

ORIGINAL RESEARCH ARTICLE

Engaging Students to Improve Sexual and Reproductive Health: A Report of the University Leadership for Change Initiative in Niger

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Regina Benevides¹, Katie Chau², Abdoulaye Ousseini³, Ibrahim Innocent⁴ and Ruth Simmons⁵*

Pathfinder International/E2A project¹; Independent Consultant²; Pathfinder International/Niger³; Independent Consultant/Peer Leader Coordinator of Zinder University Scaling-up⁴; ExpandNet/Partners in Expanding Health Quality and Access⁵

*For Correspondence: Email: rsimmons@umich.edu; Phone: + 15305644496

Abstract

Few development projects have addressed the sexual and reproductive health (SRH) needs of university students in West Africa or sought to promote student leadership to extend SRH benefits to others. This report presents results from the Evidence-to-Action Project's University Leadership for Change Initiative in Niger which had the goal to begin filling this gap. The Initiative used an innovative behavior change methodology with students at Abdou Moumouni University in Niamey, Niger and subsequently expanded it to three additional universities by applying ExpandNet scale-up approaches. 200 students trained as peer leaders reached almost 8,000 youths with SRH information and counseling, student leaders and university clinic staff distributed nearly 80,000 condoms and the project achieved national policy change through its collaboration with the Ministry of Public Health and the Ministry of Higher Education, Research and Innovations. The report concludes with key lessons about the benefits of student engagement and creativity in this effort. (*Afr J Reprod Health* 2019; 23[1]: 55-64).

Keywords: University student leadership, sexual and reproductive health, Niger, scaling up

Résumé

Peu de projets de développement ont répondu aux besoins des étudiants universitaires en Afrique de l'Ouest en matière de santé sexuelle et de la reproduction (SSR) ou ont cherché à promouvoir le leadership étudiant afin d'étendre les avantages de la SSR à d'autres. Ce rapport présente les résultats de l'initiative «Un leadership universitaire pour le changement, menée par le projet De l'Evidence à l'Action» au Niger, qui visait à combler ces lacunes. L'Initiative a utilisé une méthodologie innovante de changement de comportement avec des étudiants de l'Université Abdou Moumouni à Niamey, au Niger, puis l'a étendue à trois autres universités en appliquant des approches de développement à plus grande échelle. Le rapport a montré que 200 étudiants formés à la direction par des pairs ont sensibilisé près de 8 000 jeunes avec des informations sur la SSR, que des responsables d'étudiants et le personnel de cliniques universitaires ont distribué près de 80 000 préservatifs et que le projet a permis un changement de politique nationale grâce à sa collaboration avec le ministère de la Santé publique et de l'Éducation. Le rapport se termine par des leçons clés sur les avantages de la participation des étudiants et de leur créativité dans cet effort. (*Afr J Reprod Health* 2019; 23[1]: 55-64).

Mots-clés: Leadership des étudiants universitaires, santé sexuelle et de la reproduction, Niger, reproduction à plus grande échelle

Introduction

The 1994 Conference on Population and Development in Cairo created consensus in the global development community that the sexual and reproductive health (SRH) needs of young people must be addressed and many efforts have attempted to do so¹. However, there are few

experiences reporting provision of SRH information and services for university students, especially not in sub-Saharan Africa²⁻¹⁰. While it could be argued that university students have better access to information and care because of their social background, this is not necessarily the case. Moreover, their role as future leaders who will influence behaviors of others and shape

community opinion at large warrants careful attention to their needs.

This paper discusses how to address this potential by describing the Niger University Leadership for Change (ULC) initiative which was designed to promote youth leadership for driving social change and health systems strengthening, with the aim of reducing unintended pregnancies and maternal mortality, as well as increasing gender equality. We document how the project addressed the needs of students at Abdou Moumouni University (AMU) in Niamey, Niger; how it developed a systematic approach to scale-up to other universities and encouraged policy change regarding adolescent and youth sexual and reproductive health (AYSRH) and rights. The project was implemented between March 2014 and June 2016.

