
From centralised policy development to uneven implementation: a qualitative study of adolescent reproductive health policy processes at the national level and in Southwestern Uganda

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Susan Asiimwe, Viola Nilah Nyakato & Kristien Michielsens

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From centralised policy development to uneven implementation: a qualitative study of adolescent reproductive health policy processes at the national level and in Southwestern Uganda

Authors

Susan Asiimwe^{1, 2*}, Viola Nilah Nyakato³, Kristien Michiels²

Affiliations

¹Department of Nursing, School of Medicine, Kabale University, Kabale, Uganda

²Institute for Family and Sexuality Studies, Faculty of Medicine, KU Leuven, Leuven, Belgium

³Faculty of Interdisciplinary Studies, Mbarara University of Science and Technology, Mbarara, Uganda

***Corresponding author:** Susan Asiimwe

Email: suasiimwe@kab.ac.ug, / sasiimwe52@gmail.com

Abstract

Background: Adolescent pregnancy remains a significant public health and health systems concern in Uganda and across sub-Saharan Africa. Although Uganda has developed several adolescent reproductive health policies and strategies, implementation remains uneven. Less is known about how policy development and implementation processes, financing arrangements, institutional structures, and frontline discretion shape translation of adolescent reproductive health policy into practice. This study examined how adolescent reproductive health policies in

Uganda are developed and implemented, and how policy actors and frontline implementers cope with related constraints.

Methods: A qualitative study was conducted between 14th July and 30th October 2025 at the national level and in Kabale and Mbarara study areas in southwestern Uganda. Twenty-eight key informants were purposively selected, including eight policymakers at national and subnational levels and twenty frontline implementers involved in adolescent reproductive health service delivery. Semi-structured interviews were recorded, transcribed, and analysed using thematic analysis combining inductive and deductive approaches, guided by Braun and Clarke's six-phase process. Themes were developed inductively and subsequently mapped onto Walt and Gilson's Health Policy Triangle domains, while Street-Level Bureaucracy theory informed interpretation of frontline discretion and coping practices.

Results: ARH policy development followed a structured, ministry-led process shaped by centralised decision-making and donor-dependent financing. Although institutional frameworks and development partner support facilitated policy formulation, limited subnational influence, delayed policy revision, and dependence on external funding constrained responsiveness and sustainability. At the implementation level, weak dissemination, resource shortages, limited supervision, and ambiguity around adolescents' consent expanded frontline discretion, contributing to variable service delivery. Policymakers and implementers adopted coping strategies, including service integration and resource improvisation, phased implementation, and community engagement, which sustained services but also risked normalising systemic gaps.

Conclusions: Uneven implementation of adolescent reproductive health policy in Uganda does not simply reflect operational failure at the facility level. It is shaped by the interaction of

financing arrangements, centralised governance, policy ambiguity and frontline discretion within a resource-constrained health system. Strengthening implementation requires stable domestic financing, clearer operational guidance, stronger subnational engagement, and institutional mechanisms that connect policy development with frontline realities.

Keywords: Adolescent Reproductive Health, Policy Development, Policy Implementation, Health Policy Triangle, Street-Level Bureaucracy

Introduction

Adolescent (10-19 years) pregnancy remains a major public health challenge, particularly in low- and middle-income countries (LMICs) (1, 2). Each year, an estimated 21 million adolescents aged 15-19 years in LMICs become pregnant, and about 12 million give birth (3, 4). Adolescents face a higher risk of maternal morbidity and mortality compared to older women (5). In the developing region, 3.2 million adolescents underwent unsafe abortions in 2008, corresponding to an annual rate of 16 per 1,000 women aged 15-19 years (6). In Sub-Saharan Africa, restrictive abortion laws contribute to a substantial burden of unsafe abortion, with the region experiencing an estimated 6.2 million unsafe abortions annually and the highest abortion-related case-fatality rate globally (7). The region's adolescent birth rate stands at 97.9 births per 1,000 girls (8), more than double the global average of 42 births per 1000 (8). In 2021 alone, the region recorded 6,114,000 pregnancies among 15-19-year-olds and 332,000 among girls aged 10-14 (9). Uganda exemplifies this crisis, with 25% of girls aged 15-19 already mothers or pregnant (10).

Several factors contribute to adolescent pregnancies, including limited access to sexual and reproductive health (SRH) information and services, sexual violence and coercion, child marriage, poverty and gender norms (11-14). Interventions to address these determinants,

including adolescent-friendly services, sexuality education, community mobilisation, and economic empowerment, have shown promise (15-18). However, these efforts often overlook the broader policy and systems context. Policies shape the enabling environment for programme prioritisation, financing, implementation, and accountability. Without coherent and effectively implemented policies, even evidence-based interventions may fail to achieve sustainable impact (19).

Uganda has developed several national policies to address ARH, including the *Adolescent Health Policy Guidelines and Service Standards* (2012), the *Revised Guidelines for the Prevention and Management of Teenage Pregnancy in School Settings* (2020), and the *National Strategy to End Child Marriage and Teenage Pregnancy* (2022/2023–2025/2027). These are complemented by broader frameworks such as *Reproductive, Maternal, Newborn, Child and Adolescent Health (RMNCAH) Sharpened Plan II* (2022/23-2027/28), international technical guidance on sexuality education, and global commitments articulated in *Global Strategy for Women's Children's and Adolescents Health* (2016-2030) and the 2030 *Sustainable Development Goals* (SDGs 3 and 5) (20-23). These frameworks articulate commitments to expand access to ARH information and services, strengthen multi-sectoral collaboration, and protect adolescents from early pregnancy and marriage.

Despite these frameworks, ARH outcomes in Uganda have remained suboptimal. Existing research has largely examined determinants of adolescent pregnancy and service-delivery barriers (11), with less attention to the policy processes through which ARH priorities are set, financed, coordinated, interpreted, and implemented. This is an important gap because implementation depends not only on policy content but also on governance arrangements, institutional capacity, resource availability and the practices of frontline actors (24).

Evidence from other sub-Saharan African countries emphasises the importance of these policy processes. In Kenya, international agreements have influenced agenda-setting and policy reform (25), while in Ethiopia donor priorities and global funding streams have shaped policy formulation and resourcing (26). Across the region, limited knowledge among parents and providers, sociocultural resistance, and financial constraints can further weaken policy implementation (27-29). However, how these interacting processes shape ARH policy development and implementation in Uganda remains insufficiently examined.

