



## Building capacity of midwives and sexual reproductive healthcare professionals in Zinder, Niger

Lessons learned from SDA implementation in Niger

Danish Red Cross, Niger Red Cross and Maternity Foundation



## Partners

### **Maternity Foundation (MF)**

Maternity Foundation has Danish roots and is today a global organization, offering digital solutions and learning and training programmes within the fields of maternal and newborn health. We work in both humanitarian and development settings and other low-resource settings. As we have redirected the focus of our work in recent years to preventive services, including maternal mental health, modern contraception and safe abortion care, we are increasingly taking a broader position within the sexual and reproductive health and rights and justice agenda. In 2005, we started out as a smaller Danish NGO working in western Ethiopia. Today, we have offices in Ethiopia, India, and Denmark and engagements in multiple countries across Sub-Saharan Africa, the Middle East and North Africa, and Asia. In 2023 we have expanded our work into Latin America and the Caribbean.

### **Danish Red Cross (DRC) and Niger Red Cross (NRC)<sup>1</sup>**

DRC has implemented projects and programmes with Strategic Partnership Funding in several contexts, including Togo (mother's clubs), Guinea (sexual and reproductive health), and Myanmar (maternal and child health). DRC also has expertise in psychosocial support, humanitarian

assistance, migration, community health outreach, resilience building and sexual and reproductive health, all of which are relevant to the project. Danish Red Cross (DRC) has been present in Niger since 2017 working through the Niger Red Cross (NRC), providing technical assistance for the implementation of projects and supporting capacity building of the Niger Red Cross. Danish Red Cross with the Niger Red Cross has sought to respond to the humanitarian needs of people on the move in Niger. DRC already supports women and girls in the intervention area to improve their sexual and reproductive health and economic autonomy through a project funded by the Ministry of Foreign Affairs Denmark. One of DRC's programmatic priorities in Niger is to improve access to health services for communities with a particular focus on women and youth sexual and reproductive health. DRC and NRC benefit from the cultural understanding, trust and acceptance of the Red Cross by local communities. The unique status of NRC, through the recognition of its role as an auxiliary to the public authorities, reflects its ability to engage in dialogue with public authorities on protection and services, and sexual and reproductive health. NRC collaborates with departments and ministries in all regions of Niger, including the Ministry of Women's Promotion and Child Protection and the Ministry of Health.

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<sup>1</sup> Danish Red Cross in Niger - [Danish Red Cross - Niger](#) (accessed June 2024)

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## The maternal and newborn landscape in Niger

The Sustainable Development Goal 3, targets 3.1 and 3.2, set a goal to reduce maternal mortality to 70 per 100,000 live births and neonatal mortality to at least as low as 12 per 1,000 live births by 2023. According to a WHO, UNICEF, UNFPA, World Bank Group and UNDESA/Population Division report, Niger had a maternal mortality ratio of 441 per 100,000 live births in 2020.<sup>2</sup> The UNICEF report

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<sup>2</sup> Trends in maternal mortality 2000 to 2020: estimates by WHO, UNICEF, UNFPA, World Bank Group and UNDESA/Population Division. Geneva: World Health Organization; 2023. Licence: CC BY-NC-SA 3.0 IGO.

<sup>3</sup> Child health and well-being dashboard; UNICEF ([Child health and well-being dashboard - UNICEF DATA](#))

indicates that in 2018 Niger had a Still Birth Rate and a Neonatal Mortality Rate of 21 and 33 per 1,000 live births, respectively.<sup>3</sup>

In Niger, women and girls face challenges in accessing high-quality sexual and reproductive health services as reflected in the country's high adolescent birth rate which was 154 per 1,000 women aged 15-19 in 2021. In 2021, only 49% of women aged 15-49 had their contraceptive needs met by modern methods of contraception. The World Health Organisation (WHO) estimates that more than half of maternal deaths occur in adolescents or young adults (under 24 years of age) and within 48 hours of delivery, mainly due to anaemia.<sup>4</sup>