In Niger, family planning (FP) and reproductive health indicators call for urgent attention, especially in the field of AYSRH. Fifty percent of Nigeriens are under 15 years old¹¹. Niger has the highest fertility rate in the world (an average of 7.3 children per woman) and the highest rate of child marriage rate with 75% of Nigerien women currently 20-24 years being married before the age of 18 and 30% before the age of 15. Adolescent girls contribute 14% of the overall fertility rate¹². This high fertility rate has been intensified by an under-resourced health system, a conservative environment, and an underserved and hard-to-reach population with very limited access to services. In addition, adolescent pregnancy rates are also among the highest in the world with 40% of adolescent girls 15-19 years of age haven given birth. At the same time, only 12% of women aged 20-24 are using a modern contraceptive method, and among them, one third uses the lactational amenorrhea method in the postpartum period¹². These statistics reveal the dire AYSRH needs for the young population of Niger.

The ULC initiative was implemented by the USAID-funded Evidence-to-Action Project (E2A) at AMU which in 2014 had a student population of 19,000. Partners included Niger's Ministry of Public Health (MPH), the Ministry of

Higher Education, Research and Innovations (MHE/RI), Pathfinder International, and the USAID-funded Agir pour la Planification Familiale Project (AgirPF/Engenderhealth). The ULC team created a co-management committee to ensure participatory stakeholder engagement to support future sustainability. This committee routinely brought together a diverse range of participants – including university health providers, students, and representatives from the MPH and MHE/RI – to plan and strategize together and ensure that the project adjusted to changing situations over the course of implementation.

The ULC focused on the following five objectives:

1. increase awareness and knowledge of AYSRH and behavior change among university students;
2. increase utilization of SRH services among university students;
3. strengthen service delivery through capacity building of university health service providers and improving linkages to other MPH health centers and programs;
4. generate, share, and apply information and evidence regarding access to AYSRH services in university settings; and
5. raise awareness about AYSRH at the community level.

Methods

This report used a case-study methodology which is based on the E2A final ULC project report summarizing key results from the evaluation and documentation process which included:

1. 25 focus group discussions with peer educators, supervisors and the general student population; 21 of these were conducted at Niamey University, 4 at the other universities;
2. 43 interviews with key stakeholders including representatives from the Ministry of Health, the Ministry of Higher Education, Research and Innovations, peer educators, representatives of the student unions, district

- health officers, co-management committee members, as well as members of relevant university committees;
3. 10 observations at the health facility level, of consultation sessions, meetings with peer educators and health workers, as well as of the so-called reflection and action for change (REACH) sessions;
 4. routine project data including numbers of peer educators trained, numbers of students receiving counseling from peer educators and the numbers of students receiving SRH/HIV counseling and related services at the university health services.

The focus group discussions, in-depth interviews and observations at facilities were conducted by an external researcher not part of the project implementation team.

ULC Project Approaches

Using behavior change and participatory approaches to implement an AYSRH program

Comprehensive behavior change methodology: The ULC project was based on a participatory behavior change methodology to build leadership skills among university students and generate demand for SRH information and services. Given the low level of demand for SRH and FP services in Niger, especially among adolescents and youth, E2A adopted a behavior change approach that focuses on narratives - or stories. This approach was intended to draw information from individuals in their context rather than deliver messages *to* them through information, education and communication messages¹³. It encouraged students to identify barriers and facilitators to change in SRH behavior engaging them in an open discussion about topics considered taboo.

Participatory approach to strengthening SRH services: University students were not merely viewed as consumers of SRH information and services, but they participated as decision-makers and frontline implementers for the program. The

project also worked closely with the MPH to integrate AMU health center services with the existing public health program to ensure sustainability of providers, supplies, and supervision. This approach for improving health services was an essential component of implementing the AYSRH program.

Methods for systematically planning scale-up and institutionalization

The ExpandNet/WHO scale-up methodology: Throughout the planning and implementation phases, the ULC project used the ExpandNet/WHO methodology which views scaling up in terms of a three-stage process. Stage 1 suggests that scaling-up should be anticipated from the outset and reflected in project design and implementation. The ExpandNet/WHO tool developed for this stage consists of twelve recommendations¹⁴. For example:

1. involvement of key stakeholders from the beginning of project planning;
2. testing the innovation under routine service delivery circumstances;
3. keeping the innovation simple; and
4. documenting the process of implementation.

Stage 2 consists of the development of a scaling-up strategy based on the ExpandNet framework which considers implications related to:

1. the nature of the intervention package;
2. the characteristics of the organization which is scaling up the interventions;
3. the nature of the environmental context in which scaling up takes place; and
4. the resource team available to support the process.