This study therefore examined how ARH policies in Uganda are developed and implemented, what factors shape these processes, and how policymakers and frontline implementers manage related constraints across national, subnational, facility, and community levels of the health system.

Conceptual Framework: the Health Policy Triangle and Street-Level Bureaucracy

The study adopts a dual theoretical framework, combining Walt and Gilson's Health Policy Triangle (HPT) (30) and Lipsky's Street-Level Bureaucracy (SLB) theories (31).

The HPT provides an overarching framework for examining the Actors involved in the ARH policy, the contextual factors that shape it, the content of policies, and the processes through which they are developed and implemented. HPT therefore helped organise the analysis of both policy development and implementation.

The SLB provides a complementary micro-level perspective by examining how frontline health workers interpret and adapt policies within the constraints of limited resources, organisational norms, and sociocultural expectations. SLB was used to understand how implementers exercise

discretion, negotiate policy ambiguities, and develop coping strategies during day-to-day service delivery.

The two frameworks facilitated a comprehensive analysis of policy intent (via HPT) and policy practice (via SLB), emphasising not only how ARH policies are formally designed but also how they are implemented, adapted, or constrained in real-world settings. While the HPT provides a structured lens to examine actors, context, content, and processes shaping policy development and implementation, it does not explicitly theorise how frontline actors interpret and operationalise policy under conditions of ambiguity and constraint. SLB theory complements this by explaining how discretion, coping mechanisms, and everyday decision-making practices emerge when policy expectations encounter resource limitations, institutional pressures, and sociocultural norms. Together, the frameworks link macro-level governance structures with micro-level implementation dynamics, enabling analysis of how policy intentions are mediated through frontline practices and how implementation experiences generate feedback that may inform policy content, processes, and broader governance arrangements over time.

Fig 1. Integration of the Health Policy Triangle (HPT) and Street-Level Bureaucracy (SLB) Theories

Figure 1 illustrates the relationship between the two frameworks. The HPT describes the main domains that influence policy development and implementation, while the SLB perspective highlights frontline discretion and adaptive practices that shape implementation outcomes and create feedback loops within the policy system.

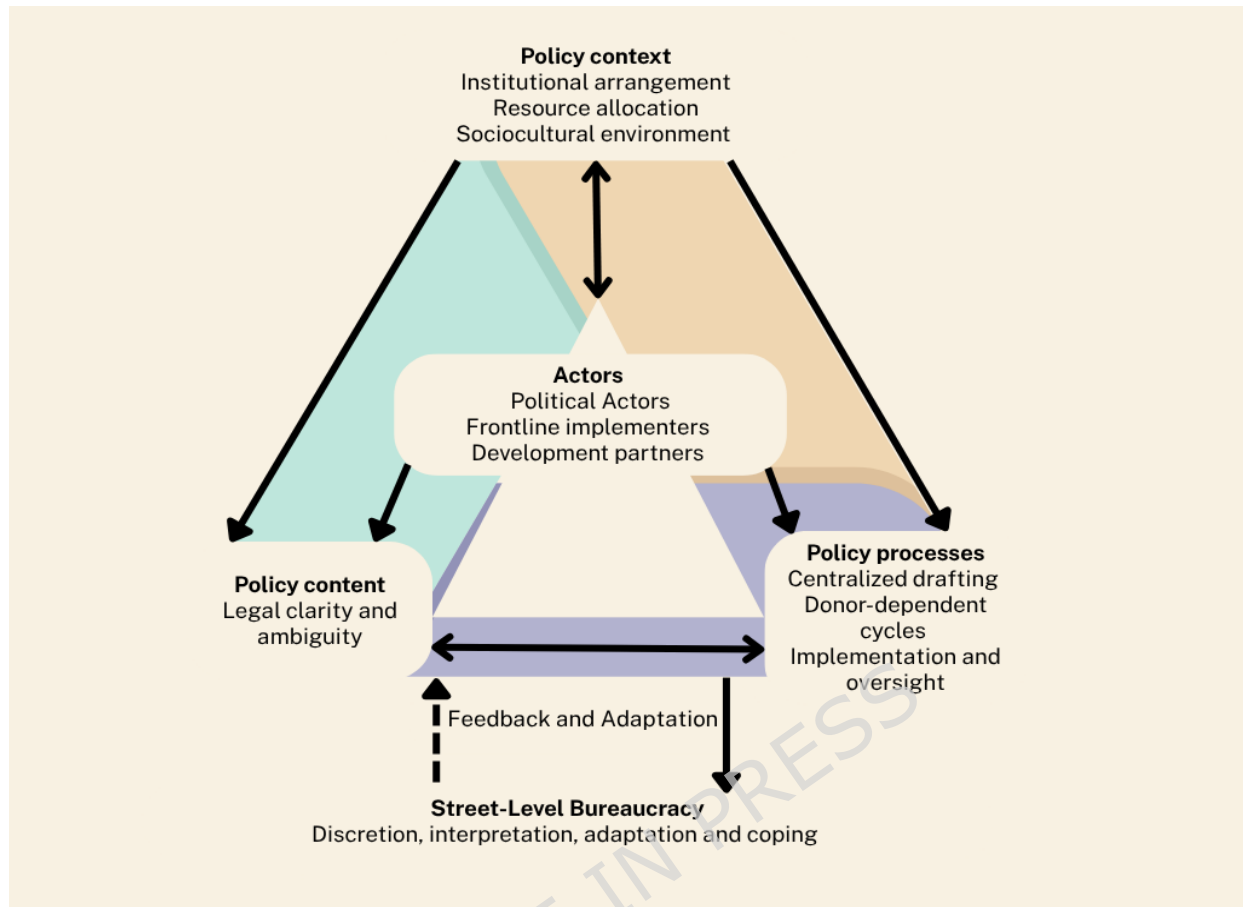


Fig 1. Integration of the Health Policy Triangle (HPT) and Street-Level Bureaucracy (SLB) Theories.

Methods

Study design

This study employed a qualitative descriptive design, using semi-structured key informant interviews to explore the development and implementation of ARH policies in Uganda, with attention to factors that enable or constrain these processes and the coping mechanisms used to navigate them. The qualitative approach was appropriate for examining the complex policy

environment and capturing the perspectives of actors involved in policy development and frontline implementation.

