

Mobile learning to support health workers in pharmacies in expanding access to over-the-counter contraceptives: The World Health Organization Academy Learning Programme

Sarah Ann Borg ^a, Manjulaa Narasimhan ^b, Tana Wulijj^c

a Consultant, Department of Sexual and Reproductive Health and Research, UNDP/UNFPA/UNICEF/WHO/World Bank Special Programme of Research, Development and Research Training in Human Reproduction – HRP, World Health Organization, Geneva, Switzerland.

b Scientist, Department of Sexual and Reproductive Health and Research, UNDP/UNFPA/UNICEF/WHO/World Bank Special Programme of Research, Development and Research Training in Human Reproduction – HRP, World Health Organization, Geneva, Switzerland. *Correspondence:* narasimhanm@who.int

c Technical Officer, Department of Health Workforce, World Health Organization, Geneva, Switzerland

Keywords: sexual and reproductive health and rights, self-care interventions, COVID-19, task sharing, pharmacies

Introduction

The COVID-19 pandemic has led to substantial pressure on health systems worldwide, threatening to reverse decades of progress in sexual and reproductive health and rights (SRHR).¹ Many sexual and reproductive health (SRH) services have been disrupted due to competing health priorities, contraceptive and other SRH commodity stockouts, travel restrictions, and nation-wide lockdowns. Sixty-eight percent of countries from the five World Health Organization (WHO) regions (the WHO African, South-East Asia, European, Eastern Mediterranean, and Western Pacific Regions) surveyed in mid-2020 reported disruptions in family planning (FP) services in the second quarter of 2020,² contributing to increased numbers of unintended pregnancies.¹

It was estimated that a decline of 10% in service coverage of pregnancy-related care, a decline in the use of reversible contraception, and a shift in abortions from safe to unsafe could result in an additional 48.6 million women with an unmet need for modern contraceptives, an additional 15.4 million unintended pregnancies, an additional 28,000 maternal deaths, and 3.33 million additional unsafe abortions during a 12-month period, as essential SRH services face disruptions.^{3,4}

When facility-based provision is disrupted, the WHO recommends strategies like self-care

interventions for SRHR which include access to self-administered contraceptives, task sharing, and outreach to ensure access to medicines, diagnostics, devices, information, and counselling.⁴ Supporting and promoting self-care interventions requires competency-based education for health workers in addition to providing access to safe and effective products and information to users. Given that COVID-19 health care disruptions have also affected the education of health workers and their continuing professional development, innovative and agile means to continue the delivery of quality health care are essential.²

In many countries, the numbers of health workers are not sufficient to address the need for SRH services.⁵ Optimising skills mix and scopes of practice in the health workforce by engaging pharmacists and the pharmacy workforce to expand the provision of contraceptive methods, including self-care contraceptive interventions, has the potential to significantly improve access and SRHR outcomes.^{5,6}

The WHO's definition of self-care is the ability of individuals, families, and communities to promote health, prevent disease, maintain health, and cope with illness and disability with or without the support of a health worker, and self-care interventions are tools which support self-care.⁵

Self-care interventions have the potential to increase individual empowerment, choice, and autonomy over SRH.⁵

Role of the pharmacy workforce in increasing contraceptive access

The integration of health workers who are competent, well equipped, and supported into the health system to bring services directly to clients is a proven high-impact practice which can increase access to contraceptive services.⁷ Health workers can provide contraceptive counselling and methods in the community, particularly in remote and harder-to-reach areas, as a complement to facility-based health services, rather than requiring clients to visit these health facilities.^{1,8}

The pharmacy workforce plays an important role in meeting the increasing demand for contraception;^{7,9,10} pharmacies (staffed by a licensed pharmacist) and small drugstores (with no pharmacists on staff) are often the first line of health care in communities and resource-limited settings.^{6,7} Pharmacies can be utilised as effective service delivery points throughout pandemics such as during the COVID-19 pandemic.^{1,11} This approach may overcome barriers faced by facility-based health services, such as distance to services and understaffing issues.¹

Supporting health workers in pharmacies to meet the demand for FP as a complement to facility-based health services to improve understanding of and access to self-care interventions

The WHO recommends prioritising ensuring access to contraception by enabling pharmacy settings to increase the range of contraceptive options they can provide and allow for multi-month prescriptions and self-administration of subcutaneous injectable contraceptives, if available.⁴

To implement the WHO guideline on self-care interventions, the WHO Academy (“Academy”) is establishing an SRHR learning programme for health workers in public and private community pharmacy and drugstore settings who provide or will be providing over-the-counter contraception. This includes pharmacists, pharmacy technicians and assistants, nurses, doctors, traditional health attendants, community health workers, and other health workers providing SRH services in community pharmacies and drugstores.