Strategic choices are then made about advocacy and dissemination, how to organize the process, how to mobilize necessary resources and how to monitor and evaluate the process¹⁵. Stage 3 consists of the strategic management of the scale-up process.

The project held workshops on the ExpandNet/WHO methodology and tools to ensure

project staff and stakeholders understood them and could successfully strategize about their implications for the ULC from the outset.

ULC Project Implementation and institutionalization of AYSRH approaches at AMU

Youth leadership in behavior change activities

Training students as leaders: From its design phase, ULC made a deliberate choice to work with young people as leaders of change. Because of their high level of education and mobility, university students in Niger are well-positioned to improve their own SRH and increase peer demand for and access to youth-friendly services. As members of the target population, they can relate well to young people and understand their needs. A pool of potential leaders – representatives of the different courses at the University and coming from all regions in the country – was selected from the Student Union. They were trained as student supervisors by the MPH's Adolescent and Youth Health Division and the NGO Lafia Matassa. Student supervisors helped identify and train peer leaders who were tasked with planning and leading comprehensive behavior change activities.

Because behavior change methods are more effective when working with small groups of participants, the ULC focused on select groups of students to become peer leaders, rather than trying to reach the entire university student population. As the project progressed, a training system was established whereby “senior” peer trainers and student supervisors as well as the MPH and university health center staff, trained new cadres of peer leaders. They also set up a coaching system between existing peer leaders and new peer leaders, and continuously learned from this process.

Peer-based behavior change activities: With the support of the ULC project team (consisting of Pathfinder/Niger supported by E2A DC and the Pathfinder International Office/Boston) the peer leaders ran peer-based behavior change activities

on campus with their fellow students. One of the primary activities was the *Pathways to Change* (PtC) game. This simple board game had two objectives: 1) introduce small groups of university students to topics about SRH and FP that could help them discuss change in their behavior with peers, family and friends; and 2) help the ULC team learn how these youth think about various types of behavior change objectives.

The second component of ULC's behavior change approach was a group exercise called Reflection and Action for Change (REACH). Based on the PtC sessions the REACH methodology takes the reflection process further by guiding small groups to prioritize and act on issues such as barriers and facilitators related to contraceptive access especially to LARCs and social norms around the use of contraceptives by unmarried girls. The behavior-change approach of engaging students to lead the activities proved essential in ensuring receptiveness and participation from other youth; they were able to establish a more direct conversation about topics that are sensitive to be discussed with adults. Furthermore, having youth leaders facilitate behavior change activities provided the opportunity for young people to be more open and take ownership of their health.

Student leadership at the community level: Peer leaders also raised awareness about AYSRH at the community level through health information caravans, which included the use of PtC and REACH videos. These information caravans were brought to almost all regions in the country. Moreover, in Maradi, Tahoua, and Zinder, where there are three other campuses of the Niger University, the Niamey leaders engaged with their university peers working with other youth at the community level.

The second community-based activity had peer leaders use a pre-existing AMU mechanism which assists students in organizing events during their vacation time to work with secondary school students. Peer leaders used this mechanism to bring their new knowledge and skills to other students. They also conducted PtC “training of

trainers” with community workers from the IPPF affiliate Association for Family Planning in Niger and from four integrated health centers in Niamey. With the supportive supervision of the student leaders, community trainers started cascading PtC and REACH sessions at the grassroots level, thus increasing the ULC impact at the community level.

Producing behavior change films

The ULC project produced three behavior change films as part of the REACH methodology. The scenarios and scripts of the films were based on the data collected through PtC games with students, health providers and young people in communities across Niger. The data from PtC provides insights about the barriers and facilitators that affect young people’s access and utilization of SRH services. E2A and Pathfinder International technical advisors worked with the Pathfinder Niger team and two local film production companies in collaboration with student leaders, the MPH and the MHE/RI to produce the three films (available in the supplementary materials).

Improving service delivery at AMU

Prior to the ULC project, the university health center did not provide contraceptive services to students. To address this gap, the project collaborated with the AgirPF project to ensure that ten AMU health providers were trained on contraceptives, counseling techniques, youth-friendly services, and behavior change techniques. AMU’s health center was also not part of the procurement system for acquiring contraceptives nor did it have a supervision system. The project facilitated the integration of the AMU health center into the local health district and regional SRH/FP supplies procurement system and the health district’s routine supervision system. As a result, the university health center was able to procure the full range of modern contraceptives including male condoms, oral contraceptive pills, injectables, and IUDs. In addition, the ULC project arranged with the MPH to second a part-time midwife for the university health center, who

began to work two days per week offering SRH/FP services and supporting the other providers. The project also enlarged the offering of SRH services including HIV pre-post counseling and testing. This integration of AYSRH into existing health services created the basis for sustainability beyond the life of the project.