The state of health coverage is also skewed in rural and urban areas. As per the 2018 UNICEF report on Niger, only 31% of women had the recommended four antenatal care visits compared to 46% in urban areas.<sup>5</sup> Only 12% of newborns receive postnatal care in rural areas compared to 22% in urban areas. Similar observations were reported concerning household wealth. In poorer households, only

<sup>4</sup> Niger to Improve Women and Girl's Access to Nutrition and Health Services; World Bank Group; 2021

<sup>5</sup> UNICEF Data and Analytics, Division of Data, Research and Policy in collaboration with Health Section Programme Division. March 2018



12% of mothers had access to skilled birth attendants (SBAs) at birth. In comparison, 71% of the mothers in richer households had access to SBAs.<sup>5</sup> In rural areas, reduced access to services such as newborn resuscitation, vacuum-assisted delivery and limited availability of equipment and drugs were highlighted by Kante et al.<sup>6</sup>

Most maternal and newborn deaths are preventable with access to skilled care during pregnancy and birth. However, many midwives and other healthcare professionals supporting women during pregnancy and delivery lack access to the tools, training, support and learning opportunities necessary to enable them to deliver safe and respectful care. This is especially the case for midwives who care for pregnant women and newborns in remote and marginalised communities.<sup>7</sup>

## The Project

The objective of the project was to build the capacity of midwives and SRH (Sexual and Reproductive Healthcare)

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<sup>6</sup> Kante AM, Youssoufa LO, Mounkaila A, Mahamadou Y, Bamogo A, Jiwani SS, Hazel E, Maïga A, Munos MK, Walton S, Tam Y, Walker N, Akseer N, Jue Wong H, Moussa M, Dagobi AE, Jessani NS, Amouzou A. Challenges in reducing maternal and neonatal mortality in Niger: an in-depth case study. *BMJ Glob Health*. 2024 May 6;9(Suppl 2):e011732. doi: 10.1136/bmjgh-2023-011732. PMID: 38770808; PMCID: PMC11085984.

<sup>7</sup> Menendez C, Nhampossa T, Gbeasor-Komlanvi D F, de Lauwerier V B, Gupta G, Bustreo F et al. Stalled global progress on preventable

professionals in Niger to deliver high quality respectful maternal and newborn healthcare using the global French version of the Safe Delivery App which is a digital tool and learning platform for midwives and SRH professionals. The app has proven to empower midwives and SRH professionals to improve their skills and knowledge.<sup>8,9</sup>

The **Safe Delivery App (SDA)** is an evidence-based job aid, learning and training tool designed to support midwives and other SRH professionals in assisting births and managing the most common complications. Among other features, it contains simple, animated instruction videos, descriptions of practical procedures, and action cards in addition to having a MyLearning platform that allows for competency-based learning and training. At the same time, the user can achieve a formal certification and become Safe Delivery Champion through the app. It is free and once downloaded, it also works offline, making it possible to be used in even the most remote areas.

maternal deaths needs renewed focus and action *BMJ* 2023; 381 :p1473 doi:10.1136/bmj.p1473

<sup>8</sup> Florez-Arango JF, Iyengar MS, Dunn K, Zhang J. Performance factors of mobile rich media job aids for community health workers. *J Am Med Inform Assoc*. 2011;18(2):131-137. doi:10.1136/jamia.2010.010025

<sup>9</sup> Bolan NE, Sthreshley L, Ngoy B, et al. mLearning in the Democratic Republic of the Congo: A Mixed-Methods Feasibility and Pilot Cluster Randomized Trial Using the Safe Delivery App. *Glob Health Sci Pract*. 2018;6(4):693-710. doi:10.9745/GHSP-D-18-00275

