

**The impact of the COVID-19 pandemic on programs that combat
child marriage among girls: a scoping review.**

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LIST OF ACRONYMS

AP: Adolescent Pregnancy.

ACRWC: African Charter on the Rights and Welfare of the Child.

CCT: Conditional Cash Transfer.

CEDAW: Convention on the Elimination of All Forms of Discrimination Against Women.

CFM: Child Forced Marriage.

CM: Child Marriage.

CRC: Convention on the Rights of the Child.

CRIN: Children Rights International Network

GPECM: Global Programme to End Child Marriage.

DRC: Democratic Republic of Congo.

FAWE: Forum for African Women Educationalists

FGM/C: Female Genital Mutilation/Cutting.

FORWARD: Foundation for Women's Health Research and Development.

GBV: Gender-Based Violence.

HAY: Healthy Adolescents and Young People

MSI: Marie Stopes International.

NGO: Non-Governmental Organization.

SDG: Sustainable Development Goals.

SRHR: Sexual and Reproductive Health and Rights.

UNFPA: United Nations Population Fund.

VAWG: Violence Against Women and Girls.

WRO: Women's Rights Organizations

ABSTRACT:

Background: Every year 12 million girls under 18 years are married, and by 2020 21% of girls under 18 worldwide were estimated to be married. The regions with the highest prevalence of child marriage are Sub-Saharan Africa, South Asia, Latin America, and the Caribbean. Measures and programs to end child marriage were implemented in many countries, and strategies were used alone or in combination, achieving a certain level of success. The COVID-19 pandemic is reported to have led to a 25-year reversal of progress and it forced many programs to stop their activities.

Aim: To identify and review the relevant literature about the consequences of the COVID-19 epidemic for different programs and approaches aimed at combatting child marriage, the challenges these encountered, and the program's coping mechanisms.

Method: A scoping review of the literature was conducted, using the PRISMA approach. Searches were performed in 3 databases: ProQuest, PsycINFO, and Web of Science; the search motor Google Scholar was also used. After removing duplicates and performing a full-text reading of 36 articles, 13 articles were included from the databases and 2 from Google Scholar. A narrative data synthesis was used for the data analysis.

Findings: The main challenges child marriage programs encountered during COVID-19 were the redirection of resources, lockdown, closure of schools, travel restrictions, social distancing measures, uneven access to mobile phones and the internet, fear of being infected, youth migration, supply chain disruption, misuse of child marriage laws, mandatory mask-wearing, and gender inequality. The redirection of resources led to the reduction of the offer of SRHR services, especially in LMICs, and the abandonment of CM surveillance. The lockdown, school closures and lack of safe spaces, and social distancing measures led to the interruption of interventions addressing SRHR, empowerment and social norms. Girls stopped trying to access CM programs due to travel restrictions and fear of being infected. Travel restrictions also caused impediments to reaching CM victims, and reporting CM cases. The uneven access to mobile phones and the internet impeded virtual e-learning programs and the making of legal complaints about child marriage cases through the legal system. SRHR services in rural areas collapsed due to youth migration and stopped providing contraceptives to the young due to supply chain disruptions. The coping mechanisms adopted

by CM programs to continue their work during the pandemic were the implementation of measures and temporary policies to protect women, and the use of social media, virtual e-learning, television, radio, and mobile phones.

Conclusions: During the COVID-19 epidemic, various direct and indirect approaches and programs faced many of the same challenges and consequences as occurred during previous health emergencies. The mechanisms put in place to cope with the consequences of development program interruptions, including those combatting child marriage, are still few. There seems to be a need to learn from past emergencies and prepare to continue reaching all girls and vulnerable groups with necessary services and programs.

I. INTRODUCTION

The aim of this scoping review is to explore how the COVID-19 pandemic has affected programs combatting child marriage. In this Introduction chapter, I will first introduce the phenomenon of child marriage, its consequences, its meaning in the human rights context, the most affected areas, and the global, governmental, organizational, and non-organizational efforts to end this practice. Ending up with the rationalization of this study, its aim, and the research question.

1.1. Background

1.1.1. Definitions and occurrence of child marriage

Child marriage is defined as a formal or informal union of a child before the age of 18 years (Efevbera et al., 2017), and it can be forced or self-initiated. Child marriage practice affects both genders, but it is more common among girls than boys, and it is more likely that girls are forced into a child marriage than boys (Arthur et al., 2017). Moreover, the age of marriage is on average lower for females with more harmful consequences for girls than for boys (Efevbera et al., 2022). Each year approximately 12 million girls younger than 18 years of age are married, according to UNICEF (2020). Globally, by 2020 an estimated 650 million girls and women were married before their 18th birthday (Efevbera et al., 2022). This means that 21% of women were younger than 18 years when they married (UNICEF, 2020a). From a global public health point of view, child marriage is an important topic as it affects the health and well-being of many girls, and results in increased maternal and infant mortality and morbidity, among others (Arthur et al., 2017).

1.1.2. The consequences of child marriage

The consequences that married girls face are often worse than the expected benefits. Girls who are married at a very young age, are at risk of different deprivations, such as the likelihood of becoming the very young mother of at least one child, facing severely constrained access to schooling, and enduring higher rates of food insecurity (Das, et al., 2022), higher risk of experiencing gender-based violence, sexually transmitted infection and cervical cancer, together with risks during pregnancy, labor, and delivery, infant mortality and maternal mortality. Girls also suffer from social isolation and carry poor mental health

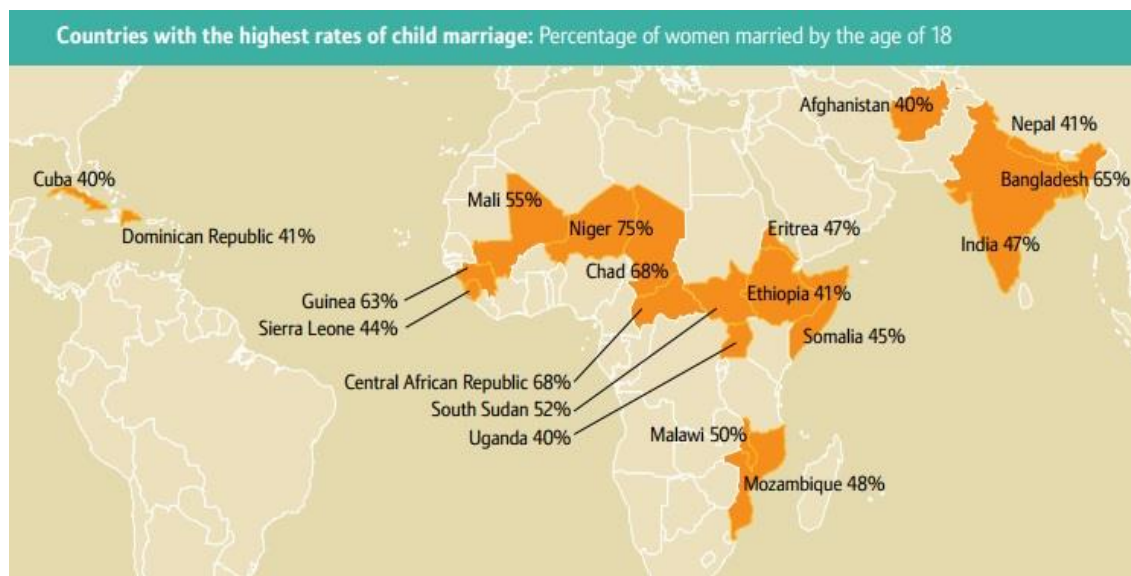
(Das et al., 2022) (Siddiqi & Greene, 2021), and marriage often leads to deprivation of their childhood, impaired well-being, and it limits academic potential and their opportunities for career and vocational advancement (Deane, 2021).

1.1.3. Geographical occurrence of child marriage

Geographically, Sub-Saharan Africa is the region with the highest prevalence of child marriage, in this area 35% of girls are married before they turn 18 years old (Das et al., 2022). South Asia is the second largest area with 30% and the third area is Latin America and the Caribbean, where one in four girls under the age of 18 are married (Das et al., 2022., p.1). This data coincides with rates of adolescents that gave birth by 2022, with 58% in Africa, followed by Asia at 28%, and 14% in Latin America and the Caribbean. Child marriage practice does not belong just to these regions but also to countries such as the USA, however, the practice is more prevalent in low- and middle-income countries.

By March 2022, the countries with the highest rates of child marriage according to UNICEF were Niger (76%), followed by the Central African Republic (61%), and Chad (61%), based on calculations from a survey that includes women aged between 20 and 24 that were married before they became 18 years old (UNICEF, 2022a).

Figure 1: Map of the countries with the highest rates of child marriage.



Source: International Business Times, 2014.

1.1.4. Child marriage as a violation of human rights

The Universal Declaration of Human Rights enshrines that child marriage represents serious violations of children's sexual and reproductive health and rights, education, equality, and a life free from violence and exploitation, freedom of expression, and the right to be protected from harmful traditional practices (Arthur et al., 2017). Additionally, child marriage deprives children's right to fully participate in education, the economy, and politics. The Universal Declaration also states that marriage must be consent-free for both parties, which means that both participants accept voluntarily, with the total enjoyment of their autonomy to get married, and by being properly informed of what marriage means (Arthur et al., 2017). Consent cannot be free when one of the parties involved is not sufficiently mature to make an informed decision about a life partner (Arthur et al., 2017).

1.1.5. National and international efforts and programs to end child marriage.

Several efforts have been made to combat child marriage, across and within countries, and at different levels, from the global to the national governmental, and non-governmental organizational levels. Besides the Universal Declaration of Human Rights, there are several legal instruments committed to eradicating child marriage, for example, the 1989 United Nations Convention on the Rights of the Child (CRC), the 1990 African Charter on the Rights and Welfare of the Child (ACRWC), the Supplementary Convention on the Abolition of Slavery, the Slave Trade, and Institutions and Practices Similar to Slavery (1956); the Convention on Consent to Marriage, Minimum Age for Marriage and Registration of Marriages in 1964, the International Covenant on Civil and Political Rights (1966), the International Covenant on Economic, Social and Cultural Rights (1966) (Deane, 2021), the 1979 Convention on the Elimination of All Forms of discrimination against women (CEDAW), the 1995 Beijing Platform and Declaration for Action, and the Protocol to the African Charter on Human and People's Rights and on the Rights of Women in Africa in 2003 (Arthur et al., 2017), (UNICEF, 2022b).

The United Nations Sustainable Development Goals (SDG) of 2015 included the elimination of all harmful practices by 2030, such as child-, early, and forced marriage, and female mutilation, as part of SDG 5 on Gender equality, and subgoal 5.3 (United Nations, 2022). At the government level in many countries, legal protections were established that set a

minimum marriage age to combat child marriage (Arthur et al., 2017), and they set also that marriage must be free, and occur with full consent.