During the behavior change PtC game students emphasized that the fear of judgmental treatment by health providers combined with a fear of lack of privacy and confidentiality would likely prevent students from accessing the newly offered SRH/FP services. To address this significant barrier, the project organized dialogue sessions between students and providers to discuss service quality. The outcome was an agreed upon set of actions to help address identified barriers, including posting a schedule for different service providers especially for the midwife, and taking measures to ensure privacy and confidentiality. This process facilitated a marked improvement in relationships between students and the university health center staff and resulted in improved quality of SRH services.

ULC Planning for scale up to three other universities

Central to ULC’s planning for scale-up to other sites was the collaboration with ExpandNet and the application of ExpandNet’s two tools: “Beginning with the end in mind” (BWEIM)¹⁴ and “Nine-steps for developing a scaling-up strategy”¹⁵. These tools guided scale-up planning and implementation. Using the recommendations from BWEIM, the project began planning for potential future scale-up from the early stages of its design. This included the establishment of the co-management committee and the introduction of stakeholders in March 2015 to the ExpandNet approach for scaling up.

In addition to training student peer leaders to run behavior change activities, the ULC project brought youth leaders into discussions for scale-up of activities to other universities. This involvement provided students the opportunity to develop mechanisms for sustaining youth leadership

beyond the life of the project. Students founded a youth-led organization with clear procedures to manage student turnover and ensure continuous student contributions to scale-up. Because the structures put into place were informed by student experiences and realities, this organization has been sustainable. Students have continued to plan and carry-out youth-led sensitization and behavior change activities at AMU beyond the end of the ULC project in 2016.

In July 2015, the ULC staff conducted an initial internal analysis using the ExpandNet tool “Beginning with the End in Mind” which contains 12 recommendations on how to design projects with scaling up in mind. This analysis demonstrated that while the ULC project with its emphasis on stakeholder involvement did look ahead to expansion to other universities; it also underscored several actions that could improve the scalability of interventions. Key recommendations coming from this process were to: 1) test the ULC approach in different contexts, 2) implement activities under routine operating conditions of the health and university system, and 3) continue with advocacy efforts to secure resources for future implementation on a larger scale.

Following this exercise, a consultant was recruited to produce process documentation on how the project had evolved in ways that could either facilitate or hinder scale-up to other universities in Niger. The primary source of AMU program data came from focus group discussions with students and key informant interviews with health providers, district health officers and co-management committee members. The consultant also travelled to three university campuses outside of the capital and collected information to assess implications for potential scale-up. The data demonstrated a strong need for SRH information and services among students at all the universities and revealed that students considered peer-to-peer activities useful channels to raise health awareness. Two of the three universities had infirmaries, yet none had capacity to provide youth-friendly FP services.

In December 2015, ULC organized a scale-up reflection workshop, bringing together 25

participants from the ULC co-management committee, AMU peer leaders, relevant MPH divisional and regional authorities, representatives of regional universities and their respective health services, project implementing partners and USAID. After presenting the data prepared by the consultant the ULC team facilitated a discussion focused on a CORRECT analysis; which articulates seven intervention attributes that can help increase the success of scale-up efforts. Extensive research on the diffusion of innovations originally discussed by Glaser *et al.*¹⁶ and subsequently edited by ExpandNet¹⁵ suggests that interventions are likely to be scalable if they are:

- credible in that they are based on sound evidence and/or advocated by respected persons or institutions;
- observable to ensure that potential users can see the results in practice;
- relevant for addressing persistent or sharply felt problems;
- have relative advantage over existing practices so that potential users are convinced the costs of implementation are warranted by the benefits;
- easy to install and understand rather than complex and complicated;
- compatible with the potential users’ established values, norms and facilities; fit well into the practices of the national program; and
- testable so that potential users can see the intervention on a small scale prior to large-scale adoption.