## Improving the capacity of midwives and SRH professionals

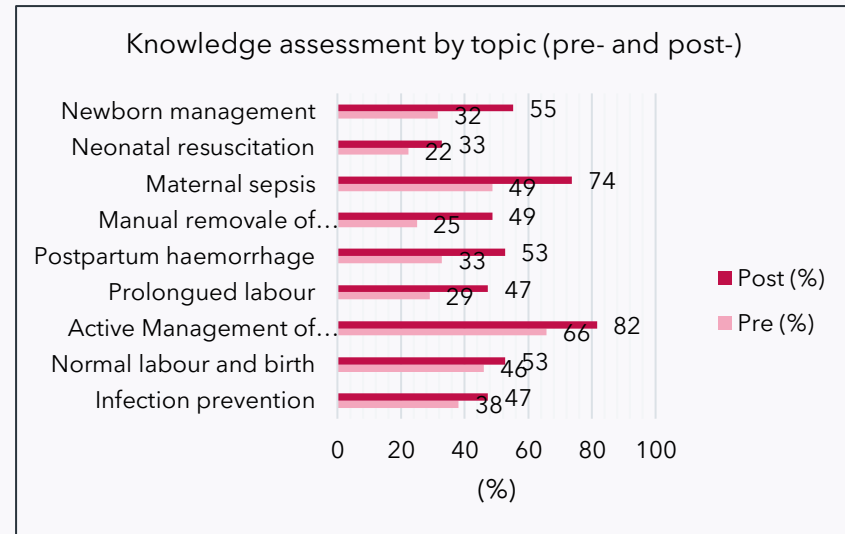
The project intended to benefit midwives and SRH professionals in Zinder of Matameye district. It began with an in-person Training of Trainers (ToT) for 11 Master trainers in Zinder from 11 to 13 July 2023. The topics covered included infection prevention, prolonged labour, active management of third-stage labour (AMTSL), postpartum haemorrhage (PPH), and neonatal resuscitation. Following the ToT, basic training was provided for 39 midwives and SRH professionals on similar topics in two rounds from 14-17 July and 18-20 July 2023 in the Matameye district by the trained trainers. Participants developed an action plan to introduce and share the Safe Delivery App (SDA) with colleagues. Additionally, a digital community of practice on WhatsApp with 44 members was established to support ongoing engagement and knowledge sharing related to SDA activities, including completing MyLearning skills assessments and sharing best practices.

Quantitative and qualitative data were collected at baseline and end line within the areas of knowledge and confidence levels.

### Knowledge

A knowledge survey was conducted twice to identify any change in the knowledge levels of the midwives and SRH professionals. 38 participants completed the pre- and post-

assessments. The pre-assessments were conducted before the training and the post-assessments were conducted 3 months after the training. A 17% increase in knowledge levels was observed from baseline to end line.



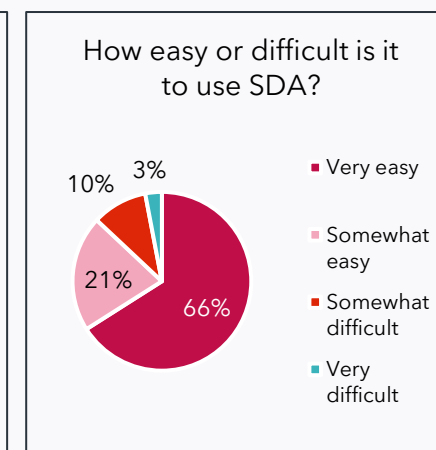
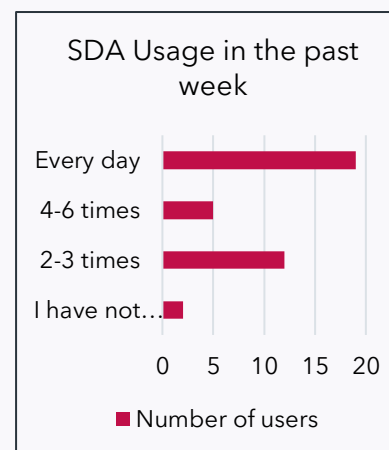
### Confidence

The midwives and SRH professionals' confidence in managing maternal and newborn complications was assessed through a Likert-scale questionnaire before the training and 3 months after the training. The professionals rated their levels of confidence in managing 10 complications on scale of 1-5 (1 = I don't feel good at all, and I don't know what to do and 5 = I feel very good, and I know exactly what to do).

The overall confidence levels increased from 3.6/5 at baseline to 4.6/5 (3 months after the training) indicating that midwives and SRH professionals now feel more confident performing/handling procedures.