The study focused on the development and implementation of ARH policies, with particular attention to how these policies shape and are enacted through adolescent-friendly service delivery within the health sector.

The study was guided by Walt and Gilson's Health Policy Triangle (HPT), which informed the analysis of policy actors, context, content, and processes, and Lipsky's Street-Level Bureaucracy (SLB) theory, which supported the interpretation of frontline discretion, adaptation, and coping practices. These complementary frameworks enabled examination of both formal policy structures and everyday implementation realities. This study is reported in accordance with the Consolidated Criteria for Reporting Qualitative Research (COREQ) guidelines (S1 Checklist).

Setting

This study was conducted at the national and subnational levels in southwestern Uganda across two study areas: Kabale and Mbarara. Within each study area, participants and study sites were drawn from both district and municipality administrative jurisdictions. These sites were selected to reflect variation in administrative contexts and service-delivery environments relevant to the implementation of ARH policy. Both study areas host a regional referral hospital and health facilities at different levels of care that offer ARH services, and both have active partnerships between government and non-governmental organisations addressing adolescent pregnancies. Including national and subnational settings enabled the study to capture perspectives from both policy formulation and frontline implementation.

Uganda's public health system has a tiered structure: Health Centre (HC) II, HC III, HC IV, and Regional Referral Hospitals (RRHs). HC IIIs offer outpatient services, family planning,

maternity care, and basic labs. HC IVs provide advanced services, such as surgeries and inpatient care, while RRHs handle specialised referrals for districts. The study focused on frontline workers in HC III, IV, and RRHs to explore different service delivery contexts related to ARH policy.

Participants

Twenty-eight key informants were purposively selected: eight policymakers and twenty frontline implementers. Policymakers included one national-level technical officer, three senior medical officers at the national level, and four subnational health officials from district and municipality health offices in the Mbarara and Kabale study areas. Implementers consisted of doctors, clinical officers, nurses/midwives, adolescent peer educators, and village health team members directly involved in ARH service delivery. This purposive sampling strategy ensured the inclusion of both strategic (policy-level) and operational (implementation-level) perspectives, enabling the study to capture experiences from those who shape policy and those who translate it into practice.

Inclusion criteria required that participants be aged 18 or older and actively involved in ARH-related policy formulation, coordination at the national or district level, or the implementation of ARH services at the facility or community level. Participants also had to have held their role for at least 1 year and to have provided informed consent. Individuals not directly involved in ARH policy or service delivery activities or with less than one year of relevant experience were excluded.

The sample size was predetermined to include eight policymakers and twenty implementers to ensure representation across governance levels (national and subnational) and across different cadres and facility levels (Health Centre III, Health Centre IV, and Regional Referral Hospitals). This sampling frame was designed to capture variation in experiences of ARH policy development and implementation across different institutional and service-delivery settings.

Data Collection

Semi-structured interviews were conducted by the main author between 14th July and 30th October 2025. The main author had prior experience in qualitative interviewing. The research team developed the semi-structured interview guides specifically for this study and they were not previously published. They were designed to explore the facilitators and barriers influencing ARH policy development and implementation, as well as the coping strategies employed to address policy gaps. The guides were informed by the study objectives and the study's conceptual framework, namely Walt and Gilson's Health Policy Triangle and Lipsky's Street-Level Bureaucracy theory (30,31), which guided the exploration of policy actors, context, content, processes, frontline discretion, adaptation, and coping mechanisms. The interview guides were piloted before the main data collection and refined for clarity and flow. The English-language interview guides for policymakers and policy implementers are provided in Additional files 1 and 2, respectively.

All interviews were conducted in private settings within participants' workplaces, lasted approximately 45-60 minutes, and were audio-recorded with participants' consent. Twenty-four interviews were conducted face-to-face, and four were conducted virtually via online platforms.

All interviews were conducted in English and transcribed verbatim by trained researchers and assistants. Field notes were taken during and after the interviews.

Data collection and analysis occurred concurrently. Recruitment continued until the predetermined sample was complete. Saturation was then assessed to determine whether this completed sample had generated sufficient depth and breadth of information to address the research questions. Among policymakers, the eight interviews were sufficient to achieve saturation, as no substantively new insights on policy development and governance processes were identified by the final eighth interview. For frontline implementers, saturation was assessed cumulatively across participants from the eight health facilities and community-level health workers rather than within individual facilities. By the final twentieth interview, no substantively new codes or insights were emerging, recurring patterns were evident across implementation settings, and the coding framework had stabilised.

Data Management

Audio recordings were stored on a password-protected computer. Transcripts were pseudonymised and cross-checked against the audio recordings for accuracy. During pseudonymisation, each participant was assigned an alphanumeric identifier indicating the participant group and interview number (POM for policymakers and POI for policy implementers), which was used to attribute quotations in the Results. Non-verbal cues relevant to the content were included in the transcript. Transcripts that were prepared by the research assistants were reviewed by the research team for accuracy. All transcripts were imported into NVivo (Version 15) for coding and organisation.

Data Analysis

Data were analysed using thematic analysis combining inductive and deductive approaches. Braun and Clarke's six-phase process (32); familiarisation, coding, generating initial themes, reviewing themes, defining and naming themes, and reporting guided the analysis. In this study, coding and initial theme development were primarily inductive and data-driven, followed by deductive mapping of the developed themes onto the Health Policy Triangle and theory-informed interpretation using Street-Level Bureaucracy theory.

During familiarisation, transcripts were read closely and initial observations were noted. Relevant segments were then coded, producing an evolving coding framework, and related codes were grouped into candidate themes based on recurring patterns in participants' accounts. Candidate themes were reviewed against the coded data and the wider dataset and were merged, separated, or refined where necessary. The scope and meaning of the final themes were subsequently clarified, and themes were defined and named. After the themes had been developed and reviewed, a deductive stage was undertaken by mapping these themes onto the domains of Walt and Gilson's Health Policy Triangle (actors, context, content, and processes) to organise findings related to policy development and implementation. Street-Level Bureaucracy theory was then applied as an interpretive lens to examine frontline discretion, adaptation, and coping practices. In the reporting phase, the final themes were presented with illustrative participant quotations and organised within the HPT domains, with SLB interpretations integrated where relevant.

