EVOLUTION IN THE EVIDENCE BASE ON CHILD MARRIAGE

2000–2019

UNFPA-UNICEF
Global Programme to End Child Marriage

Anju Malhotra
Shatha Elnakib

January 2021

end child marriage
A voice. A chance. A future.

The Global Programme to End Child Marriage is generously funded by the Governments of Belgium, Canada, Italy, the Netherlands, Norway and the United Kingdom, as well as the European Union and Zonta International.

#ENDChildMarriage

Front cover: Burkina Faso. October 2020. © UNICEF/UNI394572/ Frank Dejongh
Back cover: Bangladesh. July 2018. © UNICEF/UNI333941/Mawa

Acknowledgements

The research and writing of this scoping review was undertaken in 2019–2020 by Anju Malhotra, Programme Division, UNICEF, and Shatha Elnakib, Johns Hopkins University School of Public Health, on behalf of the UNFPA-UNICEF Global Programme to End Child Marriage. We would like to thank Nankali Maksud for supporting the overall effort and Helen Belachew, Satvika Chalasani, and Joseph Mabirizi for providing helpful comments on a draft version. Thanks are also due to Chandra-Mouli Venkatraman and Marina Plesons from WHO as well as Rachel Yates, Ellen Travers, and Arwyn Finnie from Girls Not Brides for discussions and feedback on key themes explored in the paper. Additionally, we are grateful to the many attendees of a webinar presentation of the paper in June 2020 for their comments and suggestions.

Anju Malhotra, Shatha Elnakib

An Executive Summary of this scoping review is available at this link.

Contents

1. Introduction

© UNICEF/ UN0324156/
Biju Boro

The issue of child marriage has gained considerable global momentum in the past two decades, with a target for the elimination of child marriage by 2030 now in the Sustainable Development Goals (SDGs), and an ever-increasing number of countries, organizations, and individuals committed to working toward achieving this goal. Recent data indicate that there has been progress in reducing rates of child marriage globally, although there is significant variation across and within regions and countries, with rates remaining stagnant and even increasing for several sub-geographies and sub-populations. Even more daunting is the fact that despite the progress, rates of reduction would have to accelerate to 11 times their current trajectory in order for the target of elimination to be reached by 2030.

Given this monumental task and its urgency, it is extremely important that upcoming advocacy, programming, policy, and investment efforts be informed by the best evidence available, and that upcoming evidence strategies be poised to address the most critical gaps for effective action. While the evidence base on understanding and addressing child marriage across various contexts has expanded rapidly over the past 20 years, it is less clear in what ways its evolution has paralleled the evolution of child marriage as a global priority and how the trajectory for upcoming research and evidence generation and synthesis can be best informed from learning to date.

In this paper, we present the findings from our scoping review of the evidence base on child marriage from 2000-2019 precisely to address this question. During this 20-year evolution, what has the evidence based contributed to most effectively, and what important gaps remain? Equally, as the field has progressed during this time to present new challenges and opportunities, what new urgencies with regard to the evidence base have emerged? In particular, has the evidence base evolved with the changing status of the child marriage issue on the global agenda, from a primary focus on information and knowledge enhancement for advocacy to secure commitments, political action, develop a framework and set the agenda, to the more intervention-focused priorities of today where specifying viable, feasible and cost-effective strategies for meaningfully changing the life trajectories of millions of girls is most critical concern? How is the evidence base advancing action to end child marriage?

The paper is structured as follows. We begin by presenting the methodology of the scoping review which focused on child marriage related research outputs between 2000-2019 in the published and grey literatures. We then present our findings beginning with an overview of the historical evolution and trend in the volume of research outputs, the distributional shifts in their geographic focus, the type of data utilized, and the primary focus for the research inquiry. We then present our analysis of how the evidence on child marriage has evolved over the last 20 years, grouped under four sub-themes: 1) prevalence and measurement; 2) determinants, correlates and context; 3) consequences, 4) interventions. Structuring our findings in these sub categories should inform the key questions framing this review, advancing our understanding of the degree to which the evidence base has shifted from a basic understanding of child marriage to deeper and more nuanced findings for a broader range of contexts, and in particular, the extent to which the attention has shifted to not just understanding the problem, but to documenting and learning from both successful and unsuccessful attempts at implementing interventions to prevent and mitigate child marriage.