<b>Confidence Scale -</b> 1 = I don't feel good at all and I don't know what to do 2 = I don't feel good and I lack knowledge and skills 3 = I feel neutral, neither confident nor worried 4 = I feel good, with minor doubts 5 = I feel very good and I know exactly what to do		<b>Pre-training</b>	<b>Post-training</b>
<b>1</b>	How do you feel about managing manual suctioning from the uterus (MVA)?	3.2	4.0
<b>2</b>	How do you feel about the management of severe pre-eclampsia and eclampsia?	3.6	4.5
<b>3</b>	How do you feel about the active management of the third stage of labour (AMSTL)?	3.8	4.7
<b>4</b>	How do you feel about the possibility of performing an obstetric vacuum extraction?	3.8	4.4
<b>5</b>	How do you feel about managing heavy bleeding?	3.5	4.6
<b>6</b>	How do you feel about managing retained placenta?	3.8	4.8
<b>7</b>	How do you feel about the management of maternal sepsis?	3.2	4.5
<b>8</b>	How do you feel about performing neonatal resuscitation?	3.7	4.7
<b>9</b>	How do you feel about identifying and managing danger signs in newborns?	3.8	4.8
<b>10</b>	How do you feel about the management of serious infections in newborns?	3.4	4.7
	<b>Average</b>	<b>3.6</b>	<b>4.6</b>

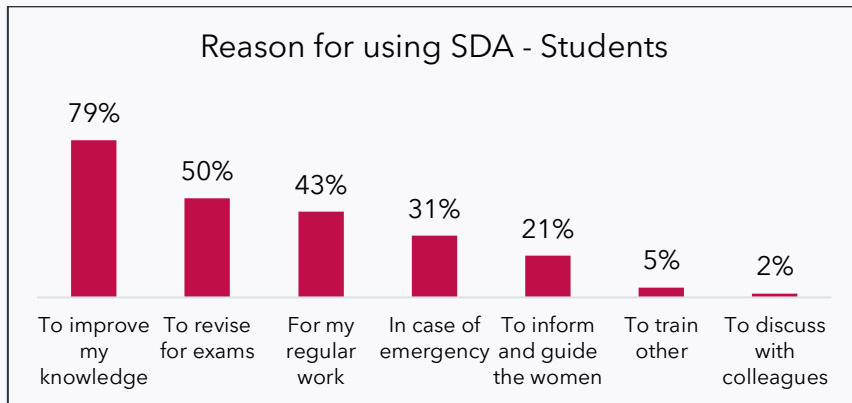
The self-reported SDA usage also indicated that regular use of the app was perceived as easy and most of the midwives and SRH professionals used the app every day. The midwives and SRH professionals also noticed an improvement in their work performance since the training and app introduction. They felt better equipped to handle and manage more cases following the training.



## Pre-service integration – acceptability check

Educators from the National School of Public Health of Zinder (ENSP) were included in the capacity-building training of healthcare professionals. They introduced the SDA to graduating midwifery students at ENSP in Zinder.

The students reported that the SDA usage helped them improve their knowledge and served as a tool to help them revise during the exams. The majority of the students reported a change in their performance after using the app.



The students felt the SDA would be a good teaching aid as its videos helped them understand topics better and showed them how to perform practical procedures.

The teachers who used SDA as a teaching aid felt that SDA allowed them to provide blended learning. This in turn improved student’s comprehension of topics, improved their practical skills and helped updating their knowledge.

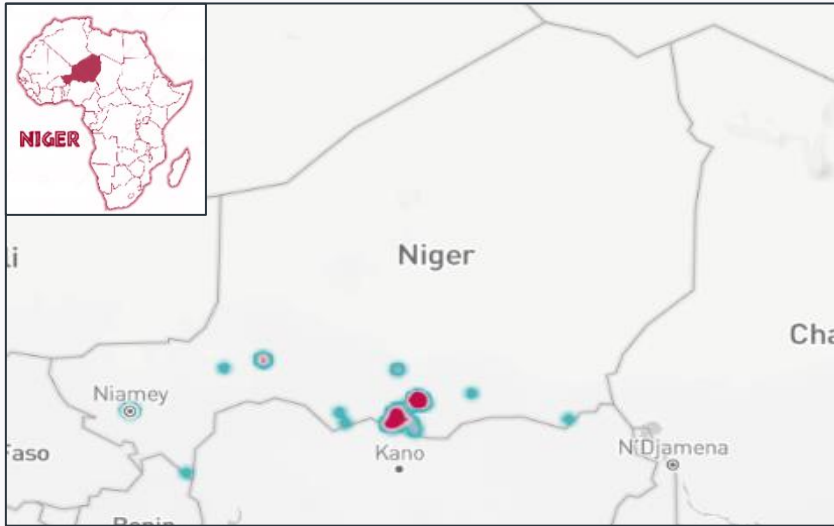
<sup>10</sup> My Learner – User who has accessed the MyLearning feature of SDA