Coding was conducted iteratively using NVivo (Version 15). An initial coding framework was developed from early transcripts and refined as analysis progressed. To enhance dependability, approximately 20% of transcripts were independently double-coded by a second researcher. Differences in coding were reviewed and discussed, and code definitions were clarified or

refined where necessary. Final coding decisions were reached through consensus. No statistical measure of intercoder agreement was calculated, as the double-coding process was intended to refine the coding framework and strengthen consistency in its application.

Reflexivity

The lead author is a Ugandan nurse-midwife and academic with prior clinical experience in the Ugandan health system. Her professional familiarity with reproductive health services positioned her partly as an insider and may have facilitated rapport and probing during interviews.

Participants may, however, have perceived this positionality differently depending on their roles. Frontline implementers may have viewed her clinical background as a source of professional familiarity, whereas policymakers may have perceived her more as an academic researcher and an outsider to their specific policymaking roles. However, she was not involved in the development of the ARH policies examined and remained an outsider to participants' specific policymaking and organisational roles. This position may also have shaped how she interpreted health-system and service-delivery experiences. Her clinical background may have heightened her attention to service-delivery constraints, provider experiences, and the practical implications of policy gaps during probing and interpretation, while her outsider position in policymaking may have required greater attention to understanding policy processes from participants' accounts rather than **from prior experience**. Reflexive memos were maintained throughout data collection and analysis to document assumptions, interactions, and analytic decisions, and interpretations were discussed within the research team to question initial assumptions and consider alternative interpretations of the data.

Ethical Considerations

Ethical approval was obtained from the Research Ethics Committees (RECs) of KU Leuven (PRET approval number: G-2024-8892-R4(MAR)) and Kabale University (KABREC-2025-883), with clearance from the Uganda National Council for Science and Technology (UNCST) as the final approval via their National Research Information Management System (NRIMS) (registration number: HS6231ES). Mbarara Regional Referral Hospital, Kabale Regional Referral Hospital, and the relevant district health offices granted administrative permissions. Written informed consent was obtained from all participants prior to the interviews. Confidentiality was maintained through the use of pseudonyms and secure data storage.

Results

Overview of the Participants

Twenty-eight key informants were interviewed from 14th July to 30th October 2025: eight policymakers and 20 policy implementers. Policy implementers primarily comprised nurses/midwives (n = 12), clinical officers (n = 2), doctors (n = 2), and adolescent educators (n = 4). The majority were female (n=16) and had professional experience ranging from 1 to over 11 years (median=7 years).

Policymakers included national-level senior medical officers (n=3), subnational health officials from district and municipality health offices (n=4), and one national-level technical officer. Most were male (n=6), with professional experience ranging from 1 to 10 years (median=5 years). Participants represented national, subnational, facility, and community levels of the health system.

Findings of the thematic analysis

This section presents the findings from key informant interviews with policymakers and implementers involved in ARH policy processes in Uganda. Findings are organised by the HPT domains of actors, context, content, and processes, distinguishing between policy development and implementation. Table 1 presents the themes and subthemes mapped within these domains, with SLB informing the presentation of frontline discretion and coping practices.

Table 1. Mapping of themes and subthemes to the Health Policy Triangle and Street-Level

Bureaucracy frameworks

Framework Domain	Policy Stage	Themes	Subthemes	Illustrative quotes
Actors (HPT)	Development	Stakeholder engagement and influence in policy development	Broad stakeholder engagement but limited influence; political-technical differences in priorities; uneven policy literacy among some subnational actors.	<i>“They [other stakeholders involved in policy consultations] participate, but their feedback does not necessarily determine how the policy takes shape.” (POM4)</i>
Actors (HPT)	Implementation	Frontline knowledge, values and discretion	Knowledge and training; access to policy guidance; provider attitudes and moral judgements; professional and community identities; challenges engaging adolescents	<i>“Some staff see adolescents as having done wrong and deny them the service.” (POI11)</i>
Context (HPT)	Development	System and contextual conditions shaping policy development	Formal review and evidence structures; insufficient or delayed data; institutional instability; donor influence;	<i>“Every five years, we [policymakers] are supposed to be reviewing</i>

Framework Domain	Policy Stage	Themes	Subthemes	Illustrative quotes
			sociocultural and religious influences	<i>documents.”</i> (POM6)
Context (HPT)	Implementation	Resource and sociocultural conditions shaping implementation	Availability of adolescent-friendly spaces and support; stock-outs and supply constraints; inadequate infrastructure and privacy; staffing shortages; parental and religious resistance	<i>“Space is small; privacy is a challenge.”</i> (POI17)
Content (HPT)	Development	Policy design, relevance and ambiguity	Comprehensive policy guidance; outdated policy content; legal and policy ambiguity around adolescent consent; donor influence on policy scope and emphasis.	<i>“The policy does not say no, though it does not say yes... it does not work.”</i> (POM8)
Content (HPT)	Implementation	Accessibility and operational clarity of policy guidance	Guidelines perceived as clear when accessible; inconsistent access to policy documents; ambiguity around consent; bulky, outdated or difficult-to-operationalise guidance	<i>“We [health care providers] do not have the guidelines... but we give the service.”</i> (POI13)
Processes (HPT)	Development	Centralised policy development and limited subnational influence	Structured MoH-led development process; lengthy bureaucratic procedures; limited subnational participation; weak dissemination of draft policies	<i>“Dissemination... remains on paper in people’s laptops.”</i> (POM7)
Processes (HPT)	Implementation	Weak implementation support and continuity	Limited dissemination and training; weak coordination; limited supervision, monitoring and evaluation;	<i>“I [healthcare provider] have never seen anyone come to evaluate</i>

Framework Domain	Policy Stage	Themes	Subthemes	Illustrative quotes
			disruption following donor withdrawal.	<i>the policy.”</i> (POI1)
Coping (SLB)	Development	Policy adaptation under structural constraints	Working within existing approvals; integration with related policy areas; phased or incremental implementation; mobilisation of partner resources	<i>Working within our [policymakers] means... sometimes we are already implementing, but we are implementing without approval</i> (POM5)
	Implementation	Frontline improvisation and local adaptation	Improvised funding and resource use; service integration; personal sacrifice; collaboration with VHTs, parents and community leaders	<i>“We [healthcare provider] even got some money from the PHC grant... so the services kept running.”</i> (POI13)

Policy development (HPT framework)

Actors, contexts, content, and processes influence the development of ARH policies in Uganda.