For instance, Niger, Central African Republic, and Chad, the countries with the highest rates of child marriage by 2022 (UNICEF, 2022a), all include national measures to combat child marriage.

Niger adopted some strategies to end child marriage through a multisector national action plan, implemented in 2017, and through a multi-stakeholder collaboration between the Niger government and UNICEF-UNFPA, and a platform to advocate for better legislation for those below 18 years of age, both implemented in 2018 (Deane, 2021).

For the Central African Republic, the measures to prevent CM are indicated through the country's commitment to Sustainable Development Goal (SDG) #5, to eliminate "child marriage, forced marriage and female genital mutilation by 2030" (Girls Not Brides, 2020). Its co-sponsoring in the resolutions on child-, early-, and forced marriage, the ratification of the Convention on the Rights of the Child that sets the age of 18 as the minimum marriage age, and its adherence to the Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW) (Girls Not Brides, 2020).

Chad also committed to SDG 5 on gender equality by adopting specific national strategies, for instance, the national campaign "Altogether, let's put an end to the Marriage of Children" (Girls Not Brides, 2022a), and ratifications of resolutions that advocate children's rights and ensure free and full consent to marriage to be above the age of 18 years (Girls Not Brides, 2022a).

1.1.6. Non-Governmental Organizations that combat child marriage

Non-governmental organizations have implemented programs to combat child marriage either directly or indirectly, by adopting and combining different approaches and strategies. For example, Save the Children, an international non-governmental organization (NGO) is trying to reduce child marriage and teenage pregnancies by promoting inclusive education and the acquirement of life skills (Svanemyr, 2021). The efforts of the global organization Girls Not Brides, another NGO, are based on the theory of change that includes girls' empowerment, mobilization of families and communities, service provision, and implementation and establishment of law (Psaki et al., 2022). The organization CARE

Ethiopia is another example of an NGO that also works to combat child marriage and its programs have achieved success through vocational training and access to savings and loans (CARE, 2023). Other organizations are the Children Rights International Network (CRIN), Forum for African Women Educationalists (FAWE), FORWARD, Girls Not Brides, GirlsUP, Humanium, International Center for Research on Women (ICRW), and more (16days, 2013). All these efforts have shown effectiveness in increasing the child marriage age and decreasing child marriage prevalence. However, at the global, governmental, and organizational levels, these efforts to end child marriage have been impacted negatively by the COVID-19 pandemic.

1.1.7. The COVID-19 pandemic and Child Marriage

In 2020 the COVID-19 pandemic outbreak took place. The COVID-19 pandemic brought devastating consequences globally, such as economic shocks, and disruption of basic health and education services among others. For child marriage, the pandemic is claimed to mean 25 years reverse of the progress of ending child marriage (Cousins, 2020). The pandemic has forced families to consider marrying their children to alleviate poverty, thus, child marriage has been used as a coping mechanism resulting in a rise in the child marriage rate.

Although accurate numbers of child marriages during COVID-19 are missing, and the data varies from source to source, recent studies have suggested that the pandemic has put girls more at risk of becoming child brides (UNICEF, 2021b).

For example, Save the Children's Girlhood Report 2020 pointed out that child marriage has increased during COVID-19. According to the report, before the pandemic, in 2020 it was estimated that 100 million girls were at risk of becoming child brides (Szabo & Edwards, 2020). The COVID-19 pandemic added 10 million girls at risk of becoming child brides, which is estimated to occur until 2030 (UNICEF, 2021b). The same report also predicted that 10 million children will never return to school (Szabo & Edwards, 2020). COVID-19 also represents a delay in research, as it has impeded research, data collection, and evaluation efforts on child marriage (Das et al., 2021).

The pandemic put at risk the achievement of eradicating child marriage by 2030, and it is also counterproductive for programs that were achieving positive results in increasing the age of marriage and decreasing child marriage, and an impediment for governments to accomplish laws against child marriage. Data shows that married girls have experienced worse health,

widespread psychological distress, food insecurity, heightened fear of job loss, and greater poverty during the pandemic (Das et al., 2022). This is even worse for refugee girls (Madhumita et al., 2021).

By 2021 the identified factors that influenced the increase in child marriage during the COVID-19 pandemic are multiple. For instance, school closures during the lockdown increased the possibility that girls wouldn't go back to school and contributed to the absence of a protective environment for girls (Svanemyr & Wang, 2021). Moreover, economic pressure on families driven by poverty created the perception that their daughters would be safer if married (Deane, 2021). Also, in the case of the death of a parent, female orphans are more likely to assume the parental responsibility for younger siblings which forces them to drop out of school and get married (Svanemyr & Wang, 2021). These drivers to child marriage existed before the pandemic and have probably been heightened during the pandemic and led to an increase in child marriage. Besides these factors, the pandemic also caused the interruption of programs and services that have as a goal to end child marriage, as the pandemic caused difficulties for girls to access services and programs that protect them, and these disruptions allegedly intensified sexual violence and abuse of women and girls (UNICEF, 2021). To sum up, low- and middle-income countries have the highest rates of child marriage, and consequently, the highest interruptions of programs and services have occurred in these countries (Meherali et al., 2021). This study analyses the challenges the programs that combat child marriage met during the COVID-19 epidemic and identifies the programs' coping mechanisms.

1.2. The rationale of the study

There is a knowledge gap about the challenges and interruption of the programs to combat child marriage during the COVID-19 pandemic, the consequences associated with this disruption, and potential coping mechanisms. Knowledge regarding the challenges the programs encountered during the pandemic is relatively scarce. Moreover, the challenges the programs encountered vary, and it is interesting to explore and identify how these factors affected their performance. To our knowledge, there is no scientific review about the challenges programs that combat child marriage have encountered during the pandemic, something this scoping review will address, by reviewing all the found information and

literature about the topic. The findings of this review may inform future programs to end child marriage during emergencies and crises and contribute to preventing girls' ill health.

The COVID-19 pandemic has had a negative impact on many development goals around the world. In this study, the focus will be on the consequences of the pandemic on programs that work to end child marriage, in both governmental and non-governmental organizations (NGOs).

1.2. Aim of the scoping review

The aim of this study is to identify and review the relevant literature about the main challenges the different programs aiming at combatting child marriage encountered during the COVID-19 epidemic, identify the consequences of these challenges in child marriage programs, and the program's coping mechanisms.

I will try to answer the following main research question(s?):

1.3. Research questions

What were the main challenges that the different programs aiming at combatting child marriage among girls encountered during the COVID-19 pandemic, and how did these programs address the challenges?

II. THEORETICAL FRAMEWORK

In this chapter child marriage and various related concepts are introduced and defined, including the type of programs that combat child marriage (CM), their main strategies and approaches, or key thematic areas, as will be used interchangeably, as synonyms. The programs pursue the achievement of their goals through direct and indirect means, and I will present the most common CM approaches and programs.

2.1. Child marriage

Different authors define child marriage as the union of a child under 18 years old (Efevbera et al., 2017) (Psaki et al., 2021) and (Harrison et al., 2023). Its practice is established as a threat

to girls, adolescents, and their children around the world, as it commonly condemns girls to leave school, unaware of their rights, and it excludes them from certain parts of society, with harmful consequences. It also has negative effects on societies by perpetuating intergenerational poverty (Harrison et al., 2023). As mentioned previously, child marriage is identified as a violation of human rights and in various countries, its practice is illegal (Psaki et al., 2021). However, in many countries, child marriage is still a common tradition. Child marriage drivers are different from context to context and are interconnected with each other as detailed in the following framework based on Psaki et al., (2021).

2.1.1. The drivers of child marriage

The main drivers for child marriage are considered to be poverty and economic reasons, social norms, child's lack of agency, lack of opportunity, and pregnancy/fear of pregnancy (Psaki et al., 2021). When it comes to poverty and economic factors, the poorer the girl, the higher the risk for child marriage. However, this driver works in different manners; child marriage can be used either to reduce the financial burden of the girl's family or for girls to choose marriage when parents do not have the resources to provide a home or education for them (Psaki et al., 2021). According to Psaki et al. (2021), child marriage relates to social norms and parents' attitudes. In some settings, where premarital pregnancy is a tabu, social norms are the main reason for child marriage, pressing parents to marry their daughters due to the fear that girls will get pregnant out of marriage. Lack of agency is another important aspect, where girls cannot decide whether they want to get married or not. In some cases, such as in Malawi, Niger, and Bangladesh girls do not know that their marriage may be already planned, and they cannot do anything about it or the only solution is to escape (Psaki et al., 2021). Lack of opportunities refers not just to the lack of education for girls but also to the lack of work opportunities after finishing education, making parents question the value of education for girls. Moreover, since girls might not find work because they lack higher academic skills that primary and secondary school do not provide, they may see marriage as a unique way to get away from their parents. Finally, child marriage is used as a strategy to protect girls from sexual assault, sexually transmitted infections, and concerns about family honor, like in Nigeria, for example (Deane, 2021).

2.1.1. Actions and approaches to combatting child marriage.

Actions to end child marriage may be launched by governments as well as by the private sector. National and international not-for-profit organizations' work often includes programs defined as a collection of organized activities to accomplish a specific goal, that in this case should involve the improvement of the targeted people's lives (What's the Difference? 2017). Programs to eradicate child marriage have existed for many years, and to achieve the goal of eliminating child marriage, they use different strategies, aiming to reach their goals through direct and/or indirect means (Harrison et al., 2023). One example of an indirect means to reduce child marriage may be a policy aiming to increase educational rates in girls. It is argued that this might have a greater indirect impact on reducing child marriage (Harrison et al., 2023). Such strategies are for example applied in sexual and reproductive health and rights (SRHR) interventions (Girls Not Brides, 2019) and other empowerment interventions. On the other side, direct means refers to a program that has a specific goal to end child marriage. For example, the Global Programme to End Child Marriage from UNFPA and UNICEF (UNFPA-UNICEF, 2020).

Approaches to combat child marriage can also be described according to different key thematic areas (What's the Difference? 2017), and by adopting and combining a different number of strategies. For example, The Population Council working in India, Malawi, Mali, and Niger (Population Council, 2023) includes 1) life skills, 2) sexual education and sexual and reproductive health services, 3) changing social norms, and 4) legal and policy frameworks, as the approaches to ending child marriage. On the other side, the approaches that UNICEF, Girls Not Brides, and UNFPA include are: "1) education; 2) livelihoods and economic rights; 3) sexual and reproductive health; 4) voice, choice, and agency; 5) individual and collective social norms; 6) women's rights organizations (WROs) and feminist movements; and 7) legal reform and gender-responsive budgeting" (What's the Difference? 2017).