A needs analysis, involving a survey and consultations with key stakeholders, including subject matter experts and health workers responsible for providing SRH services, resulted in the development of a new interactive, online learning programme, *Counselling and prescribing of contraception in pharmacies*.

Methodology of learning programme development

An initial learning needs analysis was conducted to inform learning solutions for health workers to address disruptions to essential SRH services in the context of COVID-19.

From 15/10/20 to 16/11/20, the Academy conducted an online learning needs analysis survey, targeted at health workers providing SRH care, on maintaining essential SRH services during COVID-19. The survey was available on SurveyMonkey and advertised through social media and distributed to medical, nursing, and pharmacy professional associations and membership organisations, and SRH non-governmental organisations (NGOs). There were 712 respondents responsible for providing SRH between 01 and 12/2020 in 91 countries in the WHO African Region (35%), European Region (23%), South-East Asian Region (13%), Region of the Americas (13%), Western Pacific Region (12%), and Eastern Mediterranean Region (4%), working in a range of roles, including doctors (22%), nurses (17%), public health practitioners (11%), health service managers and administrators (9%), midwives (8%), pharmacists (4%), health educators (3%), and community health workers (2%). Key takeaways from the survey were:

- 45% of health workers ($n = 222$) reported that contraception counselling and services, including condoms, lubricants, and self-administered contraception, had been reduced or were no longer currently available where they worked due to COVID-19.
- 55% of health workers ($n = 225$) would like to take courses to build their competencies in adapting contraception counselling and services in the context of COVID-19.
- 48% of health workers ($n = 200$) reported difficulties in attending training courses or meeting training requirements and 53% ($n = 219$) reported a lack of staff learning opportunities on how to provide services in the context of COVID-19.

- 46% of health workers ($n = 188$) reported using task sharing/role delegation as a solution to overcome the challenges in delivering SRH during COVID-19.

Throughout the needs analysis process, over 50 internal WHO and external subject matter experts, international and national pharmacy association and organisation representatives, and NGOs providing SRH care were consulted through multiple online meetings to gain their inputs into learning programme objectives and design.

Two virtual multidisciplinary collaborative meetings were conducted to conceptualise and co-design learning solutions for pharmacy and drugstore staff to advance SRHR and maintain over-the-counter delivery of self-administered contraception during and post COVID-19.

The first meeting, held in November 2020, aimed to share the proposed course learning journey with attending SRH subject matter experts and SRH providers to understand the current context of training needs and the potential use of the Academy learning programme.

Participants were asked key questions to allow co-design of and inform learning solutions to support pharmacists in the delivery of priority, essential contraceptive services during and post the COVID-19 pandemic. Some of the common themes broadly echoed by the group were:

- An identified need for skills mix optimisation to meet the demand for over-the-counter contraception, involving engaging and expanding the scope of the pharmacy workforce in pharmacy settings, which includes pharmacists, doctors, nurses, midwives, community health workers, and other health workers with no formal training.
- Learning needs of the target audience included: feeling comfortable discussing SRH issues including with young clients; ensuring privacy and confidentiality; non-judgmental, respectful, and culturally sensitive service provision; ensuring clients feel comfortable expressing their needs; a focus on informed choice; screening and referral mechanisms for intimate-partner violence (IPV); good dispensing practices; documentation and reporting; and pharmacovigilance.
- Potential outcomes of an ideal programme would include: pharmacies being seen as safe places providing quality services; increased access to FP services; staff job aids being

available in pharmacies; development of support networks for the pharmacy workforce and sustained engagement with learners; integration of the programme into allied health worker curriculums; and health workers and clients reporting feeling empowered to provide and choose the right contraceptives for them.

Based on the meeting findings, learning programme content was drafted. Participants were invited to volunteer to provide input and feedback on course development and design.

The second meeting, held in February 2021, aimed to share, evaluate, and inform the quality improvement of the Academy SRHR learning programme prototype. Fifty-five participants (health workers in community pharmacy and drugstore settings and SRH subject matter experts) were asked key questions about usability, relevance, applicability, and dissemination to inform the quality improvement of the learning programme. The findings were used to shape the iterative learning journey development process and feedback was incorporated into learning programme updates. Participants were invited to volunteer to provide further input into learning development and design, as well as to undertake qualitative interviews about their experience in using the learning material.