Participants identified factors that facilitate policy formulation and persistent constraints that hinder policy development.

Actors in policy development

ARH policy development in Uganda involved multiple actors, including national-level technical officers, subnational policymakers, political actors, development partners, and selected

community stakeholders. Subnational policymakers contributed primarily through consultative processes informed by implementation experience, whereas development partners were engaged primarily through funding, technical assistance, and advocacy, rather than through decision-making authority.

Although stakeholder engagement was described as routine in ARH policy formulation, participation was frequently characterised as consultative rather than influential. As one policymaker noted, *“They participate, but their feedback does not necessarily determine how the policy takes shape”* (POM4). Limited technical confidence among some subnational stakeholders further constrained their influence during consultations (POM8).

Tensions between political and technical actors were commonly reported. While technical teams prioritised evidence and continuity, political actors were perceived as driven by visibility and short-term interests, and sometimes redirected or delayed policy decisions. As one policymaker explained, *“the priorities of politicians differ from ours... their support can be impulsive”* (POM3).

Uneven awareness of existing ARH policies and policy processes among some subnational actors further limited substantive engagement during the drafting and review stages. One policymaker explained, *“not everyone has the competence or confidence to engage in technical matters”* (POM8). As a result, although multiple actors were formally involved in policy development, differences in power, priorities, and policy literacy constrained the extent to which participation translated into substantive influence.

Context of policy development

The national policy environment included formal structures intended to support ARH policy development, including periodic policy reviews, strategic planning units within the Ministry of Health, and data systems designed to inform evidence-based decision-making. Several participants noted that health policies are routinely reviewed every five years, providing opportunities to incorporate emerging evidence and implementation experience. As one policymaker explained, *“Every five years, we are supposed to be reviewing documents”* (POM6).

Despite these structures, contextual constraints remained. Limited availability and quality of subnational data hindered the timely incorporation of evidence into policy revision processes, with reporting delays and incomplete datasets reducing responsiveness. As one participant noted, evidence was sometimes *“insufficient or delayed”* (POM7).

Institutional instability further shaped the policy context. Frequent restructuring within ministries and leadership changes disrupted continuity, weakened institutional memory, and slowed policy processes. Participants described policy work being paused or restarted following organisational transitions, prolonging development timelines. The policymaker explained that *“there have been many transitions...leading to starting over again”* (POM3).

Development partners played a significant role in shaping the policy environment through funding, technical assistance, and support for drafting policy documents. While partner involvement enabled progress despite limited domestic resources, it also influenced policy priorities and timelines. Some policymakers reported that donor-driven agendas led to fragmented inputs and duplication across districts. As one policymaker explained, partners’ priorities sometimes led districts to *“duplicate efforts”* rather than *“working together under a*

single policy direction” (POM6), thereby fragmenting policy inputs and complicating coordination during policy development and revision.

Sociocultural factors also influenced the policy context, particularly regarding sensitive ARH issues. Religious and cultural norms shaped debates around sexuality education and adolescent access to contraception, resulting in cautious framing or compromise within policy drafts. As one policymaker observed, religious leaders often “*misinterpret sexuality education*” (POM7), constraining the scope of policy content that could be formally endorsed.

Content of ARH policies during development

ARH policy documents were considered comprehensive and aligned with national and international frameworks, reflecting a rights-based approach to adolescent health. Participants noted that existing policies and strategies provided broad guidance on adolescent-friendly services, sexuality education, and multi-sectoral collaboration.

However, several content-related challenges were identified. Policymakers reported that some ARH policies became outdated by the time revisions were initiated, limiting their responsiveness to emerging adolescent health needs. Delays in revision cycles were frequently mentioned. One policymaker observed that “*the Adolescent Health Policy Guidelines and Service Standards of May 2012... we wanted to review it since 2017*” [and it is still not revised] (POM5).

Policy content was particularly difficult to define in sensitive areas. Legal and policy ambiguity regarding adolescents’ access to contraception created uncertainty during drafting. As one policymaker explained, “*The law does not say no, though it does not say yes... it does not work*” (POM8). This ambiguity constrained policymakers' ability to articulate clear guidance and contributed to the cautious framing of policy provisions.

Donor priorities further shaped policy content. Policymakers noted that development partner funding influenced which ARH issues were emphasised, sometimes leading to shifts in focus during the drafting process. While this support enabled policy development in contexts of limited domestic resources, it also contributed to variation in scope and emphasis across policy documents. One policymaker explained, *“They say no way, maybe you should do it like this. They send you back... because what they said wasn’t part of what you presented.”* (POM5)

Processes of ARH policy development

ARH policy development followed a structured and standardised process led by the Ministry of Health. The process typically involved problem identification, evidence review, drafting by technical teams or consultants, stakeholder consultations, and validation through multisectoral forums. Participants noted that this structure supported alignment across departments and consistency with national health priorities.

At the same time, policymakers characterised the development process as highly centralised and bureaucratic. Multiple layers of approval and lengthy administrative procedures were reported to slow progress and reduce responsiveness to emerging ARH issues. As one policymaker explained, *“You have to go through all these bureaucracies with a lot of back and forth”* (POM7).

Limited involvement of subnational actors during the drafting stages further shaped the development process. Subnational policymakers reported that their participation was largely confined to consultation meetings and that they had minimal influence on draft content. One participant noted, *“policy development should be a bottom-up approach, but now it’s a top-*

down... for me, I have not participated,” limiting the incorporation of subnational implementation realities.

Weak dissemination of draft policies during development also constrained feedback.

Policymakers reported that draft documents were sometimes shared selectively or remained inaccessible beyond small technical teams. As one participant stated, dissemination often *“remains on paper in people’s laptops”* (POM7), restricting opportunities for broader input and iterative refinement.

Policy implementation (HPT framework)

While the development stage reflects structured processes and institutional coordination, implementation in practice reveals the real-world challenges of translating ARH policy into service delivery. Participants’ accounts showed how actors, contexts, content, and processes influenced the daily implementation of ARH policies across facilities.

Actors in policy implementation

Frontline health workers played a central role in translating ARH policies into practice, with provider knowledge, attitudes, and skills strongly influencing adolescents’ access to services under existing ARH policies and service standards.

Implementers who had received training in adolescent-friendly care reported greater confidence in engaging with adolescents and maintaining privacy and confidentiality. As one provider explained, mentorship helped them *“they come, see how you are performing and guide you”* (POI5).