Using this tool, workshop participants analyzed key elements of the ULC intervention package as implemented at AMU to assess the potential for scale-up to other universities. This review led to the recommendation to strengthen the implementation of the ULC in Niamey and to introduce the approach in Maradi, Tahoua, and Zinder for a feasibility-testing phase. Students from these three universities and peer leaders from AMU were involved in this phase conducting activities, mobilizing resources and engaging stakeholders that could support the ULC approach.

Key recommendations emerging from this analysis included:

1. strengthening the peer leadership approach in Niamey with a focus on sustainability e.g. by recruiting students in earlier stages of their studies and organizing annual refresher trainings for student leaders;
2. organizing refresher trainings on youth-friendly SRH/FP service delivery for health providers and ensuring routine sharing of health data from the university health center with health district authorities;
3. including district and regional health structures in the co-management committee to create a more inclusive decision-making system and more generally revitalizing the committee given that meetings were frequently cancelled;
4. simplifying the ULC intervention package given the resource constraints at the other universities. Such simplification involved focusing solely on PtC rather than REACH activities, given the lack of audio-visual equipment. Moreover, given the lack of trained health providers for offering contraceptives, efforts focused on referrals instead of providing a full range of FP services while providers at university health centers waited for training and university services were included in the government contraceptive procurement system; and
5. testing interventions in the other universities under routine operating conditions of the health system.

In January 2016, the ULC began implementing a five-month feasibility-testing phase at the three-potential scale-up sites. The goal was to assess the ULC approach in these new sociocultural and university contexts to gain experience for broader scale up.

At the end of this period the implementation experiences from the three new universities confirmed that the ULC approach was relevant and adaptable to different university contexts. Stakeholders at the three universities agreed that the approach could be implemented

under routine operating conditions and had the potential to make important contributions to improving student health and well-being.

In October 2016, a culminating dissemination and scale-up planning workshop was organized using ExpandNet's nine-step approach. The objectives of the workshop were to:

1. disseminate the results of the ULC in Niamey as well as the pilots in Maradi, Tahoua, and Zinder;
2. agree on the package of interventions to scale up;
3. identify the steps for the scale-up strategy; and
4. agree on next steps of the scale-up process, including roles and responsibilities for different stakeholders.

The workshop was jointly facilitated by ExpandNet and E2A, with 60 participants representing the MPH (national and regional levels), four universities (AMU in Niamey and three regional universities in Maradi, Tahoua and Zinder) as well as their health services, the Niamey-based ULC student-led NGO, the MHE/RI, AgirPF and the other implementing partners. After initial presentations, participants worked in regional groups to analyze the steps for developing a scale-up strategy and to agree on the priority interventions for scale up. Each region then detailed actions for the scale-up strategy.

The workshop resulted in a clear consensus on the essential ULC package for scale-up, as well as draft plans to scale up the ULC approach in additional sites throughout Niger. After the workshop, a meeting was held with the Niamey-based co-management committee to debrief and agree on next steps. At this meeting, the MHE/RI and MPH reaffirmed their commitment and collaboration for the scale-up process.

Results

Institutionalization through national policy change

The most significant result of the ULC initiative is that is produced awareness at the national level of

Table 1: Number of youths participating in the ULC Project in Niamey, by age and sex, for the period April 20, 2014 – June 20, 2016

Category	Total (n)	Sex		Age		
		Male (n)	Female (n)	15-19 (n)	20-24 (n)	25 + (n)
Students trained on AYSRH and behavior change (peer leaders)	221	139	82	--	--	--
Youth reached by peer leaders with information or counseling on AYSRH	7,899	5,064	2,835	1,752	3,822	2,325
University students	3,899	2,646	1,253	102	2383	1414
Community youth	4,000	2,418	1,582	1650	1439	911
University students who accessed SRH/FP counseling	754	334	420	5	379	370
University students who accessed HIV counseling or treatment services	246	160	86	16	131	99
University students who obtained FP methods other than condoms	61	--	--	--	46	15

the importance of a focus on adolescent and sexual reproductive health, and the commitment to institutionalize interventions through policy change. As the project came to an end, E2A collaborated with the MPH and MHE/RI to agree on a strategy to impact AYSRH activities more broadly. For example, E2A's Niger Project Manager served as a technical expert for the MPH to support the development of Niger's new National Adolescent Health Strategy which included in its draft strategy the ULC intervention package. Moreover, the fact that the MPH proposed the ULC as one of the three good health practices to the West African Health Organization similarly attests to the high value attributed to these interventions within the public-sector health system in Niger.