<sup>11</sup> Expert – User who has completed MyLearning quizzes of one or more modules

## Safe Delivery App Usage

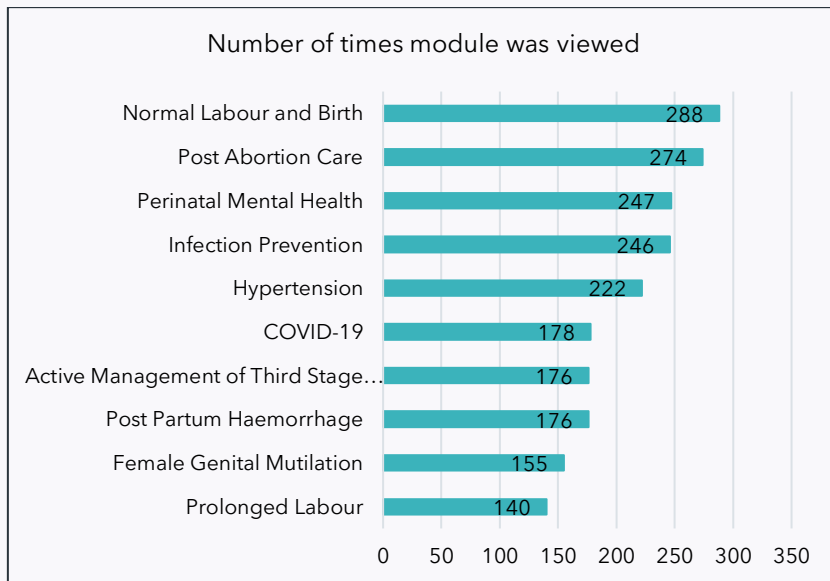
Maternity Foundation monitored data on app usage at the country level to gain insights into how and when the app was used among midwives and SRH professionals. This was an indicator of what impact SDA has on improving and retaining clinical knowledge. In the duration of the project (between July 2023 and January 2024) there were 164 healthcare professionals’ users of the app. Approximately 72% of the users were either midwives or nurses working in either a primary health facility or a secondary health facility. The remaining users were physicians and other healthcare professionals working in sexual and reproductive healthcare. The most frequently viewed modules included: Normal labour and birth followed by post-abortion care, perinatal mental health and infection prevention. During the 7-month period of the project, there were 75 My Learners,<sup>10</sup> 26 Experts,<sup>11</sup> and 3 Champions<sup>12</sup> (tiers of the MyLearning certification). Collectively the new users have initiated 1,883 learning sessions on the app, with 2,845 module visits.

<sup>12</sup> Champions – User who passed all modules and levels and has cleared the certification exam to gain the Safe Delivery Champion certificate



## Key learnings and recommendations

The Safe Delivery App has been effective in improving midwives' and SRH professionals' knowledge and confidence levels in managing complications related to birth. The in-person Training of Trainers (ToT) and subsequent basic training sessions were successful in introducing the SDA to midwives and SRH health professionals. Regular use of SDA was perceived as easy, leading to better work performance and increased confidence among healthcare professionals. Educators from the National School of Public Health of Zinder played a crucial role in capacity-building by introducing the SDA to midwifery students.