However, limited awareness of ARH policies and inconsistent access to guidelines were widely reported. Some implementers relied on personal experience or peer guidance in the absence of policy documents. One provider noted, *“We do not have the guidelines... but we give the service”* (POI13).

Provider attitudes and moral judgements also shaped service delivery. Despite policy emphasis on non-judgmental care, some staff viewed adolescent sexuality negatively, resulting in denial or restriction of services. As one participant stated, *“Some staff see adolescents as having done wrong and deny them the service”* (POI11).

Professional responsibilities were sometimes difficult to separate from providers' personal and community identities. As one policymaker reflected:

We can provide the services, but you know that we do not operate in isolation. This health worker lives in the community... this health worker is possibly religious... this health worker is a parent, so sometimes it is hard to separate our thoughts and values from some services. (POM5)

Communication with adolescents presented additional challenges, with some adolescents perceived as embarrassed or *“reluctant to engage”* (POI18).

These variations in knowledge, attitudes, values, and access to guidance contributed to uneven implementation of ARH policies across facilities and settings, illustrating how frontline discretion shaped the translation of policy intent into practice.

Context of policy implementation

The implementation of ARH policies occurred within health system contexts characterised by varying levels of resource availability, infrastructure, and community support. Facilities with

dedicated adolescent-friendly spaces, outreach activities, or supportive supervision structures were better positioned to deliver services aligned with ARH policy and service standards. One implementer described an adolescent clinic that was “*outside but part of the hospital*”, which promoted privacy and comfort for adolescents (POI4).

However, substantial contextual constraints affected implementation. Stock-outs of contraceptives and essential supplies, as POI1 explained, meant “*sometimes there are no medicines*”; inadequate infrastructure and limited space compromised service delivery. Privacy was a recurrent challenge, particularly in high-volume facilities. As one provider explained, “*Space is small; privacy is a challenge*” (POI17). Staffing shortages further intensified workloads and limited the time available for adolescent-responsive care, as one implementer explained, “*we are so overwhelmed with work*” (POI14).

Community-level sociocultural norms also shaped the implementation context. Implementers described resistance from parents and religious leaders, which discouraged adolescent service use and constrained provider practices. Some parents were described as unwilling to discuss sexual and reproductive health with adolescents, while religious objections to family planning reduced community acceptance of services. As one participant noted, “*The parent is not ready to discuss such things*” (POI9).

These contextual constraints interacted to shape how ARH policies were enacted at facility and community levels, contributing to variation in service delivery across districts and settings.

Policy content and its relevance for implementation

ARH policies and service guidelines were generally considered clear and relevant when accessible. Participants noted that implementation plans and service standards helped translate

national priorities into operational activities at the facility level. One provider described the guidelines as *“clear and understandable... everyone has a role to play”* (POI6).

Despite this, access to policy documents was inconsistent across facilities. Several implementers reported lacking physical or electronic copies of ARH guidelines and relying instead on memory, peer instruction, or prior training. As one participant stated, *“We do not have the guidelines... but we give the service”* (POI13).

Ambiguities in policy content posed particular challenges during implementation. Unclear guidance regarding consent for minors created dilemmas for providers, especially when parents or guardians were absent. One implementer explained that *“parents are not there... but the adolescent consents”* (POI13), highlighting tensions between legal requirements and service delivery realities.

Policy documents were considered bulky or difficult to operationalise at the facility level, particularly in settings with limited staffing or supervision. Outdated or incomplete guidelines further constrained the consistent application of policy content in daily practice, as one policy implementer explained, *“policies... they come in booklets, and this booklet sometimes is very hard to read, it is bulky”* (POI16).

Processes of ARH policy implementation

Implementation processes were shaped by the dissemination of guidelines, coordination mechanisms, supervision practices, and funding arrangements. Some implementers accessed ARH guidelines through Ministry of Health platforms or partner-supported trainings and benefited from mentorship and integrated outreach activities.

However, dissemination remained a major weakness. Many implementers reported not having received formal training on ARH guidelines or service standards, and lacking access to updated policy documents. One provider noted that “*no department has enough resources to go district by district to disseminate [the guidelines]*” (POI3).

Coordination between national and district structures was described as inconsistent. While multisectoral collaboration was perceived as stronger at the national level, similar coordination mechanisms were often absent or weak at the district and facility levels. As one policymaker explained, “*so coordination is still a challenge at the subnational level*” (POM4). This limited alignment and reduced clarity about implementation roles.

Supervision, monitoring, and evaluation were also reported to be limited. Several implementers indicated that policy implementation was rarely followed up through routine supervision or evaluation visits. As one participant stated, “*I have never seen anyone come to evaluate the policy that was rolled out*” (POI1).

Funding discontinuities further shaped implementation processes. Implementers described situations in which donor-funded adolescent-friendly services were reduced or discontinued following partner withdrawal. One provider explained that after external support ended, “*things changed*”, affecting the continuity and availability of ARH services (POI12).

Coping mechanisms (SLB perspective)

In response to constraints affecting both policy development and implementation, participants described a range of coping strategies to sustain ARH policy processes and service delivery. These strategies reflected adaptive responses to limited resources, procedural delays, and sociocultural resistance.

At the policy development level, coping strategies included working within existing approvals, integrating ARH priorities into related policy areas, and adopting phased or incremental approaches when formal processes were delayed. Some described mobilising support from development partners to advance policy activities in the absence of adequate domestic funding. As one policymaker noted, *“Sometimes we are already implementing, but we are implementing without approval”* (POM5).

At the implementation level, frontline health workers used several strategies to maintain service delivery despite resource constraints. These included reallocating small amounts of funding, improvising with available resources, and integrating ARH activities into other primary healthcare services, such as immunisation or outpatient care. One implementer said, *“While going for immunisation, we also meet adolescents in those areas.”* Another one added, *“We even got some money from the PHC [Primary Health Care] grant... so the services kept running”* (POI13).

Personal sacrifice was also reported, with some providers extending working hours or absorbing additional workloads to support adolescents’ access to services. Implementers further described collaborating with Village Health Teams, parents, and community leaders to reach adolescents and reduce community resistance. POI5 explained that, prior to outreach, teams would hold *“dialogues with leaders and parents”* to build acceptance of ARH services in settings where cultural or religious norms posed barriers.