2. Methodology

© UNICEF/UNI394636/
Frank Dejongh

Our review of the literature on child marriage was guided by the scoping review methodological framework developed by Arksey & O'Malley (1). Scoping reviews map the key concepts underpinning a research area and the main sources and types of evidence available, characterizing the breadth of the existing literature on a given topic and lending themselves to broad research questions (1,2) (3). They differ from systematic reviews in that included publications are not limited to specific study designs or restricted to high quality research (1). This approach was preferable for our query since we are interested in the full range of evidence generated and its evolution—not limited to high quality research only. In fact the range of quality and redundancy in the research outputs that have emerged is part of the analysis and findings, which requires the inclusion of both poor and high quality research.

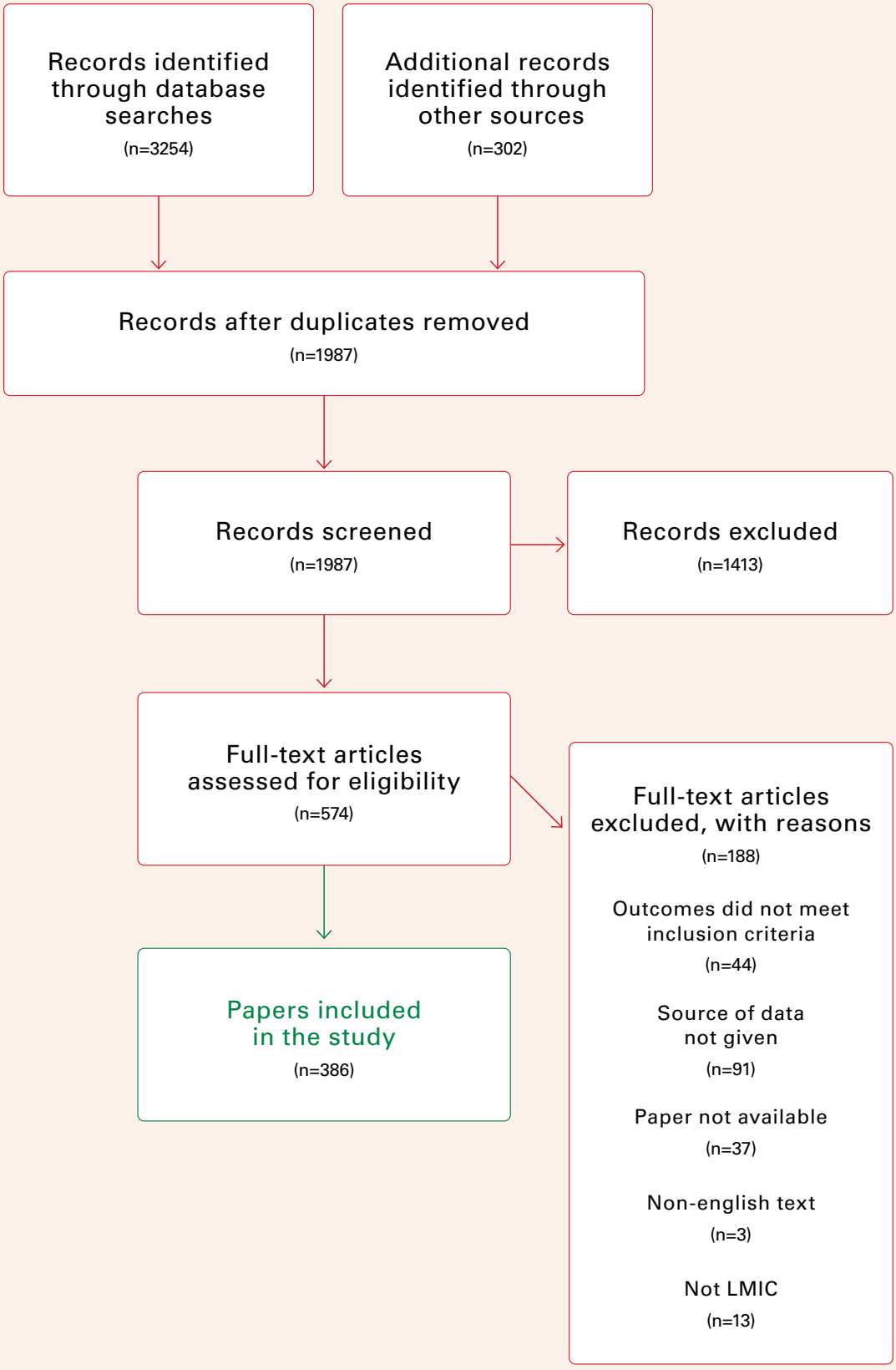
In providing a comprehensive overview, scoping reviews allow for numerical analysis which conveys information on the volume, coverage and geographic distribution of research on child marriage. In turn, this draws attention to research gaps as well as topics which have been extensively studied or omitted. They also allow for the systematic collation, sifting, charting and summarization of studies, allowing us to compare across studies, identify gaps and contradictions in the evidence base, and document the conceptual evolution of the field and the current state of research. Given our interest in analyzing the evolutionary research landscape on child marriage and overall aim to shed light on underexplored areas that warrant greater attention, this method is especially suited to our nature of inquiry. An important compromise in getting this comprehensive overview, however, is that scoping reviews can yield an abundance of literature which can be difficult to manage and which cannot be analyzed in depth.