There were certain challenges such as changes in the political condition in Niger that hindered the implementation of activities. For example, a refresher training for the participants of ToT. The project duration was insufficient to integrate the SDA into the midwifery curriculum. Integration of SDA into the midwifery curriculum would have benefitted the new cohort of midwifery students to take advantage of blended learning. Additionally, training more midwives and SRH professionals on SDA would have encouraged the continuous promotion of SDA and emphasised its benefits and use. A community of practice was established with all participants of the training to continue supporting



knowledge sharing among peers. Even though this community of practice was created, its use decreased a few months after the training was completed.

Projects need to advocate for the importance of maternal and neonatal health even more during challenging conditions. The community of practice will need to encourage midwives and SRH professionals to share their experiences, success stories and challenges to foster a sense of collaboration. Integration of SDA into the sexual and reproductive health curriculum will ensure future midwives receive exposure to the app's content. Finally, encourage all midwives and SRH professionals to continue learning and skill development through the use of SDA.

#### **Quotes from midwives and SRH professionals -**

*"I found the SDA very useful; it helped me to improve my competency to manage obstetrical complications and I urge my colleagues to use it to enhance the adequate provision of care to women and newborns. I also recommend this application to student midwives to increase their chances for success in examinations. We are advocating for integration of the SDA in the midwifery curriculum and we have already started to train our finalist students on SDA to strengthen their competency."*

*"The SDA is a good application that helped them to acquire new knowledge, the application can serve as a guide and once someone is stuck can use it and know what to do. They recommend training for all birth attendants on this application because this can help to reduce maternal and neonatal mortality."*

#### **Quote from students -**

*"Yes, I noticed a lot of changes after being trained on the application, although I received it late (just before the exam), I had knowledge that helped me during my theoretical and practical exams. Regarding motivation, I was eager to see the content of this app to see if it will help me in my job. In short, I've seen a lot of changes."*

#### **Teachers experience of using the SDA as a teaching aid**

*"After each theoretical lesson, we watch the videos of the application together to get more immersed in the practice."*

*"We have integrated this application into our regular teaching because it contains the latest updates in the management of obstetric complications. This means that it complements our modules, not to say that it goes beyond the school's old teaching practices."*

## What is next?

The next steps for Niger would be to monitor the usage of the SDA and collaborate with relevant stakeholders to sustain and scale the successful implantation of the SDA. A key feature of the SDA is a self-directed learning platform called “MyLearning” that takes users through questions on each of the thematic areas covered by the App, across three levels of difficulty. Once users have completed all three levels, there is a final certification exam to become a MyLearning Champion and earn a certification. In several countries, the Champion Certificate has been accredited through the National Midwifery Association so that midwives who have achieved the certificate can receive some CPD points. These countries are examples that demonstrate how health tools such as SDA could be a sustainable and scalable solution for midwives and SRH professionals. Details on countries that have achieved measures to be sustainable and scalable are as follows:

- **India:** In 2021, the Indian Nursing Council accredited the SDA Champion certificate with 15 Continued Nursing Education (CNE) hours equivalent to 3 CNE credits after discussions and reviews in expert group meetings and reviews by the technical expert team in the Indian Nursing Council.
- **Cambodia:** During the process of developing the Khmer language version of the SDA in 2021 with JICA and the Ministry of Health, the Cambodian Midwives Council

approved the SDA for continued professional development and accredited 20 CPD points. Midwives must achieve 60 CPD every three years for relicensing.

- **Tanzania:** In February 2023, the SDA was accredited by the Tanzanian Nursing and Midwifery Council with 25 CPD points (one point for the FGM module and 2 points for the rest such that completion of the Champion Certificate results in the accreditation of 12 points)
- **Namibia:** In 2020, the Champion Certificate in the Safe Delivery App was accredited for 20 CEU (level 3) points and 5 Ethics CEU points by the Health Professions Council of Namibia (HPCNA), a process that was facilitated by IMANA, the Independent Midwives Association of Namibia with support from Maternity Foundation
- **Ethiopia:** The Safe Delivery App is recognized by the Ministry of Health and is integrated into national in-service training such as Basic Emergency Obstetric and Neonatal Care training and the national catchment-based clinical mentoring programme. The app is being used by Educators/trainers, students, midwives and SRH professionals who are active in Maternal and Child Health care.