Results of learning programme development

The Academy launched a prototype of the new learning programme, *Counselling and prescribing of contraception in pharmacies*, on the Academy smartphone application at the end of 2020. This digital learning programme covers contraceptive counselling and prescribing of self-administered contraceptive methods that can be taken at home and/or within safe environments, such as shelters for women at risk of IPV.

Learning programme competencies and outcomes are focused on provision of contraception in a people-centred and non-judgemental way, fostering privacy and confidentiality, as well as effective communication, including addressing clients' needs, and adequate counselling, to allow clients to make an informed health decision. The programme is pitched at the level of a community health worker or pharmacy assistant with little or no training who may be required to provide over-the-counter contraception in

their role. The prototype programme takes on average 12 hours to complete; it is available in the six official languages of the United Nations; can be run on a “low bandwidth mode”; and is free for anyone to access.

Learners are guided at their own pace through simulated interactive clinical scenarios, using a question-and-answer approach to provide self-administered, over-the-counter contraceptive methods, including emergency contraception, progestogen-only pills, combined oral contraceptives, self-injectables, and external and internal condoms. Content was drawn from the WHO Family Planning – A Global Handbook for Providers,¹² Family Planning Training Resource Package (TRP),¹³ the WHO Medical Eligibility Criteria for Contraceptive Use,¹⁴ the WHO Selected Practice Recommendations for Contraceptive Use,¹⁵ and the WHO Decision-making tool for FP clients and providers,¹⁶ allowing learners to test their knowledge on FP counselling from these resources. WHO guidelines are subject to a rigorous quality assurance process.¹⁷ Programme content was reviewed by internal WHO and external SRH subject matter experts. Learners are provided with links to these WHO guidelines and job aids when relevant to the clinical scenario they are attempting, to assist their progression. The programme ends with a short knowledge assessment component drawn from the assessments available in the TRP¹³ and the Decision-making tool training guide.¹⁶ On successful completion, a certificate is awarded.

A disclaimer, visible on the home page of the learning programme, details that completion of the programme does not qualify the learner as competent in distributing medical advice; FP counselling; or prescribing of contraceptives. The course is intended for users to test their knowledge and decision-making only. Providers need to be aware of their current local policies and guidelines and adhere to these.

The programme will be re-launched on the Academy learning experience platform in early 2023, and this will be freely accessible on desktops and smartphones. For more details on when the programme will be available and how to access, visit the Academy website: <https://www.who.int/about/who-academy>

Current progress

A feedback survey for programme users is ongoing. An on-the-ground evaluation of the learning programme in a low-resource setting is

in the planning stage. This impact and outcome evaluation will assess objectives of programme completion, using surveys to assess self-reported self-efficacy in contraceptive counselling and provision, and pre- and post-written knowledge tests and competency-based training skills assessments to assess knowledge and counselling skills, compared to a control group who have not completed the learning programme. Number of clients provided with contraceptive services in pharmacies and drugstores whose staff have completed the programme will be monitored and compared to pharmacies and drugstores where staff have not completed the programme.

A larger library of interactive clinical scenarios available for programme users to test their knowledge is in production. Interactive learning support through virtual meeting platforms is also being developed for future versions of the programme.

Discussion

The methodology of the Academy SRHR learning programme development as a learning solution for advancing SRHR and maintaining over-the-counter self-administered contraception provided a novel approach to meeting the needs and rights of people to contraceptive access during and post COVID-19. This prototype solution aims to transform SRH health worker education through targeted and interactive competency-based learning solutions to aid in their implementation of measures to address disruptions to essential SRH services. These types of training modules will also equip health workers with the competencies they need to support their clients with self-care interventions and practices.¹⁸

Further modules are envisaged and will cover additional priority aspects of self-care interventions for SRHR, including self-collection of samples for human papilloma virus (HPV). These training modules aim to provide health workers and general public members with quality, evidence-based, education which they can access at their own pace.