In their systematic review, Yukich et al. (2021) include the following indirect strategies: 1) Girls' empowerment and participation in normal schooling, 2) Community education and dialogue, 3) Educating parents, 4) Economic incentives, and 5) Supporting legislation and policy.

To sum up, the literature about how to combat child marriage identifies several approaches and key thematic areas employed by different organizations. For this study, the most

mentioned approaches are those presented below, and the order of the approaches is based on their frequency in the articles:

1. Sexual and reproductive health and rights (SRHR) approaches
2. Changing social norms approaches.
3. Legal and policy frameworks-based approaches
4. Education-based approaches.
5. Economic incentives approaches.
6. Life skills approach.
7. Empowerment of girls.

All these strategies can be used alone or in combination, in multicomponent or single-component interventions (Malhotra & Elnakib, 2020).

1. Sexual and Reproductive Health and Rights

When addressing sexual and reproductive health rights (SRHR), the programs' intention is to focus on the right to enjoy a satisfied, safe, equitable, and emancipated sexual life, be free to decide when to start a family, have sexual relations, get married, and "have access to information and means to achieve their reproductive goals" (Girls Not Brides, 2019). In the SRHR programs/services girls and boys will get the necessary tools to develop the life skills to improve their sexual and reproductive health, which includes knowledge about sexual infections, healthy relations, and sexual orientation, being critical regarding harmful social norms such as child marriage, or gender inequitable norms and gender-based violence (GBV) (Girls Not Brides, 2019). Moreover, SRHR services also provide contraception, abortion, post-abortion care, wider sexual health services, and HIV prevention services (Church et al., 2020). SRHR programs have shown success and are offered in schools, safe spaces, and girls' clubs, where girls who have no access to school can get knowledge of SRHR in safe settings. According to the Girls Not Brides (2019) thematic brief, there is strong evidence about the relationship between sexual education and higher marriage age. Moreover, it is suggested that SRHR programs that involve either parents or community members are more likely to achieve behavior change (Girls Not Brides, 2019).

2. Changing Social Norms

Social norms interventions aim to change the social expectation that girls must marry before 18 years of age. This type of intervention includes topics about sexuality, future economic roles, and the personal safety of girls (Greene et al., 2021, p.8) as girls in this type of society are also limited to access education, healthcare, and livelihood opportunities (CRANK, 2023). This type of approach targets all levels of society, community decision-makers, gatekeepers, community members, both men and women, and religious leaders (Greene et al., 2021) (CRANK, 2023) and promotes community dialogue between these actors. The evidence shows that to achieve more sustainable results it is relevant to commit men and boys and combine this intervention with education (Greene et al., 2021) (CRANK, 2023). Social norms interventions normally involve schools, youth clubs, and healthcare services.

3. Legal and policy frameworks-based programs

Programs addressing legal and policy frameworks often refer to the minimum age of marriage, which by law should be 18 years of age (Mahtab & Fariha, 2022). The establishment of a minimum age of marriage is to protect children from "abuse, harm, violence, and exploitation" (Mahtab & Fariha, 2022), which are common consequences of child marriage. Many countries have a law on 18 years of age as the minimum age of marriage, yet at the same time, many countries include exceptions to this law. For example, in Bangladesh, the law states that the minimum age of marriage is 18 years, but in special circumstances, parents and/or legal tutors can apply to marry their children before 18 years of age (Mahtab & Fariha, 2022). The COVID-19 pandemic was considered a special circumstance, thus, according to the law in Bangladesh, parents could marry off their children before they had reached 18 years of age.

4. Education as a strategic theme

Education is considered a powerful path to gender equality, strengthening girls' skills, knowledge, and power to challenge discriminatory gender norms such as child marriage (Girls Not Brides, 2022b). It has been shown that keeping girls in school delays marriage and that secondary education has a stronger impact on delaying marriage than primary education,

and the strategy is applied by several organizations (Girls Not Brides 2022b; Population Council, 2016). Education programs do not seek just to provide girls with academic education, this approach also aims to provide girls with knowledge about health, sexual well-being, and their rights as women, and give girls the tools to increase their economic opportunities. All of this is normally provided in schools (Greene et al., 2021). Schools are important settings to deliver effective interventions to delay marriage, moreover, in some cases, schools are also sources of safe spaces and feeding programs (Chimbindi et al., 2022). Thus, education interventions aim to empower girls by providing them with skills, support, and education (Greene et al., 2021). According to Greene et al. (2021), the key for education programs to work is the increment of “enrolment, retention, completion, and transition rates for girls’ schooling” (Greene et al., 2021, p.6).

5. *Economic incentives as a strategy*

Addressing child marriage through economic incentives often refers to conditional and unconditional cash transfers. The condition is that girls under 18 attend school, and this type of intervention normally includes stipends, school supplies, and uniforms. According to the evidence, it seems that conditional cash transfers are more effective for delaying marriage in girls aged 15-17, while unconditional cash transfers are for girls between 12 and 14 years of age (Greene et al., 2021). This approach also refers to non-cash asset transfers, such as for example chickens, goats, or oil; either the girl attending school or her family get any of these assets, monthly or yearly. According to Greene et al. (2021), this approach is most effective when combined with another approach such as the shifting social norms approach (Greene et al., 2021).

6. *Life skills approach*

This intervention is also an overarching approach, that aims to empower girls by providing them with the "skills they need to navigate the transition from girlhood to adulthood" (Population Council, 2016, p.2), which includes SRHR, and education interventions. This intervention also includes livelihoods skills training, which provides girls with "training in computers, mobile phone servicing, photography, and basic first aid" (Population Council, 2016, p.2).

7. Empowerment

Empowerment strategies refer to the strategy/intervention that has as its target to provide girls with all the necessary tools so they will be able to "advocate for themselves and improve their own status and well-being" (Greene et al., 2021, p.8). This achievement is achieved by changing the girls' perceptions about themselves, providing them options besides motherhood, and converting girls into advocates and influencers of other girls (Greene et al., 2021). This type of program commonly "uses a combination of approaches" (Greene et al., 2021, p.9) as girls can be empowered in different manners.

So, empowerment intervention can be identified as an overall approach used in all the key thematic approaches, so it could also be presented as a common feature of all thematic areas, as these are only different ways of empowering girls, through improved health education and services, through life skills development, through education, sexual reproductive health rights, commonly combined with economic incentives approaches (Greene et al., 2021).

The aim is to provide girls with the skills to generate their own income and to give them the tools to feel confident about the decisions they make "about sex, reproduction, and marriage" (Greene et al., 2021, p.8).

2.1.2. Specific programs that combat child marriage

There are also large and specific programs aiming at combatting child marriage, some operating globally, such as "The Programme to Accelerate Action to End Child Marriage" or "The Global Programme". The program was created by UNICEF and UNFPA and operates in Bangladesh, Burkina Faso, Ethiopia, Ghana, India, Mozambique, Nepal, Niger, Sierra Leone, Uganda, Yemen, and Zambia. The program works with governments, communities, and partners by aligning key players in different sectors such as education, social norms, and health (UNICEF, 2022c). This program promotes the rights of adolescent girls to avoid marriage and pregnancy, empowers girls, and includes the community and advocates for protective child marriage laws and policies. (UNICEF, 2022c). Some outcomes of the program are education support through school fee payments and distribution of school materials, as was applied in Burkina Faso (UNICEF, 2022c). In Nepal, the program achieved that municipalities developed and funded action plans addressing child marriage (UNICEF, 2022c). In Ethiopia, a program supporting community surveillance in 2020 made it possible

to detect possible child marriage early and avoid it, and the outcome was a smaller number of CM cases than in 2019 (UNICEF technical report, 2021).

III. METHODS

3.1. Study design: Scoping review.

To review available literature, a scoping review design was used, which is defined as a “type of evidence synthesis that has the objective of identifying and mapping relevant evidence that meets pre-determined inclusion criteria regarding the topic, field, context, concept or issue under review” (Peters et al., 2021, p.2). The scoping review is based on the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines (Moher et al., 2009). The data search was carried out with the help of a librarian, and I selected the literature, as the only author. I used the tools EndNote and Rayyan.

3.2. Eligibility criteria

To select the literature, the following eligibility criteria were applied:

- Studies that contain information about programs to end child marriage published since the onset of the COVID-19 epidemic, in 2019 and up to April 2023.
- Studies about child marriage, early marriage, child brides, adolescent pregnancy, and forced marriage since 2019.
- Grey literature: organizational websites, technical reports, government documents, and academic theses since 2019.
- Geographic focus: no geographical limit was placed, expecting the literature to be limited in scope, while mainly covering low and middle-income countries.
- Study design: no limit was placed on the research design of the studies.
- Only studies published in English were selected.

3.3. Information sources

In searching the literature for this scoping review, the following search engines and databases were used:

- ProQuest.
- Psycinfo.
- Web of Science.
- Google Scholar.
- Organizational sites: UNICEF, Save the Children, Girls Not Brides.

3.4. Search strategy

I used the Population, Context, and Concept (PCC) framework for the search strategy, which was defined as follows:

POPULATION: Girls under 18 years.

CONTEXT: All countries where programs combatting child marriage among girls are found.

CONCEPT: The impact of the COVID-19 pandemic on programs that combat child marriage.

The following keywords were employed in the search strategy by using quotation marks, truncation, and Boolean operators “OR”, and “AND”.

The final KEYWORDS used, after adding some important, missing keywords along the way were:

- “Program” OR “intervention” OR “combat” OR “prevent” OR "momentum response" OR “effort”.

AND

- “Child marriage” OR “early marriage” OR “child bride” OR “girls’ rights” OR “child’s rights” OR “Adolescent pregnancy” OR “forced marriage”.

AND

- “Covid” OR “pandemic” OR “lockdown”.

3.5. Management and selection of study records

3.5.1. Data management

- I stored my data on my personal laptop. Records from the literature search were imported to EndNote. After importing the records to EndNote, I deleted the duplicates.

3.5.2 Selection process (screening).

For the selection process or screening, I used Rayyan. I divided this process into two phases:

- First, I screened titles and abstracts with Rayyan to identify whether these titles and abstracts met the criteria or not.
- Second, for the titles/abstracts that seemed relevant, I obtained the papers in full text, and I decided whether the paper met the inclusion criteria or not. If only the name of a high-income country appeared in the abstract or the full article review, this article was excluded.