These coping practices reflect classic Street-Level Bureaucracy dynamics, in which frontline actors adapt policy expectations to the constraints of operational realities. Variations in these adaptive practices contributed to differences in the implementation of ARH policies across facilities and districts.

Discussion

The study found that uneven ARH policy implementation in Uganda stemmed from interconnected conditions spanning policy development and frontline delivery. At the policy-development level, donor-dependent financing and centralised decision-making shaped policy priorities and limited the influence of subnational actors. At the implementation level, weak dissemination, resource constraints, and ambiguity in operational guidance reduced the support available to frontline workers. These conditions widened the space for discretion, leading providers to adapt services through integration, resource improvisation, and community-based strategies. Bringing HPT and SLB together therefore shows how upstream governance arrangements shape the implementation conditions within which frontline discretion occurs, helping to explain why nationally articulated ARH policies are enacted unevenly across settings.

Structural governance constraints in ARH policy systems

A central finding of this study is that governance and financing arrangements shape the conditions under which ARH policies are developed and subsequently implemented. Donor-dependent financing and centralised decision-making emerged as interconnected structural features influencing agenda-setting, policy priorities, stakeholder participation, and the sustainability of policy processes. Their effects were therefore not confined to policy development but extended downstream to the conditions under which implementation occurred.

While development partners play an important enabling role by providing financial and technical support, donor priorities were found to influence which issues are emphasised and how policies are framed. In contexts of limited domestic funding, external financing catalyses ARH policy formulation and resourcing, consistent with findings from Kenya and Ethiopia and broader

evidence on donor influence in national health policy processes (25, 26, 33, 34). However, reliance on external financing can also increase the influence of donor priorities over which issues are advanced and sustained. Donor-driven priorities also contributed to instability when funding cycles ended, or partners shifted focus. Delayed revisions, shifting emphases in policy drafts, and the discontinuation of adolescent-friendly services following partner withdrawal illustrate how policy trajectories become vulnerable to funding volatility. Donor support can therefore enable policy development while donor dependence may simultaneously reduce continuity and national ownership of policy priorities. This influence operated primarily through financing and agenda-setting rather than formal decision-making authority. From a policy sovereignty perspective, reliance on external financing may therefore narrow the practical space for national actors to set and sustain priorities independently of donor funding cycles. Similar patterns of funding-related instability have been documented in other sub-Saharan African settings (27, 35).

At the same time, stakeholder participation in ARH policy processes was frequently consultative rather than influential. Although multisectoral engagement is formally emphasised, decision-making authority remained concentrated within central technical structures. This concentration of authority meant that consultation did not necessarily translate into influence over policy content, limiting the extent to which district- and facility-level implementation realities could shape national policy decisions. Limited subnational policy literacy and uneven technical confidence further constrained meaningful engagement, reinforcing asymmetries between national technical teams and subnational-level actors. These patterns are consistent with wider health policy analyses showing that policy processes are shaped by actors, power, and decision

space, and that decentralisation does not necessarily translate into greater decision-making authority at subnational levels (30, 36).

The findings suggest donor dependence and centralised governance structures shape the direction and responsiveness of ARH policy. Financing arrangements influence priorities, while concentrated authority limits the incorporation of contextual realities of implementation. These upstream governance conditions can create a mismatch between national policy intentions and the realities of district- and facility-level implementation. Such structural conditions have downstream implications for implementation consistency and sustainability.

From policy design to uneven implementation

The study identified a persistent gap between centrally developed ARH policies and their enactment in frontline practice. Although policy documents articulate commitments to adolescent-friendly, rights-based care, implementation occurs in facilities characterised by resource constraints, uneven dissemination of guidelines, and reliance on frontline discretion. When national guidance is not consistently disseminated or translated into practical implementation support, frontline providers have less institutional direction for day-to-day decisions, increasing reliance on local judgement and adaptation.

Limited access to facility-level guidelines and service standards therefore widens the disconnect between national frameworks and operational realities. Similar gaps between well-articulated policies and uneven implementation have been documented in Kenya and Ghana (25, 37), while evidence from Uganda's RMNCAH landscape analyses shows that bulky, technical policy documents with limited contextual adaptation can constrain uptake at the subnational level (38).

Policy ambiguity, particularly regarding adolescents' consent to contraception, further intensified implementation challenges. In contexts where policies do not clearly specify permissible actions, implementers must reconcile legal uncertainty, institutional norms, and personal values. From a Street-Level Bureaucracy perspective, such ambiguity expands the scope for discretion, making implementation outcomes highly dependent on individual provider judgment and local conditions. This helps explain how unclear policy guidance can produce variation in implementation, as providers may interpret the same policy differently depending on institutional and social circumstances. Comparative analyses from Uganda and Kenya similarly show that unclear legal and policy positioning on adolescent contraception creates confusion among providers and weakens consistent policy interpretation (39).

The findings further suggest that frontline discretion is socially embedded rather than exercised in isolation. Providers reported difficulty separating professional obligations from their identities as community members, parents, and religious adherents. In contexts where institutional guidance and supervision are limited, these overlapping identities may further intensify the influence of personal and community norms on policy enactment. This helps explain why providers working under the same national policy may interpret and enact it differently. Street-Level Bureaucracy theory similarly recognises that frontline actors operate within overlapping institutional and social environments that shape how policies are interpreted and enacted (40, 41).

The findings suggest that implementation variability is closely linked to structural features of ARH policy systems, rather than being explained solely by isolated provider-level failures. Without consistent dissemination of guidelines, supportive supervision, and alignment between policy expectations and facility-level realities, enactment remains contingent on individual

discretion. Frontline variation therefore reflects not only provider-level decision-making but also the institutional conditions within which those decisions are made. Within Uganda's decentralised health system, subnational leadership is important in translating national policy into facility-level dissemination, coordination, supervision, and implementation support. Although Kabale and Mbarara were selected to capture variation in service-delivery contexts, the analysis did not identify sufficiently consistent setting-specific patterns to support a formal comparison between the two settings. Strengthening institutional mechanisms that link policy development to service delivery, including clearer operational guidance and sustained supervision, is essential to reduce variability and improve consistency (27, 42).

Coping and informal governance: Adaptation and its limits

A further important contribution of this study lies in its examination of coping strategies employed by both policymakers and frontline implementers in response to persistent constraints. These adaptive practices functioned as informal governance mechanisms that sustained ARH policy processes and service delivery despite systemic weaknesses. Rather than operating only as temporary responses to implementation problems, recurrent adaptations appeared to become part of how ARH policy was enacted in practice.