Conclusion

“Access to voluntary FP information and the ability to choose from a wide range of contraceptive methods protects reproductive, maternal, and child health by promoting healthy timing and spacing of pregnancies, advances the ability of women, young people, and couples to achieve their fertility

*intentions, and promotes healthier families and communities through secondary economic, social, and environmental impacts – many of which will also be impacted by COVID- 19”.*¹

The *Counselling and prescribing of contraception in pharmacies* learning programme provides an approach to meet the demands and rights of people to contraceptive access. There was a demonstrated need for a learning programme targeted at health workers in pharmacy settings, and health workers providing SRH care told us they would like to take courses to build competencies in adapting contraception counselling and services in the context of COVID-19. By supporting health workers to build competencies in counselling and prescribing of self-administered contraception in a people-centred and non-judgemental manner, this programme could contribute to maintaining and advancing the quality of essential SRH services during and post COVID-19.

Acknowledgments

The authors wish to acknowledge the subject matter experts, international and national pharmacy

association and organisation representatives, and NGOs that were consulted for their participation and guidance in the learning programme development process.

Disclaimer

The named authors alone are responsible for the views expressed in this publication and do not necessarily represent the decisions or the policies of the World Health Organization (WHO) nor the UNDP-UNFPA-UNICEF-WHO-World Bank Special Programme of Research, Development and Research Training in Human Reproduction (HRP).

Disclosure statement

No potential conflict of interest was reported by the author(s).

ORCID

S. Borg  <http://orcid.org/0000-0002-8311-9087>
M. Narasimhan  <http://orcid.org/0000-0003-0598-6887>

References

- Mickler AK, Carrasco MA, Raney L, et al. Applications of the high impact practices in family planning during COVID-19. *Sex Reprod Health Matters*. 2021;29(1):1881210.
- World Health Organization. Pulse survey on continuity of essential health services during the COVID-19 pandemic: interim report. Geneva: World Health Organization; 2020 Aug 27.
- Riley T, Sully E, Ahmed Z, et al. Estimates of the potential impact of the COVID-19 pandemic on sexual and reproductive health in low- and middle-income countries. *Int Perspect Sex Reprod Health*. 2020;46:73–76.
- World Health Organization. Maintaining essential health services: operational guidance for the COVID-19 context: interim guidance. Geneva: World Health Organization; 2020 Jun 1.
- World Health Organization. WHO guideline on self-care interventions for health and well-being 2.3. Geneva: World Health Organization; 2021.
- World Health Organization. Task sharing to improve access to family planning/contraception: summary brief. Geneva: World Health Organization; 2017.
- USAID. Drug shops and pharmacies: sources for family planning commodities and information: Johns Hopkins University; 2013. Available from: <http://www.fphighimpactpractices.org/briefs/drug-shops-and-pharmacies>.
- Ammerdorffer ALM, Narasimhan M, Lucido B, et al. Reclassifying contraceptives as over-the-counter medicines to improve access. *Bull World Health Organ*. 2022;100(8):503–510.
- El Bizri L, Jarrar LG, Ali WKA, et al. The role of community pharmacists in increasing access and use of self-care interventions for sexual and reproductive health in the eastern Mediterranean region: examples from Egypt, Jordan, Lebanon and Somalia. *Health Res Policy Sys*. 2021;19(Suppl 1):49. <https://doi.org/10.1186/s12961-021-00695-0>.
- Navarrete JYN, Schindel TJ, et al. Sexual and reproductive health services provided by community pharmacists: a scoping review. *BMJ Open*. 2021;11:e047034.
- International Pharmaceutical Federation (FIP). Empowering self-care: a handbook for pharmacists. The Hague: International Pharmaceutical Federation; 2022.

12. World Health Organization and Johns Hopkins Bloomberg School of Public Health/Center for Communication Programs. Family Planning - global handbook for providers. Geneva, Switzerland; 2018.
13. USAID, World Health Organization, UNFPA. Family Planning Training Resource Package; 2022. Available from: <https://www.fptraining.org/>.
14. World Health Organization. Medical eligibility criteria for contraceptive use; 2015.
15. World Health Organization. Selected practice recommendations for contraceptive use. Geneva, Switzerland; 2016.
16. World Health Organization. Decision-making tool for family planning clients and providers. Geneva, Switzerland; 2005 [cited 2022 May 11]. Available from: <https://www.who.int/publications/i/item/9241593229>.
17. World Health Organization. WHO guidelines 2022 [cited 2022 May 11]. Available from: <https://www.who.int/publications/who-guidelines>.
18. Narasimhan M, Aujla M, Van Lerberghe W. Self-care interventions and practices as essential approaches to strengthening health-care delivery. Lancet Global Health. 2022;11(1): e21–2.