3.6. Data collection process and data items

The items that were extracted from the chosen studies were the name of the authors and article, type of document, its title, context/country, the aim of the study, the year the study started, study design, mode of data collection, number of informants/respondents, type of CM program/its aim, organization implementing program, target population, challenges encountered during the pandemic, and CM programs' coping mechanism. The information was consequently put on Excel sheets.

For this scoping review, the literature search was done across three databases: ProQuest, PsycINFO, and Web of Science. Additionally, Google Scholar was used to find grey literature. As explained above, the articles were exported to the EndNote, duplications were deleted and sent to Rayyan for screening.

The identification of the challenges and coping mechanisms were as follows: First, I identified the challenges CM programs encountered during the pandemic. Second, I transcribed exactly what was written in the articles, subsequently, I highlighted repeated

words identified as describing the main challenges CM programs met during COVID-19. In the findings, the challenges are presented according to how often these were mentioned in the articles. To identify the coping mechanisms, first I reviewed all the articles and identified what was explicitly described as a coping mechanism used by the programs during the pandemic. Subsequently, I did a second review and identified all the actions the CM programs took in order to keep functioning during the pandemic.

3.7. Narrative data synthesis

The findings are presented in a narrative synthesis form. This type of synthesis summarizes and critically discusses the found literature about a topic. The objective of using narrative synthesis is to provide a comprehensive overview of the topic, highlight relevant areas, and identify gaps (Griffith, 2022).

In the next chapter, the Prisma chart showing the selection of reviewed articles is presented, as well as three tables summarizing the findings, along with a more in-depth presentation of the findings.

Table 1: Characteristics of the included studies

Author (s) year	Type and title of document/ article.	Context/ Country	Aim of the study / Year the study started	Study design and Mode of data collection.	Participants/ informants/ respondents + Number	Type of CM program addressed
Ahinkorah et al., 2021.	Research article: <i>Barriers and facilitators regarding implementation of policies and programmes aimed at reducing adolescent pregnancy in Ghana: an exploratory qualitative study.</i>	Ghana	Explores the perceived barriers and facilitators among health and education professionals, grassroots workers, and adolescent girls in Ghana regarding the implementation of policies and programs aimed at reducing adolescent pregnancy	-Exploratory, qualitative study. -Semi-structured interviews. - Focus group interviews.	-Education professionals (15) -Grassroots workers (15) -Pregnant/parenting and non-pregnant adolescent girls (51).	Adolescent Sexual and Reproductive Health Programs.
Carter et al., 2022	Research article: <i>Understanding the</i>	Democra tic	To present a meta-synthesis of existing and ongoing	Literature review of qualitative and	Reviewed participants: Men, women, and	

	<i>broader impacts of COVID-19 on women and girls in the DRC through integrated outbreak analytics to reinforce evidence for rapid operational decision-making.</i>	Republic of Congo.	analyses to highlight the broader impacts of COVID-19 on women and girls in the country.	quantitative studies.	healthcare workers in the Social Sciences analytics cell (CASS). - Community members.	-----
Chimbindi et al., 2022	Research article: <i>The sexual and reproductive health needs of schooling-going young people in the context of COVID-19 in rural KwaZulu-Natal, South Africa.</i>	South Africa	-Examine the impact on the sexual health needs of learners in the context of COVID-19-related lockdowns in rural KwaZulu-Natal, South Africa. -Between July-November 2020 and August-November	-Qualitative exploratory study. -Interviews -Group discussions	-Principals -Teachers - School governing board representatives, - Department of Education key stakeholders - NGO representatives. - School learners -Peer navigators	The HIV and AIDS Life Skills Program Life Orientation (LO).

			2021.		- Non-governmental stakeholders. Parents/community members. Total: 69 interviewed	
Church et al., 2020	Report: <i>Reproductive health under COVID-19 – challenges of responding in a global crisis.</i>	Bangladesh, Nepal, Zimbabwe.	To identify the challenges reproductive health services met under COVID-19 and the response during this global crisis.	-----	-----	SRHR program
Esho et al., 2022	Research article: <i>The perceived effects of the COVID-19 pandemic on female genital mutilation/cutting and child or forced marriages in Kenya,</i>	Kenya, Uganda, Ethiopia, and Senegal.	-To examine respondents' perceptions on how the COVID-19 pandemic has affected FGM/C and CFM in Kenya, Uganda, Senegal, and Ethiopia. -October-December 2020.	-Cross-sectional mixed methods study. -Household surveys. -Interviews.	-Men, women, and healthcare workers in the Social Sciences analytics cell (CASS). - Community members. 1049 women and men. -38 key informants. Total: 1087	-Legal system -Civil society

	<i>Uganda, Ethiopia and Senegal.</i>					
Girls Not Brides, 2022	Brief: <i>Girls' education and child marriage</i>	Africa and Asia	-To explore the key facts, two-way impacts, common drivers, and solutions on education and child marriage.	-----	-----	Education programs in different countries.
Khan et al., 2022.	Research article: <i>Dramatic effects of COVID-19 public health measures and reverse migration on youth sexual and reproductive health in rural Uganda.</i>	Uganda	To qualitatively describe the perceived unintended impacts of COVID-19 health measures on youth SRH in two rural districts.	-Qualitative study -Semi-structured focus group -Interviews.	- Youth - Parents - Community leaders, health worker - Coordinators and supervisors. - Health providers - Facility and district health managers. - District health officers. Total: 94 interviewed	“Healthy Adolescents and Young People” (HAY!) initiative.
Mahtab &	Research article:	Bangla	To provide an explanation	A scoping review.	-----	Community-

Fariha 2022	<i>Pandemic within a pandemic: gendered impact of COVID-19 in Bangladesh with a focus on child marriage and domestic violence.</i>	desh.	for the observed increase in violence against women and girls during the COVID-19 pandemic in Bangladesh with a focus on child marriage.	-Literature		based programmes.
Meherali et al., 2021	Research article: <i>Impact of the COVID-19 pandemic on adolescents' sexual and reproductive health in low-and middle-income countries.</i>	Low- and middle-income countries	Identify and assess the existing literature on the impact of the pandemic on SRH needs and access to services by adolescents in LMICs.	-Scoping review. -Literature	-----	Interventions that promote SRH and access to SRH services in LMIC.
Murewanh ema, 2020	Supplement (COM) <i>Adolescent girls, a forgotten population in a resource-limited</i>	Turkey	To identify implications for sexual and reproductive health outcomes during COVID-19.	-Scoping review. - Literature	-----	SRH programs

	<i>setting in the COVID-19 pandemic: implications for sexual and reproductive health outcomes.</i>					
Musa et al., 2021	Commentary	Nigeria	-To discuss the prevalence of early marriage in Nigeria and the impact of COVID-19 on this serious socio-economic and health issue. -August-November 2020	-----	-----	The Global Programme to End Child Marriage (GPECM), UNICEF
Okeke et al., 2022	Commentary: <i>Adolescent pregnancy in the time of COVID-19- what are the implications for</i>	Globally	To discuss how the global COVID-19 pandemic has exacerbated existing issues and hindered progress toward improved adolescent SRHR outcomes.	-----	-----	SRH

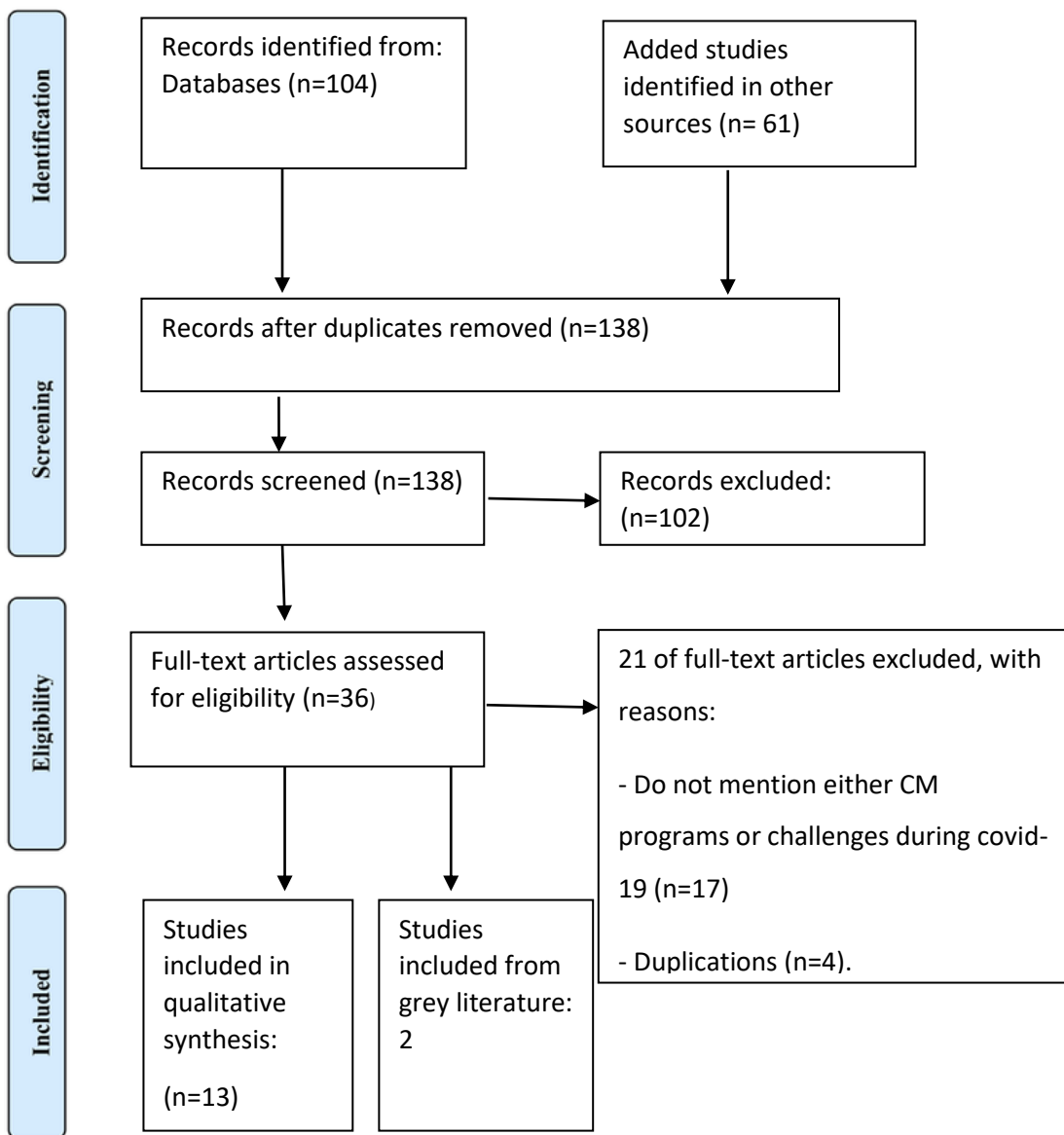
	<i>sexual and reproductive health and rights globally?</i>					
Ssebunya et al., 2022	Research article: <i>-Disparities in accessing sexual and reproductive health services and rights among adolescents and young people during COVID-19 pandemic: culture, economic, and gender perspectives.</i>	Low- and middle-income countries	To highlight the current gender, cultural, and socioeconomic dynamics of inequalities in accessing SRHR services among adolescents and young people.	-Narrative Synthesis. -Literature review.	-----	SRHR services in LMIC.
UNFPA et al., 2020	Technical note: <i>Impact of the COVID-19 pandemic on family planning and ending gender-</i>	UNFPA countries	To show how the COVID-19 pandemic could critically undermine progress made towards achieving SDG#5.	-----	-----	-----