To ensure methodological rigor and replicability, we followed a pre-specified research protocol that described the review aims and methods for both the published and grey literature. For the published, peer-reviewed literature, we developed a broad search strategy to maintain breadth of coverage, using a combination of keywords to search a total of eight electronic databases: Pubmed, Embase, Cochrane, PsychINFO, CINAHL, Popline, Sociological Abstracts, and Econlit for publications published from January 2000 to July 2019. This was coupled with backward citation tracking on eligible studies. The Pubmed search strategy, which was adapted for each database, included: ((Child* (tiab) AND Marriage (tiab)) OR (adolescent[tiab] AND marriage [tiab])OR (Early(tiab) AND Marriage[tiab]) OR "Child Marriage" [tiab] OR "Early Marriage"[tiab] OR "Forced marriage" [tiab] OR

"Child bride" [tiab] OR "Adolescent marriage"[tiab]). Articles were included if they met the following criteria: (a) original studies, both quantitative and qualitative, in which child marriage was one primary exposure or outcome; (b) studies that described at least one of the following: prevalence of child marriage, drivers, consequences, interventions, or experiences of child brides; (c) studies conducted in a low or middle-income country (using the World Bank classification); and (d) studies published from 2000 onward. Only articles in English were included.

Our search strategy for the grey literature was three-pronged, and included: a) a scan of internal documents and research outputs commissioned by the UNFPA-UNICEF Global Program to End Child marriage; b) searching publications posted on websites of organizations working on child marriage – including the online database maintained by Girls not Brides which maps research on child marriage, and a targeted search of publications posted on the websites of the International Center for Research on Women (ICRW), UNFPA, UNICEF, Pathfinder, and the Population Council, and c) snowballing using the bibliographies of publications mapped. We only included original research publications that relied on primary or secondary analysis, and excluded human interest stories, toolkits, training curricula, guidelines, program documents, national policies, and conference proceedings/notes. The PRISMA flowchart (see **Figure 1**) shows the process for the final inclusion of 386 publication in our analysis.