Quantitative results of the ULC project

Key quantitative results for the period of April 2014 – June 2016 are presented in Table 1. Over 200 students were trained as peer leaders who in turn reached almost 8,000 youths with information or counseling with a slightly higher number of these in the community than at the university. The project distributed nearly 80,000 condoms, provided SRH/FP counseling to 754 students (56% of whom were women), and provided

contraceptives other than condoms to 61 students at the Niamey university health center while over 200 received HIV counseling and treatment.

In addition to these results, ULC also saw success with its PtC and REACH behavior change activities, with 425 PtC sessions and 83 REACH sessions organized with young people. Furthermore, 45 community workers from Niger's Association for Family Planning were trained as trainers on behavior change to be able to lead activities with young married women in Niamey.

Discussion

A key lesson learned in the ULC project is that students can play a strong leadership role in the effort to provide SRH services at the university level and pass on the new knowledge they acquired to peers in their university and home communities. The unexpected and impressive fact that students organized themselves and found a mechanism for dealing with the inevitable turnover in the student population by creating their own organization and connecting with the three other Universities in the country to start thinking about a national association is a promising avenue to be supported. Considering that young women only represent 24% of the overall student population in Niamey, the fact that just over one-

third of all students reached were women demonstrates that the project's gender-sensitive approaches were successful.

Also essential to the success of the ULC was the significant stakeholder involvement, government responsiveness and support. Given that a strong connection to the public health system was made to ensure availability of contraceptives, training and adequate personnel, one can expect that this connection will be maintained. This is especially so because while the project was being implemented, a youth friendly gender and rights-based approach, incorporating ULC results, was included into the AYSRH National Strategic Plan, thus demonstrating the broad policy influence that this project achieved.

At the same time, however, the ULC experience has also demonstrated that more needs to be done to ensure larger, sustainable impact. While the large number of youths reached by peer leaders with AYSRH information and counseling and the distribution of condoms were impressive, the number of students receiving actual FP services at the university clinic remained very limited. Of course, it is important to interpret this in light of the larger context in Niger where demand for modern contraception among young women is still very low.

A challenge that ULC faces is that the scale-up plans for the different universities have not been completed to the extent expected. However, the recommendations of scaling-up plans for Zinder – which included the continuation of the activities at the university, but also the adaptation of the ULC approach for community youth – are being implemented. This brings hope that the project can reach more youth with their diverse needs and in their different contexts.

The ULC initiative with its innovative behavior-change methodology and its focus on early attention to scale up deserves wide attention. The approach has importance for Niger given current plans to add an additional university to the existing ones, and the age structure of the population warrants close attention to SRH and contraception. These findings are also likely to be relevant to other countries in Africa where student

enrollment is growing, although the current report is limited because we do not know the extent to which the unique cultural context of Niger makes findings less applicable to other countries. Moreover, the qualitative approaches used in documenting the ULC (in-depth interviews and focus group discussions) were conducted at the time of university exams which resulted in a smaller number of students (130) being interviewed than initially planned.

Conclusion

University students are at a pivotal point in their lives. Many of them are living away from their families for the first time and are making decisions that will have lasting impact on their futures. They often have little understanding of their SRH and rights and have limited access to services that allow them to avoid or delay pregnancies, prevent sexually transmitted infections, and have healthy sexual relationships. At the same time, peers in their home communities who are not able to obtain higher education look to university students as leaders and sources of information. However, this potential remains generally unfulfilled in SRH. It is therefore vital that universities provide high-quality youth-friendly SRH programs for these future leaders of their countries that foster a lifetime of healthy behaviors and create the potential for them to serve as agents of change. The ULC has demonstrated how such SRH information and services can be provided for university students with limited additional resources.

Author Contributions

Regina Benevides and Katie Chau co-conceived and designed the study. Abdoulaye Ousseini collected and analyzed data; Innocent Ibrahim collected data. Ruth Simmons conducted the technical review and led in the writing of the manuscript.