	<i>based violence, female genital mutilation and child marriage.</i>					
UNFPA- UNICEF 2020	<i>Brief: Child marriage in COVID-19 contexts: Disruptions, alternative approaches and building program resilience.</i>	Eastern and Southern Africa.	To provide an overview of child marriage in the region, in the context of COVID-19, and analysis of disruptions to child marriage programs.	-----	-----	The Global Programme to End Child Marriage (GPECM)

IV. FINDINGS

This chapter first includes the Prisma chart describing (see Figure 2) and three tables. Table 1 includes the characteristics of the included studies, Table 2 presents the aim of the program discussed, implementing organization, target population, and challenges encountered during the pandemic, and Table 3 summarizes the coping mechanisms of CM programs during the pandemic according to the reviewed literature. The main challenges for child marriage programs and how these programs coped with these challenges during the pandemic are presented more in-depth in this chapter.

Figure 2: PRISMA CHART



The search in the three databases gave a total of 104 articles. Additionally, Google Scholar identified 61 articles, from which two articles were used in this study. In Rayan, 36 articles were selected for a full assessment. Only 13 studies selected from the databases and 2 obtained through searching in Google Scholar filled the inclusion criteria. The justification of why the other articles were not included is explained in the PRISMA flow diagram.

4.1. Main challenges encountered by the programs.

The included literature focused on programs fighting child marriage in low and middle-income countries in Eastern and Southern Africa and Asia. The challenges caused by the COVID-19 pandemic identified in this scoping review can be classified into different themes. The redirection of resources away from direct and indirect child marriage interventions was the most mentioned challenge in the reviewed literature, where 10 articles mentioned this as a challenge for the programs. This was followed by the lockdown, school closures, transport restrictions, restrictions of gatherings, and social distancing, mentioned between six and nine times. Uneven access to mobile and virtual platforms, fear of being infected, supply challenges, youth migration, misuse of child marriage law, and gender inequality, were also identified as challenges, mentioned between one and three times in the articles.

4.1.1 Redirection of resources.

To cope with the COVID-19 pandemic, in many countries, many organizational and economic resources were redirected. The redirection of resources could be about financial, human, organizational, or governmental resources. Funding and personnel were reallocated to the COVID-19 response (Murewanhema et al., 2020). It seems that among the various strategic interventions to end child marriage, the SRHR interventions were the most affected by the redirection of resources in low and middle-income countries in Eastern and Southern Africa (Ssebunya et al., 2022) (UNFPA-UNICEF, 2020). The redirection of human resources often led to a lack or limited offer of healthcare services, such as SRHR services. International non-governmental organizations and governments alike either stopped or limited money transfers to SRHR programs, and SRHR services staff were redeployed, resulting in child marriage no longer being an addressed issue (Ssebunya et al., 2022). The

redirection of resources also meant a reduction of funding for child marriage interventions addressing the change of social norms, such as shown in the study by Esho et al. (2022) in Kenya, Uganda, Senegal, and Ethiopia. As a program implementer stated in the study about the perceived effects of the COVID-19 pandemic on female genital mutilation/cutting and child or forced marriages in Kenya, Uganda, Ethiopia, and Senegal, when the program implementers, either did not get funding or did not have enough funding, they stopped implementing activities addressing child marriage (Esho et al., 2022).

For programs resting on the legal system to combat child marriage, this redirection meant that government officials were focused on controlling the spread of the pandemic and, therefore abandoned surveillance of the marriage age in their communities, as occurred in Bangladesh (Mahtab & Fariha, 2022). Ten of fifteen papers in this review: Murewanhema (2020), Musa et al. (2021), Okeke et al. (2022), UNFPA-UNICEF (2020), UNFPA et al. (2020) Ssebunya et al. (2022), Mahtab & Fariha (2022), Ahinkorah et al. (2021), Church et al. (2020), Chimbindi et al. (2022) and Esho et al. (2022), identified the redirection of resources as a challenge for programs to fulfill their tasks in fighting child marriage.

4.1.2. Lockdown

In nine of the fifteen papers, by Ahinkorah et al. (2021), Okeke et al. (2022), Church et al. (2020), Chimbindi et al. (2022), UNFPA-UNICEF (2020), Esho et al. (2022), Meherali et al. (2021), Musa et al. (2021), and Khan et al. (2022), the lockdown was identified as a challenge. While SRHR interventions were most often reported to be affected, the lockdown also affected other interventions such as education, empowerment, social norms-based interventions, and those based on the child protection legal system (Esho et al., 2022) (Mahtab & Fariha, 2022). In some places SRHR interventions and legal services were working during the lockdown, however, victims assumed that these services were not offered at all, and they did not try to access them (Esho et al., 2022). For the legal system to work effectively a challenge was the closure of courts, resulting in difficulty in conducting court sessions. The lockdown also led to a disruption of communication between different stakeholders such as government agencies, people's representatives, and NGO representatives (Mahtab & Fariha, 2022). Consequently, parents could freely marry their

children because stakeholders who worked in child marriage prevention were not informed about new child marriage cases (Mahtab & Fariha, 2022).

4.1.3. Closure of schools and clinics.

The closure of schools was mentioned in eight papers: Okeke et al. (2022), Church et al. (2020), Chimbindi et al. (2022), UNFPA-UNICEF (2020), Meherali et al. (2021), Musa et al. (2021), Khan et al. (2022), and Carter et al. (2022). School closures took place at different times in different settings, such as from March 2020 until October 2021 in the Democratic Republic of Congo, for example. Total or partial closure of schools was practiced as a COVID-19 protective measure, something that brought many harmful consequences for girls at risk of getting married before 18 years of age (Carter et al., 2020). For programs that use education as their strategy to end child marriage, the closure of schools meant the interruption of providing empowering tools to girls. Regarding SRHR interventions, school closures were identified as one of the main reasons for limited access to SRHR services for girls.

As stated by UNFPA-UNICEF (2020), Chimbindi et al. (2021), Carter et al. (2022), Meherali et al. (2021), and Okeke et al. (2022), schools are spaces to provide SRHR intervention in low and middle-income countries, such as the Democratic Republic of Congo, South Africa, and UNFPA's covered countries. Here, girls receive comprehensive sex education, and awareness of sexual and reproductive health (Meherali et al., 2021, p18). Moreover, in countries such as South Africa, schools also provide safe spaces for girls. (UNFPA-UNICEF, 2020, p. 3). Chimbindi et al. (2021) state that in rural KwaZulu-Natal in South Africa, school shutdowns reduced the opportunity to provide a vital safe space and information to enhance SRH for adolescents (Chimbindi et al., 2021, p.162).

Finally, because many community gatherings to promote social change were going on in schools, school closures also had a negative effect on social norms interventions (Esho et al., 2022).

4.1.4. Travel restrictions.

In this review, travel restrictions are mentioned as a challenge in six studies: Church et al. (2022), Khan et al. (2022), Ssebunya et al. (2022), Esho et al. (2022) UNFPA-UNICEF, UNFPA et al. (2020). These restrictions had a strong effect on the delivery of SRHR services, as well as on legal systems working against child marriage.

For SRHR services that remained open, travel restrictions were hindering girls from traveling to access the services, and this measure also affected workers who could not travel to the SRHR centers and provide services to girls. For example, the Marie Stopes International organization, which provides SRHR to adolescent girls in several countries in Africa, stated that travel restrictions were the challenge that had the strongest impact, impeding them from reaching the most vulnerable population, in particular girls and women in poor, rural, and marginalized areas least likely to access to SRHR services (Church et al., 2022).

For the legal system combatting child marriage, travel restrictions meant that girls were not able to travel to report their early marriage, nor were authorities able to access the victims (Esho et al., 2022).

4.1.5. Social distancing measures/restriction of gatherings.

In six papers: Esho et al. (2022), UNFPA-UNICEF (2020), Musa, Church et al. (2022), Meherali et al. (2021), and UNFPA et al. (2020), social distancing measures were acknowledged as a challenge for child marriage programs during the pandemic, hampering most of the activities to end child marriage, and its monitoring (Esho et al., 2022). The widely applied social distancing measures during the COVID-19 pandemic hindered community engagement interventions that require face-to-face interactions to promote change in social norms and prevention of child marriage (UNFPA-UNICEF 2020, p.3). For example, social distancing prohibited behavioral change interventions (UNFPA-UNICEF, 2020) through home visits, which in some places, such as Uganda, have been a type of awareness-raising activity. Indeed, the interaction between programmers, stakeholders, and community members to plan and implement interventions was hampered due to this measure.

4.1.6. Uneven access to mobile phones and the internet.

Three studies, namely Girls Not Brides (2022), Mahtab & Fariha (2022), and UNFPA-UNICEF, (2020), mentioned that uneven access to mobile phones and the internet was a challenge during the pandemic. According to Girls Not Brides (2022), educational interventions that sought to keep educating girls during the pandemic were hindered by the fact that many girls did not have either a mobile phone and/or access to the internet, thus, they could not access online educational formats. Moreover, in case a victim wanted to report abuse to the authorities, uneven access to virtual communication platforms, or the lack of experience with online options, impeded many from accessing authorities and reporting abuse (Mahtab & Fariha, 2022). Thus, online alternatives such as virtual e-learning and filing virtual complaints were not available, at least not for the most vulnerable children and young people (UNFPA-UNICEF, 2020).

4.1.7. Fear of being infected.

Two papers, by Church et al. (2020) and UNFPA et al. (2020) respectively, identified that during the COVID-19 epidemic, both clients and providers of services feared being infected, thus, many people did not seek or attend SRHR services, or travel due to the fear of being infected (Church et al., 2020; UNFPA et al., 2020). Thus, fear of infection weakened access to services and direct and indirect activities that could potentially empower girls to avoid child marriage.