Figure 1: PRISMA flow diagram



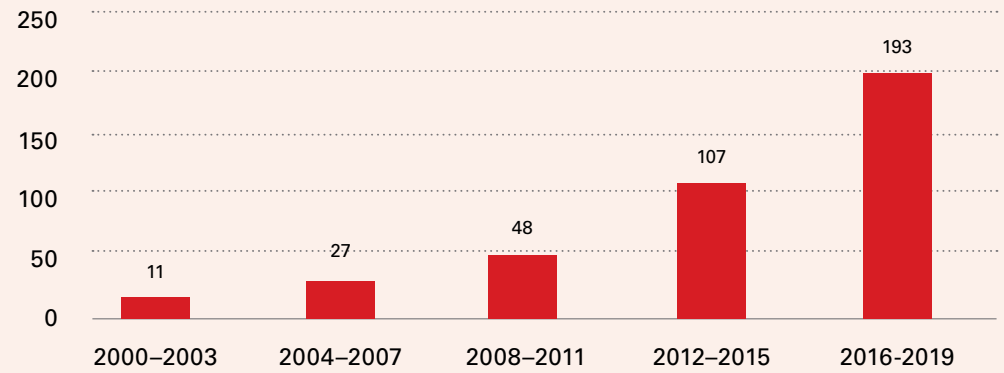
3. Results

© UNICEF/UN0281302/
Tadesse

3A Overview

In reviewing the 386 publications selected for the review, it is very clear that the volume of the evidence base on child marriage has increased exponentially from 2000 to 2019. As **Figure 2** below shows, the number of publications in the 3.5 year period from 2016-2019 period alone (193) is equal to the number of publications for the entire 16 year period from 2000-2015 (193). The pace of evidence-focused publications especially increased as of the 2012-2015 period, when 107 publications were generated, more than double the outputs in 2008-2011 (48) and almost 10 times the number generated in 2000-2003 (11). That 2011-2012 were the turning point years in the pace of acceleration in the volume of this evidence base is very likely due to the proactive efforts by researchers and advocates coming together at this time to highlight child marriage as a priority issue for incorporation in the Sustainable Development Goals (SDGs). And certainly, the rapid increase since 2016 is at least partly attributable to their success in having the elimination of child marriage being included as a target in the SDGs as well as the concurrent expansion of programmes, policies, advocacy, data and research locally and globally.

Figure 2: Trend in volume of studies on child marriage 2000–2019



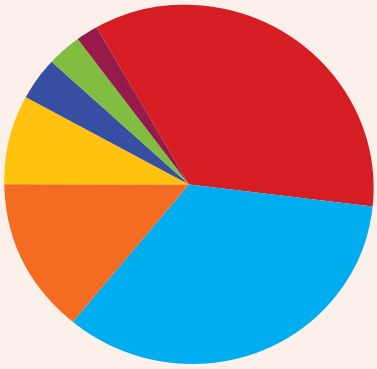
1. Trends in Regional Focus of Studies

Figure 3 shows the regional distribution of the 386 publications for the full 20 year period, indicating that the vast majority of evidence base has rightfully focused on Sub-Saharan Africa (SSA) and South Asia (35% and 34%), the two regions with highest prevalence rates and burden of child marriage in recent history. On the other hand, the Latin America and Caribbeaan (LAC) region which currently has the third highest prevalence of child marriage globally, is significantly underrepresented in this body of literature with only 2% of the publications focusing on child marriage in the LAC countries. This may be because our search is limited to English language publications.[1]

1. In addition, we carried out a separate Pubmed search specific to Latin America and did not limit the search to English articles. The search strategy however only yielded a total of 9 articles. It is possible that the limitations in the research noted for SSA here and in some of the following sections are due to the search beign confined to English language publications.

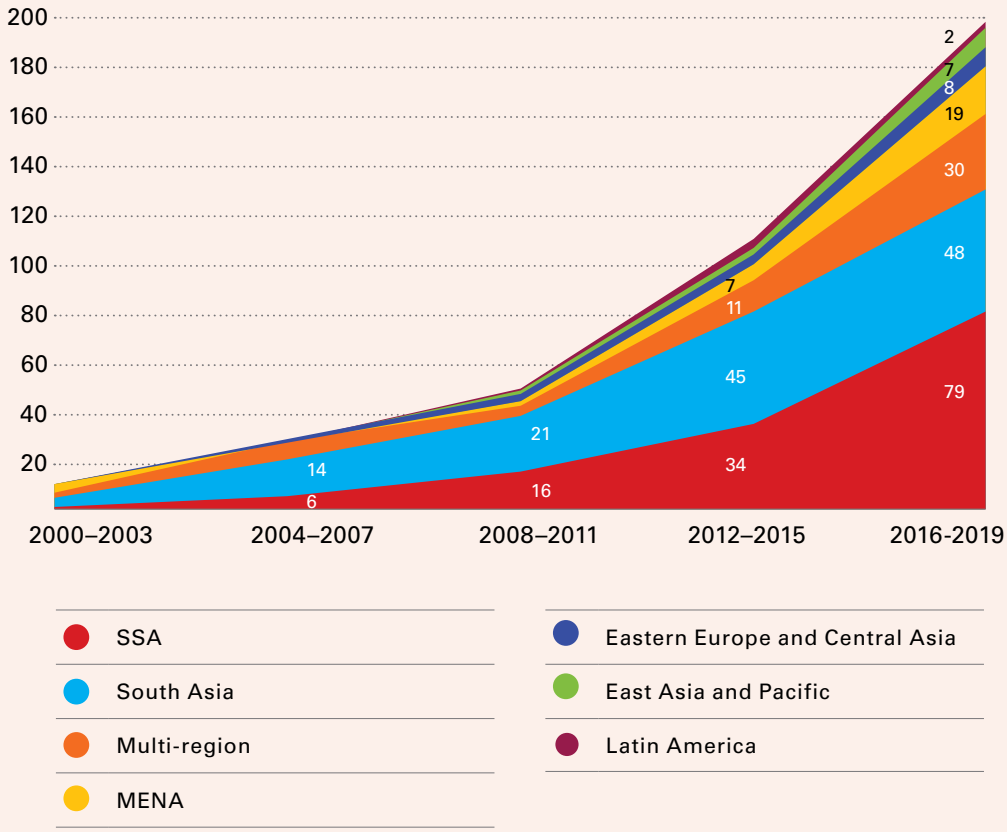
Our review of trends over time indicates that concerted attention to a particular region can shift the share of evidence base being generated with a focus on that region. As **Figure 4** shows, the body of research published between 2000-2010 heavily represented South Asia (with 43% of publications), while Sub-Saharan Africa (SSA) was underrepresented (with 28% of the publications) despite having very high prevalence rates of child marriage. This was no doubt due to a longer history of policy, programmatic, and research attention to child marriage in South Asia. However, as the gap on the evidence base in Sub-Saharan Africa was continuously highlighted in the work generated in the first decade of the new millennium, this pattern reversed in the 2011-2019 period, and SSA became most represented in the