At the policy development level, incremental implementation, periodic review processes, and piloting in selected districts enabled policymakers to maintain momentum despite bureaucratic delays and donor-driven shifts in priorities. However, these adaptations were often reactive responses to structural constraints rather than strategic innovations. They allowed policy processes to continue without necessarily resolving the governance and financing conditions that generated the need for adaptation. Similar approaches to iterative policy reform and learning through piloting have been described in global guidance and Ugandan evidence (38).

At the implementation level, frontline providers integrated ARH into broader primary healthcare services and leveraged community structures to sustain service delivery under constrained conditions, consistent with previous studies in Uganda (43). They also improvised with available resources and, in some instances, relied on personal effort or sacrifice to maintain services.

These practices show how frontline discretion can compensate for gaps in formal implementation support, allowing services to continue despite resource and institutional constraints. From a Street-Level Bureaucracy perspective, these practices reflect the central role of discretion in translating policy intent into practice when formal systems are weak or incomplete (40).

While coping strategies bridged gaps between policy ambition and operational reality, they also revealed systemic vulnerabilities. Reliance on informal adaptations risks normalising structural gaps, shifting responsibility from institutions to individuals, and entrenching uneven implementation across settings. When such adaptations are repeatedly relied upon, they can become a de facto part of the implementation architecture, even though they are not formally specified in policy. Strengthening ARH policy implementation will therefore require not only recognising local adaptive capacity but also institutionalising clearer policy frameworks, more stable financing, and robust monitoring systems to reduce reliance on informal coping over time (38).

These findings also show how coping practices are linked to upstream governance and financing conditions. Donor-dependent financing can affect the continuity of policy activities, dissemination, and supervisory support, while frontline implementers simultaneously work within resource-constrained service environments. Where formal implementation support is insufficient, discretion and coping become mechanisms through which policy is kept operational.

Uneven ARH policy enactment therefore reflects not only individual provider behaviour but also the institutional conditions that make informal adaptation necessary.

Strengths and limitations

This study has several strengths. By examining both policy development and implementation within a single analytical framework, it moves beyond stage-specific analysis and shows how governance structures at the development level shape discretionary practices at the implementation level. Integrating the Health Policy Triangle and Street-Level Bureaucracy theories enabled analysis of how macro-level financing and governance dynamics interact with frontline decision-making. For health policy research examining both upstream policy processes and frontline implementation, combining HPT and SLB may therefore provide a useful approach for tracing how governance conditions shape discretionary implementation in practice. Including national policymakers, subnational health officials, and frontline implementers further strengthened the analysis by capturing perspectives across governance levels.

The study also has limitations. Conducted in two study areas in southwestern Uganda, the findings are not generalisable, though they offer transferable insights for similar donor-dependent health systems. Reliance on self-reported accounts may have introduced recall or social desirability bias, particularly given the sensitivity of discussions around donor influence and adolescent sexuality. Finally, the study focused primarily on health-sector actors and did not include other sectors relevant to ARH such as the education sector, or adolescents, limiting insight into cross-sectoral coordination and policy enactment across health and education settings as well as beneficiary experiences.

Conclusion

Uneven implementation of ARH policy in Uganda is shaped not only by frontline constraints but also by governance arrangements that create the conditions for discretion. Donor-dependent financing and centralised decision-making influence policy priorities and implementation support. When dissemination, supervision, and operational guidance are weak or ambiguous, frontline discretion and informal coping become more prominent. By linking HPT and SLB, this study shows how upstream governance arrangements condition the scope of frontline discretion and, in turn, the consistency of policy implementation. Strengthening implementation therefore requires more stable domestic financing, stronger subnational engagement, clearer operational guidance, and institutional support that reduces reliance on informal adaptation.

List of abbreviations

ARH: Adolescent Reproductive Health

HPT: Health Policy Triangle

LMICs: Low- and Middle-Income Countries

MoH: Ministry of Health

NRIMS: National Research Information Management System

PHC: Primary Health Care

REC: Research Ethics Committee

RMNCAH: Reproductive, Maternal, Newborn, Child and Adolescent Health

SLB: Street-Level Bureaucracy

SRH: Sexual and Reproductive Health

UNCST: Uganda National Council for Science and Technology

USAID: United States Agency for International Development

VHT: Village Health Team

WHO: World Health Organisation

Declarations

Ethics approval and consent to participate

Ethical approval was obtained from the Research Ethics Committee at Katholieke Universiteit Leuven (KU Leuven) (PRET approval number: G-2024-8892-R4(MAR)) and Kabale University Research Ethics Committee (KABREC-2025-883). The proposal was then submitted to the Uganda National Council for Science and Technology (UNCST) (registration number: HS6231ES) for final clearance via the National Research Information Management System (NRIMS). Administrative approvals were also obtained from Mbarara Regional Referral Hospital, Kabale Regional Referral Hospital, and the respective District Health Offices in Mbarara and Kabale. All participants gave written informed consent.

Consent for publication

Not applicable. The manuscript does not contain any individual person's identifiable data, images, or videos.

Availability of data and materials

The datasets generated and analysed during the current study are not publicly available because they consist of qualitative interview transcripts containing sensitive and potentially identifiable information, and participants did not consent to public sharing of full interview transcripts. De-

identified excerpts supporting the findings are included in the manuscript. Additional de-identified excerpts may be made available to qualified researchers from the corresponding author upon reasonable request, subject to relevant ethical approvals and institutional data-sharing requirements.

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Competing interests

The authors declare that they have no competing interests.

Authors' contributions

SA conceptualised and designed the study, conducted data collection and led data analysis, interpreted findings, and drafted the manuscript. KM and VNN provided conceptual and methodological guidance, supervised the study, supported the interpretation of findings, and critically revised the manuscript. All authors read and approved the final manuscript.

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Additional files

Additional file 1. English-language semi-structured interview guide for policymakers. This file contains the interview guide developed for this study and used to collect data from policymakers involved in adolescent reproductive health policy development and implementation.

Additional file 2. English-language semi-structured interview guide for policy implementers. This file contains the interview guide developed for this study and used to collect data from frontline implementers involved in adolescent reproductive health service delivery.

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Supporting information: S1 Checklist, COREQ checklist.