4.1.8. Youth migration

One paper, by Khan et al. (2022), identified youth migration as a challenge for SRHR services in rural areas. For example, in rural Uganda, the return of young people to their homes led to the collapse of the SRHR services, making it difficult for them to access SRH services (Khan et al., 2022).

4.1.9. Supply chain disruptions

Supply chain disruption is only mentioned in UNFPA et al. (2020), and according to this review, it can be assumed that SRHR interventions were the most affected by this challenge. This challenge was related to the disruption of global manufacturing (UNFPA et al., 2020) of different health materials, such as contraceptives, which are provided in SRHR services. According to UNFPA et al. (2020), clearly, the consequence of this disruption will be an increase in pregnancies, including adolescent pregnancy, which drives child marriage. This has the largest impact in low-income countries and locations where SRHR services are already weak (UNFPA et al., 2020).

4.1.10. Misuse of child marriage laws.

One study mentioned, by Mahtab & Fariha (2022), that the misuse of child marriage laws was a challenge for the legal system during the pandemic. As mentioned earlier, many countries have 18 years as the legal age to marry. However, in some cases, this age can be modified in case of special circumstances or under the consent of the parents. For example, in Bangladesh, the legal age for marriage is 18 but the law allows marriage before this age if parents consider it convenient. Since the pandemic caused school closures, and other potentially harmful consequences, parents considered it convenient to marry their daughters, and this was indeed allowed by authorities. Thus, parents sometimes did not follow the child-protecting laws of marriage at a minimum of 18 years of age and married their girls at a younger age (Mahtab & Fariha, 2022).

4.1.11. Mandatory mask-wearing.

It is mentioned in one study, by Khan et al. (2022), that mandatory mask-wearing represented a challenge for SRHR interventions in rural Uganda because adolescents might not be able to purchase face masks due to economic disparities, consequently, they could not access SRHR services (Khan et al., 2022).

4.1.12. Gender inequality.

Gender inequality is mentioned explicitly in only one study. For girls who could access education from home during the pandemic, gender inequality resulted in girls having less time to study because due to gender inequality girls normally have more responsibility for domestic chores than boys (Girls Not Brides, 2022). Thus, the closure of schools was not the only challenge education interventions encountered to continue educating girls during COVID-19.

4.2. Coping strategies adopted by child marriage programs during the COVID-19 pandemic.

As mentioned previously, programs can address CM directly and indirectly. In this part, I will describe the strategies used by any type of program/ approach.

4.2.1. The SRHR approach strategies.

Ssebunya et al. (2022), identified various policies that were implemented in different countries so women could access SHRH services during the pandemic. For example, in China, Georgia, and India guidance regarding SRHR topics was provided during the pandemic, promoting access to SRHR services. In Tunisia and Morocco, women were included in COVID-19 planning meetings and in gender violence prevention schemes to facilitate the continuation of their initiatives (Ssebunya et al., 2022). This was done with "guidance at a ministerial level" (Ssebunya et al., 2022, p.238).

With regards to the school closure challenge, UNFPA outlined interventions to ensure that adolescents in low- and middle-income countries could keep access to SRH services during the pandemic, with some options such as “local adolescent-friendly mass and digital media platforms” (Meherali et al., 2022, p.15), and media campaigns aimed to avoid adolescent pregnancy. Social media platforms and radio programs to talk about sex with adolescents, telemedicine, and adolescent-friendly phone lines, were all efforts aimed at continuing to provide adolescents with safe and easy SRH services and counselling. Esho et al. (2022)

mentioned that organizations used mass media as an innovative approach to reach girls at risk.

UNFPA and UNICEF provided other alternatives of coping mechanisms to keep providing SRHR interventions. For example: In Uganda, SRH services were provided through mobile and remote SRH services. Here, UNFPA collaborated with a local organization unrelated to child marriage to distribute condoms and talk about some SRHR topics such as HIV and family planning (UNFPA-UNICEF, 2020). In Mozambique, mini-dramas targeted the young with messages about the COVID-19 pandemic, child marriage, and gender-based violence (UNFPA-UNICEF, 2020). Moreover, UNFPA provided "dignity kits to vulnerable women and girls" (UNFPA-UNICEF, 2020, p.4). Dignity kits help to maintain menstrual health and contain basic sanitary items such as soap, binders, and toothpaste (UNFPA-UNICEF, 2020) (UNFPA, 2019), which are normally distributed in humanitarian crises to girls and women.

The adaption mechanisms Marie Stopes International implemented to keep providing information on the availability of SRH services was by "repurposing of community engagement" (Church et al., 2020, p.523), which means the involvement of the community, community radio messages, social media such as Facebook and WhatsApp, and door-to-door visits. The organization was also able to provide support in the self-use of SRH products (Church et al., 2020, p.524) through social media and mobile phones.

4.2.2. Programs for changing social norms' coping strategies.

Some of the coping mechanisms GPECM adopted during COVID-19 were community and Youth Engagement, identified as key to achieving success in GPECM. This means that the youth and the community are working together with organizations to monitor access to SRH services and track cases of violence against women and girls and child marriage in their communities (UNFPA-UNICEF, 2020). In Uganda, another coping mechanism was the use of phone calls to continue community and youth engagement and to interact with girls at risk, as well as the Child Helpline (UNFPA-UNICEF, 2020). Child helpline is a free, anonymous, and confidential service via phone that protects children from any type of abuse, such as child marriage (UNICEF, 2020). The helpline existed before the pandemic.

4.2.3. Programs with an education approach strategy.

In Uganda and Ethiopia, UNFPA and UNICEF used virtual e-learning which included radio and Television education to keep providing education to children. Unfortunately, due to economic disparities, this alternative did not reach the most vulnerable children (UNFPA-UNICEF, 2020).

4.2.4. Economic incentives' approaches.

The reviewed literature does not say how the economic incentives approach was affected during COVID-19. However, UNFPA-UNICEF (2020) mentioned that in Zambia, emergency cash transfers were used as a coping mechanism to prevent child marriage because of the pandemic, "so families are not forced to arrange marriages in return for payment" (UNFPA-UNICEF 2020, p. 5).

Table 2. Aim of the program, implementing organization, target population, and challenges encountered during the pandemic.

Authors	Organization implementing Program	The aim of the program	Target population	Key findings relating to the research questions on encountered challenges during the pandemic
Ahinkorah et al., 2022.	-----	Deal with adverse adolescent sexual and reproductive health (ASRH) outcomes, including adolescent pregnancy.	Adolescent girls	Reduction in external financial support and lockdown were the main challenges for SRH programs and services during the pandemic.
Carter et al., 2022	-----	-----	Women and girls in the DRC.	The closure of schools is identified as the main challenge to providing sexual health education and safe spaces for girls at risk of child marriage.
Chimbindi et al., 2022	Government	Integrate HIV and AIDS and relevant life skills into the school curriculum and provide care, to mitigate the spread of HIV, and support for learners that are infected and affected by HIV.	Learners in primary and secondary school.	Lockdowns and school closures are identified as the main reasons for limited access to and provision of SRH services.

Church et al., 2020	Marie Stopes International (iNGO)	-----	-----	Physical distancing policies, stay-at-home orders, reduction of staff, and fear from clients and providers of being infected as the main challenges for girls at risk of accessing SRHR services.
Esho et al., 2022	-----	-----	-----	Travel restrictions, lockdown, infection prevention measures, and funding reduction for CM interventions were the main challenges interventions to change social norms faced during the COVID-19 pandemic. For the legal system, the main barrier during the pandemic for the victims was their inadequate reporting, their fear that services were not offered, and travel restrictions to access services; for the authorities, travel restrictions to access victims.
Girls Not Brides 2022	Girls Not Brides	Education programs in different countries.	-----	The main barrier for girls to access education during the COVID-19 pandemic is unequal access to mobile phones and the internet. Additionally, gender inequality causes domestic chores to be the responsibility of girls.
Khan et al.,	The University of Calgary Cumming	It targets youth SRH needs through community and	Ugandan youth (10-24	The main barriers for young people in Uganda to access youth SRH services were travel restrictions, mandatory

2022	School of Medicine and other partners.	facility-based building activities.	capacity- years).	mask-wearing (young people do not have enough money to purchase masks), school/workplace closure, and lockdowns. A secondary barrier for youth to access SRH services is youth migration, many young people move back to their homes which are normally in rural areas, where SRH services have poor quality, and migration worsens the already poor quality of services.
Mahtab & Fariha, 2022	-----	To raise awareness, challenge traditional gender norms, and empower girls.	Women and girls	Disruption of communication to inform civil society and authorities about child marriage cases. The challenges for the legal system intervention were the misuse of CM law because of "special circumstances". caused by COVID-19 such as school closures, among others. There was a lack of surveillance of the marriage age due to the redirection of resources in efforts to combat COVID-19. of resources in efforts to combat COVID-19.
Meherali et al 2021	-----	No program	Adolescents (10 to 19 years).	The main challenges for adolescents to access SRH services were the lockdown, social distancing, and school closures.

Murewanhe ma 2020	Government	-----	Adolescents and young people	Supply chain disruptions and reallocation of resources hinder access and utilization of SRH services during COVID-19.
Musa et al 2021	-----	UNICEF	To reduce child marriage	Programs that work at the community level to end child marriage have been affected during the COVID-19 pandemic due to lockdowns, and social distance measures. Additionally, school closures and limited access to sexual and reproductive health services.
Okeke et al., 2022	-----	SRH	----- -----	Lockdowns, school closures, priority shifts to fighting the COVID-19 pandemic, and fear of being infected while accessing SRHR services as the main challenges for SRHR.
Ssebunya et al., 2022	-----	-----	Adolescents and young people.	Travel restrictions, infection or death of healthcare workers, and limited government funding for SRHR services during the pandemic are identified as the main challenges in accessing SRHR services during the pandemic.
UNFPA et al.,	UNFPA	-----	No program	Social distancing measure is the one that has affected mostly the implementation of interventions to reduce

2020				<p>child marriage.</p> <p>The main challenges for SRH: redirection of clinical staff, lack of or limited healthcare services, fear of being infected with COVID-19, movement restrictions, and supply chain disruptions.</p>
UNFPA- UNICEF 2020	UNICEF & UNFPA	To end child marriage.	To reduce child marriage	<p>Education, sexual education, and life skills were the most affected interventions due to school closures. Additionally, uneven access to mobile and virtual platforms was a challenge for education and SRH programs. The redirection of resources and lockdowns were the biggest challenges for SRH interventions.</p> <p>For social norms, the most important challenges were social distancing measures and movement restrictions.</p>

Table 3: Various programs’ challenges and coping mechanisms.