Figure 3: Regional focus of studies on child marriage 2000-2019



SSA	35%
South Asia	34%
Multi-region	14%
MENA	08%
Eastern Europe and Central Asia	04%
East Asia and Pacific	03%
Latin America	02%

Figure 4: Trend in regional focus of studies on child marriage 2000-2019

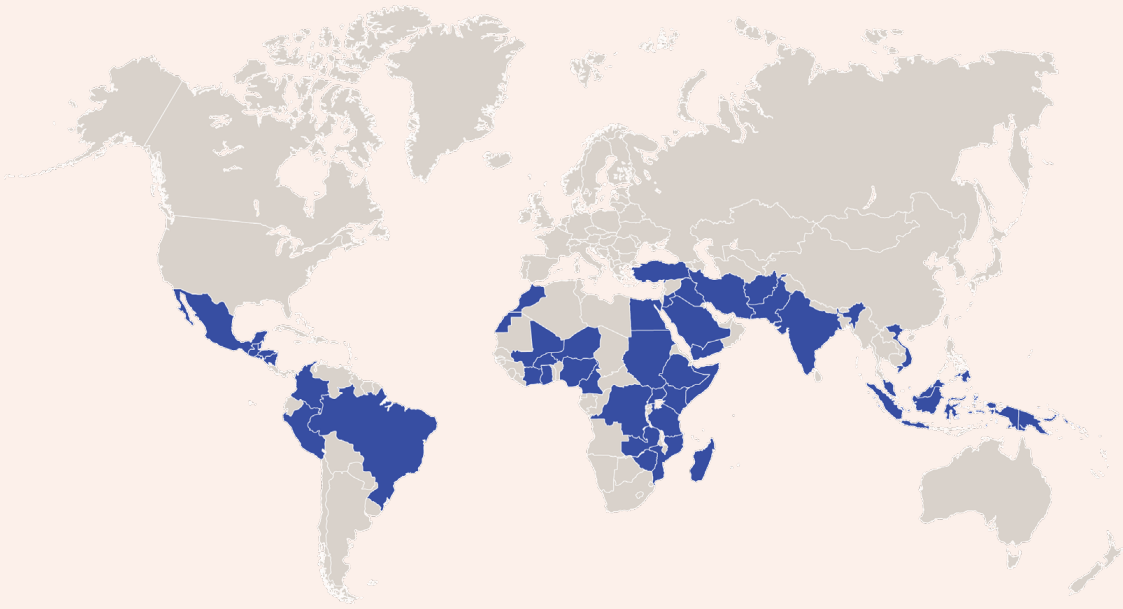


evidence-related literature on child marriage (with 37% of the publications), overtaking South Asia (with 32% of the publications). While the publications on South Asia still remain extensive and a steady volume continues to be generated till the present day, the volume for SSA has grown rapidly, especially since 2012.

For LAC, there has been an increase, from 1% in 2000-2010 to 2% in 2011-2019, but the region remains severely underrepresented in the English language publications despite high and stagnant rates of child marriage and early unions. Research in the MENA region was limited throughout 2000-2010 with only 4 publications available but has increased more than six times in the 2011-2019 period, largely attributable to the increase in research on child marriage in humanitarian settings. Indeed, more than 40% of the articles published on the MENA region in 2011-2019 were for humanitarian settings. Encouragingly, publications with a multi-regional focus have also increased from 10 to 43 articles during this period, helping to provide a comparative perspective across regions.