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References

1. Bearinger LH, Sieving RE, Ferguson J and Sharma V. Global perspectives on the sexual and reproductive health of adolescents: patterns, prevention, and potential. *The Lancet*. 2007;369(9568):1220-1231. Doi:10.1016/S0140-6736(07)60367-5
2. Chandra-Mouli V, Mapella E, John T, Gibbs S, Hanna C, Kampatibe N and Bloem P. Standardizing and scaling up quality adolescent friendly health services in Tanzania. *BMC Public Health*. 2013;13(1). doi:10.1186/1471-2458-13-579
3. Chau K, Traoré Seck A, Chandra-Mouli V and Svanemyr J. Scaling up sexuality education in Senegal: integrating family life education into the national curriculum. *Sex Educ*. 2016;16(5):503-519. doi:10.1080/14681811.2015.1123148
4. Evelia H., Nyambane J, Birungi H, Askew I, Trangsrud R, Muthuuri E, Chaami I, Odawa A, Musyoka L, Mutungi S, Githuiya M and Omuruli J. From Pilot to Program: Scaling up the Kenya Adolescent Reproductive Health Project. Washington, DC: Population Council; 2008. http://pdf.usaid.gov/pdf_docs/Pnadp418.pdf.
5. Hainsworth G, Engel DMC, Simon C, Rahimtoola M and Ghiron LJ. Scale-up of adolescent contraceptive services: Lessons from a 5-country comparative analysis. *JAIDS J Acquir Immune Defic Syndr*. 2014;66:S200-S208. doi:10.1097/QAI.0000000000000180
6. Huaynoca S, Chandra-Mouli V, Yaqub Jr. N and Denno DM. Scaling up comprehensive sexuality education in Nigeria: from national policy to nationwide application. *Sex Educ*. 2014;14(2):191-209. doi:10.1080/14681811.2013.856292
7. Joyce S, Askew I, Diagne AF, Diop N and Evelia H. Multisectoral Youth RH Interventions: The Scale-up Process in Kenya and Senegal. Washington, DC: Population Council; 2008. http://pdf.usaid.gov/pdf_docs/Pnadm556.pdf.
8. Renju J, Andrew B, Medard L, Kishamawe C, Kimaryo M, Chagalucha J, and Obasi A. Scaling up adolescent sexual and reproductive health interventions through existing government systems? A detailed process evaluation of a school-based intervention in Mwanza Region in the northwest of Tanzania. *J Adolesc Health*. 2011;48(1):79-86. doi:10.1016/j.jadohealth.2010.05.007
9. Sadik N. Sexual and reproductive health and rights: the next 20 years: Keynote address, ICPD beyond 2014: International Conference on Human Rights 7-10 July 2013, Netherlands. *Reprod Health Matters*. 2013;21(42):13-17. doi:10.1016/S0968-8080(13)42722-2
10. Kenya, Ministry of Health, Division of Reproductive Health. Adolescent and Youth Sexual and Reproductive Health Evidence Based Interventions in Kenya.; 2013. <https://www.fhi360.org/sites/default/files/media/documents/youth-sexual-reproductive-health-interventions-kenya.pdf>.
11. Population Reference Bureau. 2017 World Population Data Sheet with a special focus on youth. 2017. Washington DC, USA. https://assets.prb.org/pdf/17/2017_World_Population.pdf
12. Institut National de la Statistique - INS/Niger and ICF International. 2013. Niger Enquête Démographique et de Santé et à Indicateurs Multiples (EDSN-MICS IV) 2012. Calverton, Maryland, USA: INS/Niger and ICF International. <http://dhsprogram.com/pubs/pdf/FR277/FR277.pdf>
13. Petraglia J, Benevides R, Chau K and Abdoulaye O. Public health programming to accommodate the heterogeneity of youth and the complexity of behavior change, cogent humanities. 2018; vol 5, issue 1.
14. World Health Organization and ExpandNet. Beginning with the End in Mind: Planning Pilot Projects and Other Programmatic Research for Successful Scaling Up. Geneva: World Health Organization; 2011. http://www.who.int/reproductivehealth/publications/strategic_approach/9789241502320/en/.
15. World Health Organization and ExpandNet. Nine Steps for Developing a Scaling up Strategy. Geneva: World Health Organization; 2010. http://www.who.int/reproductivehealth/publications/strategic_approach/9789241500319/en/.
16. Glaser EM, Abelson HH and Garrison KN. Putting Knowledge to Use: Facilitating the Diffusion of Knowledge and the Implementation of Planned Change. 1st ed. San Francisco: Jossey-Bass; 1983.