Intervention/Program’s approach	Challenges	Coping mechanism
Sexual Reproductive Health Rights	<p>and</p> <ul style="list-style-type: none"> -Redirection of resources -Lockdown -Closure of schools -Travel restrictions - Fear of being infected - Youth migration -Supply change disruptions -Mandatory mask-wearing 	<p>UNICEF: “Digital and media engagement” (UNFPA-UNICEF, 2020). Radio programs with messages about CM, and shared by social media, like in Uganda (UNFPA-UNICEF, 2020).</p> <p>"Remote and mobile SRH services to ensure continuity" (UNFPA-UNICEF 2020, p.4). Condoms' distribution and awareness of family planning door-to-door such as in Uganda. Distribution of dignity kits with menstrual health and basic sanitary items in Ethiopia, Mozambique, Uganda, and Zambia.</p> <p>MSI: Community engagement to deliver SRH information (Church et al., 2020), community radio messages, social media such as Facebook and WhatsApp, and the use of phones for “self-use of SRH products” support.</p>
Changing Social Norms programs	<ul style="list-style-type: none"> -Redirection of resources -Lockdown -Closure of schools -Social distancing measures 	<p>In Uganda: community and youth engagement, phone calls to continue community and youth engagement, and the Child Helpline so community workers could continue their work in reporting CM cases (UNFPA-UNICEF, 2020).</p>
Legal and Policy frameworks-based programs	<ul style="list-style-type: none"> -Redirection of resources -Lockdown -Travel restrictions -Uneven access to mobile phones 	

	and the internet	
	-Misuse of Child Marriage Laws	
Education	-Lockdown -Closure of schools -Uneven access to mobile phones and the internet. -Gender inequality	UNICEF and UNFPA explored digital and media engagement such as radio programs, mini-dramas, and virtual e-learning to reach young people so they could still learn (UNFPA-UNICEF, 2020).
Economic incentives	Not identified	In Zambia, the Ministry of Community Development and Social Services, and UNICEF provided cash transfers to families to prevent CM (UNFPA-UNICEF, 2020).
Empowerment	-Lockdon	

V. DISCUSSION

5.1. Main discussion

To the best of my knowledge, this scoping review is the first that systematically synthesizes the literature on the challenges of the pandemic on programs addressing child marriage and the programs' coping mechanisms. The findings of this scoping review identified the redirection of resources as the most relevant challenge for CM programs to continue their activities during the pandemic. 10 out of 15 authors identified this as a challenge. Different authors such as Esho et al. (2022), Okeke et al. (2022), and Mahtab & Fariha (2022), argue that it is a natural response to prioritize during public health emergencies, such as a pandemic, due to a lack of sufficient human and economic resources, resulting in other sectors being affected negatively (Esho et al., 2021). This pattern is consistent with previous health emergencies and epidemics, such as the Ebola outbreak (Mahtab & Fariha, 2022). As this is now a known effect of health emergencies, the question is why governmental and non-governmental organizations don't increase the budget for CM programs in order to counteract this effect.

As stated by Deane (2021), after the Ebola outbreak in Niger, a multi-sector national action plan to end child marriage was adopted. The program worked with parents and communities and provided girls with SRHR education, and life skills (Deane, 2021). However, after the Ebola outbreak, an increase in funding hasn't taken place, which seems obviously relevant in fighting child marriage, especially in times of crisis.

This review also identified that the reallocation of the resources for SRHR led to the reduction or halt of SRHR services, affecting mostly the most marginalized groups in society (Church et al., 2020), in LMIC in particular and services localized in rural areas (Ssebunya et al., 2022). As stated by Church et al. (2020), limited or lack of access to SRHR services for adolescents has been shown to increase the occurrence of teenage pregnancy, and subsequently, child marriage. Mahtab & Fariha (2022), Murewanhema (2020), and Okeke et al. (2022) argue that an increase in adolescent pregnancy also happened during the Ebola outbreak, and this seems to be a typical pattern in public health emergencies (Okeke et al., 2022).

In spite of the scarcity of literature about this theme, the findings suggest that resources are needed when combating child marriage. Investment in human resources and activities is important to continue providing SRHR services, but also for awareness campaigns to change social norms, and child marriage surveillance among other actions.

Regarding the lockdowns, school closures, travel restrictions, and social distancing measures challenging the fight against child marriage, these measures were also implemented in 2014-2015 during the Ebola outbreak (Deane, 2021). The consequences of the lockdown during the Ebola epidemic were similar to the consequences of the COVID-19 lockdown. During both lockdowns, there was an interruption of access to healthcare services, and an increase in teenage pregnancy (Khan et al., 2022). The measures introduced to combat the pandemic were in both cases equally interpreted as challenges for programs that combat CM at that time (UNFPA-UNICEF, 2020). These patterns seem to be regular in crisis periods (UNFPA-UNICEF, 2020). Similarly, challenges caused by school closures during the COVID-19 pandemic are consistent with those encountered with school closures during the Ebola outbreak.

During the Ebola outbreak, approximately 10,000 schools were closed for 10 months in Sierra Leone and Liberia, and approximately 5 million children stopped going to school (Deane, 2021). Also, by that time, schools represented safe spaces protecting girls from sexual abuse and helping them avoid unwanted pregnancies (Deane, 2021; Mahtab & Fariha, 2022; Svanemyr & Wang, 2021). The same was true during COVID-19 in South Africa according to Chimbindi et al. (2022) and in the Democratic Republic of Congo according to Carter et al. (2022). Generally, school closures during COVID-19 had the same consequences as those that took place during the Ebola outbreak the absence of a protective environment for girls, increases the possibility that girls won't go back to school, and causes an increase in child marriage rates. Moreover, evidence from the Ebola epidemic shows that during school closures, girls became pregnant more often (Deane, 2021; Mahtab & Fariha, 2022).

Schools, apart from being safe spaces for girls, also serve as spaces to deliver SRHR services, and when schools closed during COVID-19, girls were prevented from receiving contraceptives and other sexual health services. This pattern was also witnessed during the Ebola era, according to Yukich et al. (2021) and Deane (2021). Another function schools

serve is the holding of community meetings. During both epidemics, such meetings were cancelled. The evidence indicates that the closure of schools caused a massive rise in child marriage (Mahtab & Fariha, 2022., 200), and adolescent pregnancies also increased (Deane, 2021; Yukich et al., 2021), which in many cases resulted in and became a synonym of child marriage. It is argued by Deane (2021) and Mahtab & Fariha (2022) that when schools reopened after the Ebola outbreak the pregnant girls were often stigmatized and could not return to school. Consequently, parents choose to marry their girls to avoid stigmatization (Deane, 2021; Mahtab & Fariha, 2022), a pattern that seems to be consistent with what happened during the COVID-19 pandemic (Mahtab & Fariha, 2022).

Another similarity between the challenges and consequences during the COVID-19 pandemic and the Ebola outbreak was the fear of being infected. During the Ebola outbreak, “the use of condoms and other contraceptives plummeted” (Okeke 2022, 2) in SRHR services in some West African countries probably due to the fear of contracting Ebola. As mentioned by Church et al. (2022) and UNFPA (2022), people similarly stopped seeking SRHR services due to the fear of becoming infected with COVID-19.

In this review, only one paper mentioned gender inequality as a challenge for CM programs. Girls Not Brides (2022) identified this as a challenge for educational interventions when trying to continue the education of girls at home during the pandemic, because girls normally have more responsibilities than boys for domestic chores (Girls Not Brides, 2022). Consequently, girls had less time for school activities. Gender inequality, however, is not limited to unevenness in domestic chores or to COVID-19. The evidence identified gender inequality as one of the roots of child marriage (UNICEF, 2022). During crises, this inequality increases child marriage (Deane, 2020). A clear example of gender inequality is the misuse of child marriage laws during the pandemic, which was also identified as a challenge for CM programs.

Other identified challenges, less mentioned, are uneven access to mobile phones and the internet, youth migration, supply chain disruptions, and mandatory mask-wearing. In opposition to the previously mentioned, challenges, the articles this dissertation is based on do not identify these as challenges in previous health emergencies, such as Ebola. However, this does not mean that these challenges were not present. These challenges can be seen as the result of socioeconomic disparities. For instance, as stated by Girl Not Brides, the uneven

access to virtual alternatives affected the most vulnerable children, the poorest. The disparity did not just affect the continued education of the poorest children but also hindered them from reporting child marriage cases or any other type of abuse (Mahtab & Fariha, 2022).

Regarding youth migration and supply chain disruptions, as declared by Khan et al. (2022), the SRHR services in rural areas were overwhelmed by an abrupt increase in adolescents seeking SRHR services. Thus, young girls in rural areas were affected by the youth migration challenge. Additionally, those most affected by the disruption of the supply chain were the lowest-income countries (UNFPA et al., 2020). Additionally, it can be inferred that mandatory mask-wearing could have represented a challenge for youth in the poorest areas, hypothetically speaking, while this was not a challenge for the better-off.

Regarding the coping mechanisms adopted by child marriage programs, only five articles mention and describe how some organizations, such as UNICEF and Marie Stopes International, and some countries coped with the challenges, in particular programs addressing child marriage through SRHR, social norms, and education interventions.

Ssebunya et al. (2022) provide some examples of coping mechanisms in some countries such as China, Georgia, and South Africa. The authors mention that during COVID-19 policies to protect women were implemented. For example, in Morocco the "inclusion of women at planning levels of all COVID-19-related meetings, and prevention of gender-based violence against women" (Ssebunya et al., 2021, 238). In a previous humanitarian crisis, in Lebanon, gender equality was encouraged "to reduce the risk of GBV" (Girls Not Brides, 2020).

These are some examples of policies that encourage gender equality, and prevention of GBV during crises. If evidence shows that gender inequality is one of the roots of child marriage that is enhanced during humanitarian crises such as COVID-19. Why are these types of policies not equally consistent when humanitarian crises are not present? Women already face GBV during non-crisis periods. I consider consistently giving the topic the deserved relevancy mandatory, not just during a humanitarian crisis.

Regarding the school closure challenge, UNFPA-UNICEF and MSI described the use of radio programs, television, social media, and text messages to spread information about SRHR. Both organizations also offered remote and mobile SRH services (UNFPA-UNICEF, 2020) (Church et al., 2020). In opposition to MSI, UNICEF included door-to-door visits for

awareness-raising about SRHR and the distribution of dignity kits to women in the East and Southern African region (UNFPA-UNICEF, 2020). Of all these coping measures, in Mozambique, the use of mobile phones and the distribution of dignity kits had previously been used as a coping mechanism, as mentioned in Girls Not Brides (2020).

