both curative and health promotion and disease prevention services, have been well integrated in the health benefits package since the 1970s, and accessible from facilities within people's domicile.

Despite the achievement in SRHS a few challenges remain. Firstly, the adolescent birth rate is still high, at 40.9 per 1,000 women ages 15–19 in 2017, which is higher than the upper-middle income country average of 30.7; and particularly

high among young girls, ages 10–14 years, with a rate of 1.3 per 1,000. The unmet need of family planning among young adolescents must be addressed, especially gaps in multi-sectoral collaboration such as effective implementation of comprehensive sex education in and outside school settings.

Secondly, there are challenges related to HPV vaccination for fifth grade school girls. In order to monitor progress of HPV vaccine coverage, information systems across Ministries, and in particular the Ministry of Public Health and Ministry of Education, must be harmonised. Another challenge is the global shortage of HPV vaccine and acceptance by parents and girls of HPV vaccine which may hinder full coverage. Further actions should focus on availability of vaccine as well as expansion of vaccine provision to those outside the formal education system, and the migrant population. Cervical cancer screening coverage is less than half of the national target. Lack of awareness and knowledge, and cultural beliefs, in particular regarding premarital virginity, contributed to non-use of cervical cancer screening. On the supply side, there is a limited number of technicians to read Pap smear slides. Thus, national policy should focus on increasing awareness and strengthening the supply side.

In conclusion, the exemplary achievement of reproductive health indicators and service coverage is the result of several decades of government commitments to the extension of district health systems and financial risk protection, as two synergistic strategies of gradual realisation towards UHC, and provision of SRHS.

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References

- United Nations General Assembly resolution 70/1. Transforming our world: the 2030 agenda for sustainable development. [cited 2020 Mar 10]. Available from: https://www.un.org/ga/search/view_doc.asp?symbol=A/RES/70/1&Lang=E
- World Bank. Contraceptive prevalence, modern methods (% of women ages 15–49). [cited 2019 Apr 1]. Available from: <https://data.worldbank.org/indicator/SP.DYN.CONM.ZS>.
- World Bank. Maternal mortality ratio (modeled estimate, per 100,000 live births). [cited 2020 Mar 10]. Available from: <https://data.worldbank.org/indicator/SH.STA.MMRT>.
- Williams K, Warren C, Askew I. Planning and implementing an essential package of sexual and reproductive health services. The United Nations Population Fund; 2010.
- Kruk ME, Gage AD, Arsenault C, et al. High-quality health systems in the sustainable development goals era: time for a revolution. *Lancet Glob Health*. 2018 Nov;6(11):e1196–e1252. Epub 2018 Sep 5. DOI:10.1016/S2214-109X(18)30386-3.
- Tangcharoensathien V, Witthayapipopsakul W, Panichkriangkrai W, et al. Health systems development in Thailand: a solid platform for successful implementation of universal health coverage. *The Lancet*. 2018;391:1205–1223.
- Balabanova D, McKee M, Mills A, editors. 'Good health at low cost' 25 years on. What makes a successful health systems? London: London School of Hygiene & Tropical Medicine, 2011.
- World Health Organization. Regional Office for the Western Pacific. The Kingdom of Thailand health system review. Manila: WHO Regional Office for the Western; 2015.
- Putthasri W, Suphanchaimat R, Topothai T, et al. Thailand special recruitment track of medical students: a series of annual cross-sectional surveys on the new graduates between 2010 and 2012. *Hum Resour Health*. 2013;11:47.
- Tangcharoensathien V, Prakongsai P, Limwattananon S, et al. From targeting to universality: lessons from the health system in Thailand (Chapter 16). In: Townsend P, editor. Building decent societies: rethinking the role of social

- security in development. Houndmills (UK): Palgrave Macmillan; 2009. p. 310–322.
11. Limwattananon S, Tangcharoensathien V, Prakongsai P. Catastrophic and poverty impacts of health payments: results from national household surveys in Thailand. *Bull World Health Organ.* 2007;85:600–606.
 12. Limwattananon S, Tangcharoensathien V, Prakongsai P. Equity in maternal and child health in Thailand. *Bull World Health Organ.* 2010;88:420–427.
 13. World Bank. World development indicators: out-of-pocket health expenditure. 2020. [cited 2020 Mar 10]. Available from: <https://data.worldbank.org/indicator/SH.XPD.OOPC.CH.ZS>.
 14. World Bank. World development indicators: catastrophic health expenditure. 2020. [cited 2020 Jul 17]. Available from <https://data.worldbank.org/indicator/SH.UHC.OOPC.10.TO>.
 15. Tangcharoensathien V, Thammatach-aree J, Witthayapipopsakul W, et al. Political economy of Thailand's tax-financed universal coverage scheme. *Bull World Health Organ.* 2020;98:140–145.
 16. World Bank. World development indicators. 2020. [cited 2020 Mar 10]. Available from: <https://data.worldbank.org/indicator/SH.XPD.GHED.GE.ZS>.
 17. National Health Security Office 2018. Annual report 2018. [cited 2020 Mar 10]. Available from: https://www.nhso.go.th/FrontEnd/page-about_result.aspx.
 18. World Health Organization. World health report 2010: health systems financing: the path to universal coverage. 2010.
 19. IPPF and UNFPA. Global sexual and reproductive health service package for men and adolescent boys. London: IPPF and New York City: UNFPA; 2017.
 20. Hawkes S, Hart G. Men's sexual health matters: promoting reproductive health in an international context. *Trop Med Int Health.* 2000;5(7):a37–a44.
 21. Ministry of Public Health. The 2nd National Reproductive Health Development Policy and Strategy (2017–2026) on the promotion of quality birth and growth; 2016.
 22. Office of Prime Minister, regulation on government officials' leaves, 2012. Royal Gazette Volume 129, number 22. [cited 2020 Mar 10]. Available from: <http://www.personnel.psu.ac.th/word/9.274.pdf>
 23. World Bank. World Bank open data. [cited 2020 Mar 10]. Available from: <https://data.worldbank.org/>.
 24. Upadhyay UD, Gipson JD, Withers M, et al. Women's empowerment and fertility: a review of the literature. *Soc Sci Med.* 2014 Aug;115:111–120. Epub 2014 Jun 11. DOI:10.1016/j.socscimed.2014.06.014.
 25. Patcharanarumol W, Tangcharoensathien V, Limwattananon S, et al. Why and how did Thailand achieve good health at low cost? (Chapter 7). In: Balabanova D, McKee M, Mills A, editors. 'Good health at low cost' 25 years on. What makes a successful health system? London: London School of Hygiene & Tropical Medicine; 2011. p. 193–223.
 26. Phanuphak N, Phanuphak P. History of the prevention of mother-to-child transmission of HIV in Thailand. *J Virus Erad.* 2016 Apr;2(2):107–109.
 27. National Cancer Institute. Cancer incidence Thailand. 1999. [cited 2020 Mar 10]. Available from: http://www.nci.go.th/en/File_download/Cancer%20In%20Thailand%20IV/C-II-01.PDF.
 28. International Agency for Research in Cancer. Thailand fact sheet; Globocan 2018. [cited 2020 Mar 10]. Available from: <http://gco.iarc.fr/today/data/factsheets/populations/764-thailand-fact-sheets.pdf>.
 29. National Health Security Office. UCS includes HPV DNA test in 2020. [cited 2020 Mar 10]. Available from: <https://www.nhso.go.th/frontend/NewsInformationDetail.aspx?newsid=MjUONA==>.