However, one may wonder if fear of being infected could have influenced both sides the families and the SRHR workers. Hypothetically speaking, maybe SRHR workers did not conduct these door-to-door visits due to the scare of being infected and/or because the targeted families did not accept these visits or the dignity kits. This is speculation, but it should be considered when creating future pandemic preparation plans if CM programs want to reach as many girls as possible. Moreover, Church et al. (2022) described in the study "Reproductive health under COVID-19-challenges of responding in a global crisis" that workers of MSI organization had problems reaching girls due to travel restrictions measures. One can therefore question how true is that door-to-door visits were accomplished.

Esho et al. (2022), and Meherali et al. (2022) also mention local adolescent-friendly mass and digital media platforms (Meherali et al., 2022, p.15) and media campaigns as interventions to ensure that adolescents in low- and middle-income countries could keep access to SRH services and counselling during the pandemic (Esho et al., 2022). (UNFPA-UNICEF, 2020) describes that to keep educating children and continue community engagement meetings, these interventions also used remote means as coping mechanisms (UNFPA-UNICEF, 2020), such as virtual alternatives. UNICEF stated that approximately 3.9 million children in the regions of the "Global Programme to End Child Marriage" accessed radio and TV education during the pandemic. UNFPA-UNICEF (2020) also mentions that in Uganda phone calls were the means to continue contacting and following up with adolescents at risk for child marriage (UNFPA-UNICEF, 2020).

The results identified social media, mobile phones, TV, and radio as the most relevant coping mechanisms for continuing to provide SRHR and education to girls during COVID-19. These alternatives, especially mobile phones also seem useful for continuing community engagement intervention. Although these seem like effective coping mechanisms, some questions arise about these alternatives. It is well known that not all children have equal access to mobile phones, radio, TV, or mass media, due to different reasons, thus leaving behind the most vulnerable (UNFPA-UNICEF, 2020).

Hypothetically speaking, the most vulnerable children most likely do not have access to either TV or radio, mobile phones, or access to internet or electricity. In the case, that children could access these devices one wonders whether they could use these devices at home to access classes or SRHR services. Normally in a low-income household is very likely that many people live in a house, maybe many siblings need to attend classes at different levels of education and the family just has one TV or radio or parents prefer to use the TV or radio for other activities. Although children may have access to these alternatives, it is very likely that not all children had enough knowledge about how to use virtual platforms. We must remember that school closures happened suddenly leaving little time for students to learn about the new virtual alternatives. It is also important to consider whether teachers and SRHR workers were prepared enough to provide virtual alternatives.

Superficially, these coping mechanisms could be considered as good solutions to continue education, SRHR interventions, and legal system approaches. However, there is missing information about how organizations tackled these factors when using virtual alternatives. It is necessary to consider all these factors to prepare effective solutions in the future. Otherwise, the poorest children will be those who suffer the biggest consequences of ineffective solutions that do not consider these factors, leaving them without the opportunity to continue accessing education, SRHR interventions, or report abuse in the next pandemic.

Literature naming all the challenges the CM programs encountered during the pandemic is scarce and CM program coping mechanisms are even more scarce. It may be too early to jump to conclusions about what was the challenge that affected equally all the CM interventions but also about which coping mechanisms are the most effective since the efficiency of different coping mechanisms would depend on different factors.

However, the results are a clear indicator of the need for qualitative research regarding child marriage programs during the pandemic. The relevance of the need for studies about the topic is urgent, especially when is well known that pandemics will likely happen more often (Haileamlak, 2022). This preparedness to avoid stopping the CM program's activities to continue progress in ending child marriage is mandatory.

5.2.Strength of the study.

This dissertation offers an in-depth insight into the problems met by programs operating in low and middle-income countries. At the same time, and because there was relatively little research published on the topic, grey literature was included to enrich the data. Finally, several consecutive searches were performed with new keywords, that added other relevant literature. To the best of my knowledge, this dissertation is the first of its kind that summarizes the challenges CM programs encountered during the pandemic.

5.3.Limitations of the study

The COVID-19 pandemic is a relatively new topic. This is most likely the explanation for the limited amount of literature found regarding the challenges the CM programs faced during the pandemic, and the coping mechanisms that were adopted. Additionally, it is likely that data collection was difficult during the pandemic, and therefore many of the challenges encountered were not properly documented. Moreover, most of the literature is about SRHR programs, while literature about the challenges of economic interventions to fight child marriage during the pandemic is missing. It is also important to note that this dissertation is based on literature published in English only, thus, it may be missing important studies in other languages. Moreover, regarding the included grey literature which represents 2 of the 15 studies, their quality was not examined, as this is not within the scope of scoping reviews to analyze the quality of the included studies (Peters et al., 2021).

Being that I am the only author of this scoping review, there was no counterpart to control and add to the selection of articles. However, collaboration with a librarian on three occasions and supervisors' guidance helped to improve the search process. Despite these limitations, this study about child marriage can be seen as a step in the right direction.

VI. CONCLUSIONS

This study reviewed and identified relevant information about the main challenges child marriage programs encountered during the COVID-19 pandemic. Based on the utilized literature for this review, it can be concluded that the main challenge for child marriage programs during the COVID-19 pandemic was the redirection of the resources, followed by the closure of schools, travel restrictions, and social distancing measures. Less mentioned are uneven access to mobile phones and the internet, fear of being infected, youth migration, supply chain disruptions, misuse of child marriage laws, and mandatory mask-wearing.

The redirection of the resources caused CM programs to limit their offer services or stop completely. The lockdown prevented people from accessing CM programs. Parents took advantage of the interruption of communication to marry their children. The closure of schools caused the loss of safe spaces and interruption in providing empowering tools to girls. Travel restrictions hindered girls from accessing any CM service, if still open during the pandemic, and hindered authorities or workers from accessing victims. Social distancing measures caused the interruption of CM activities to face to face.

Respecting the coping mechanisms for SRHR, and educational interventions, the main common innovative approach to continuing to provide education, and SRH services during the pandemic was the use of mass media and mobile and radio programs. Similarly, the coping mechanism for changing social norms interventions was the use of phone calls. The economic incentives approach is mentioned as a coping mechanism to prevent child marriage during the pandemic, however, the challenge(s) this approach encountered during COVID-19 is not identified.

The fact that most of the literature is about SRHR may limit the generalizability of the results, but this result clearly illustrates the need for research regarding this challenge. It may be too premature to conclude that the redirection of resources was the main challenge for all types of programs that combat child marriage. It is important to consider that although some programs were still functioning during the pandemic, many girls were not aware of this, or could not access these programs due to travel restrictions and/or fear of being infected. Gender inequality is also an important challenge to consider as it is identified as one of the roots of child marriage and humanitarian crises exacerbate this inequality. Moreover, the

challenges the different CM programs encountered depend on context, and culture among other factors.

Anyhow, this dissertation has identified many of the same challenges as during the Ebola outbreak. As this is the case, one may question why child marriage programs and governmental and non-governmental organizations were not prepared with effective coping mechanisms to face these challenges. If the world wants to achieve sustainable goal number 5 and decrease maternal and infant mortality and morbidity rates, effective and immediate strategies to reverse the harms of the last pandemic are needed, as well as research is urgently needed to better equip governments, organizations and communities to protect girls from child marriage during a future health crisis.

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VIII. ANNEXES

SECTION	ITEM	PRISMA-ScR CHECKLIST ITEM	REPORTED ON PAGE #
TITLE			
Title	1	Identify the report as a scoping review.	Click here to enter text.
ABSTRACT			
Structured summary	2	Provide a structured summary that includes (as applicable): background, objectives, eligibility criteria, sources of evidence, charting methods, results, and conclusions that relate to the review questions and objectives.	Click here to enter text.
INTRODUCTION			
Rationale	3	Describe the rationale for the review in the context of what is already known. Explain why the review questions/objectives lend themselves to a scoping review approach.	Click here to enter text.
Objectives	4	Provide an explicit statement of the questions and objectives being addressed with reference to their key elements (e.g., population or participants, concepts, and context) or other relevant key elements used to conceptualize the review questions and/or objectives.	Click here to enter text.
METHODS			
Protocol and registration	5	Indicate whether a review protocol exists; state if and where it can be accessed (e.g., a Web address); and if available, provide registration information, including the registration number.	Click here to enter text.
Eligibility criteria	6	Specify characteristics of the sources of evidence used as eligibility criteria (e.g., years considered, language, and publication status), and provide a rationale.	Click here to enter text.
Information sources*	7	Describe all information sources in the search (e.g., databases with dates of coverage and contact with authors to identify additional sources), as well as the date the most recent search was executed.	Click here to enter text.
Search	8	Present the full electronic search strategy for at least 1 database, including any limits used, such that it could be repeated.	Click here to enter text.
Selection of sources of evidence†	9	State the process for selecting sources of evidence (i.e., screening and eligibility) included in the scoping review.	Click here to enter text.

SECTION	ITEM	PRISMA-ScR CHECKLIST ITEM	REPORTED ON PAGE #
Data charting process‡	10	Describe the methods of charting data from the included sources of evidence (e.g., calibrated forms or forms that have been tested by the team before their use, and whether data charting was done independently or in duplicate) and any processes for obtaining and confirming data from investigators.	Click here to enter text.
Data items	11	List and define all variables for which data were sought and any assumptions and simplifications made.	Click here to enter text.
Critical appraisal of individual sources of evidence§	12	If done, provide a rationale for conducting a critical appraisal of included sources of evidence; describe the methods used and how this information was used in any data synthesis (if appropriate).	Click here to enter text.
Synthesis of results	13	Describe the methods of handling and summarizing the data that were charted.	Click here to enter text.
RESULTS			
Selection of sources of evidence	14	Give numbers of sources of evidence screened, assessed for eligibility, and included in the review, with reasons for exclusions at each stage, ideally using a flow diagram.	Click here to enter text.
Characteristics of sources of evidence	15	For each source of evidence, present characteristics for which data were charted and provide the citations.	Click here to enter text.
Critical appraisal within sources of evidence	16	If done, present data on critical appraisal of included sources of evidence (see item 12).	Click here to enter text.
Results of individual sources of evidence	17	For each included source of evidence, present the relevant data that were charted that relate to the review questions and objectives.	Click here to enter text.
Synthesis of results	18	Summarize and/or present the charting results as they relate to the review questions and objectives.	Click here to enter text.
DISCUSSION			
Summary of evidence	19	Summarize the main results (including an overview of concepts, themes, and types of evidence available), link to the review questions and objectives, and consider the relevance to key groups.	Click here to enter text.
Limitations	20	Discuss the limitations of the scoping review process.	Click here to enter text.
Conclusions	21	Provide a general interpretation of the results with respect to the review questions and objectives, as well as potential implications and/or next steps.	Click here to enter text.