Within regions, the evidence base on certain countries is much more extensive than for others. In South Asia, India (n=59) stood out as the country with the greatest number of publications, followed by Bangladesh (n=48), and Nepal (n=24). In SSA, Ethiopia was most heavily represented (n=30) followed by Uganda (n=12), Kenya (n=11), and Nigeria (n=10). In the Middle East, Lebanon, Egypt and Jordan were most heavily represented with 8, 7 and 7 publications respectively. In Latin America, publications from Honduras were most common (n=4) followed by Brazil (n=3). In East Asia and Pacific, Indonesia (n=8) was most represented followed by Vietnam (n=5). In Eastern Europe and Central Asia, most publications were from Turkey (n=13), followed by Serbia. **Figure 5** showcases the countries[2] represented in the collective evidence base in the last 20 years.

Figure 5: Countries represented in studies of child marriage, 2000-2019



2. Countries in publications featuring more than 3 settings were not counted.

For trends over time by country, we note three patterns. First, some countries are consistently well-studied and experienced steady increases in publication volume over time. This category encompasses several South Asian countries, most prominently India, Bangladesh, Nepal and Pakistan – all of which are consistently represented in the literature across time. Second, some countries are not represented in the earlier literature, but start to appear with some frequency in the 2011-2019 period. Examples include Indonesia, with several publications mapped after 2010. In the Middle East region, Jordan and Lebanon are widely represented in the 2011-2019 literature, largely owing to the Syrian refugee crisis and to bourgeoning interest in understanding child marriage in humanitarian settings. As pointed out previously, publications from Latin America only appear in later years, and only select countries are featured (namely Brazil, Colombia, Guatemala, Honduras, and Nicaragua). Additionally, most countries from SSA fit into this group – including Ethiopia, Nigeria and Ghana.

The third category includes countries that are consistently understudied, despite having a significant prevalence of child marriage. In East Asia and the Pacific, Lao has only one publication despite having the highest percentage of child marriage in the region, with 37 per cent of women aged 20 to 49 married by the age of 18 (4). Similarly, only a few publications for Malaysia and Afghanistan are published and those are mostly in the 2011-2019 period. Sudan and Yemen which have the highest rates of child marriage in the MENA region are seriously underrepresented. In SSA, some countries remain underrepresented. Notably, few publications came out from Niger, despite it having the highest rate of child marriage in the region and the world (5). Similarly, Central African Republic was completely absent despite its high prevalence of child marriage. From the Latin America region, countries like Mexico, Bolivia and Belize where more than 20% of marriages occur before age 18 are entirely lacking representation (6).

2. Trends in Terminology and Topics Covered

The term "child marriage" itself became more regular coinage as the last two decades progressed. For example, in the titles for the publications from 2000-2003, there is no mention of "child marriage," but rather, "early marriage" is used as the relevant term. "Child marriage" first appears in titles starting with 2004, but even during the 2004-2007 period, only 4 publications used the term in their titles, with the rest referring to "early marriage," "the timing of marriage," "delayed marriage," or "age at marriage." By 2012, the term "child marriage" had become more prominent than the term "early marriage," and since 2016, 65% of the publications with a relevant reference in their title have used the term "child marriage."

Figure 6 captures our findings with regard to subject matter of interest in the research literature, indicating that the determinants and correlates, or "drivers" of child marriage were

the most frequent topic of interest (n=181), followed closely by the consequences of child marriage (n=168). The prevalence and measurement of child marriage as well as shifts in trends over time were covered in 93 studies, while interventions were the focus of the fewest number of studies (n=61).

Figure 7 shows that while publications for all the four topics increased over time, it is the "determinants, correlates and context" (or what is often referred to in the studies themselves as "drivers") category that has exploded the most, increasing 16-fold from 4 in 2000-2003 to 95 in 2016-2019. This increase took off after 2011 when during 2012-2015 52 publications were generated compared to only 15 each in 2004-2007 and 2008-2011. By 2019, determinants, correlates and context comprised 47% of all research topics in the publications covered, compared to 24% in 2000-2003.

Figure 6: Major topics covered by studies on child marriage, 2000-2019

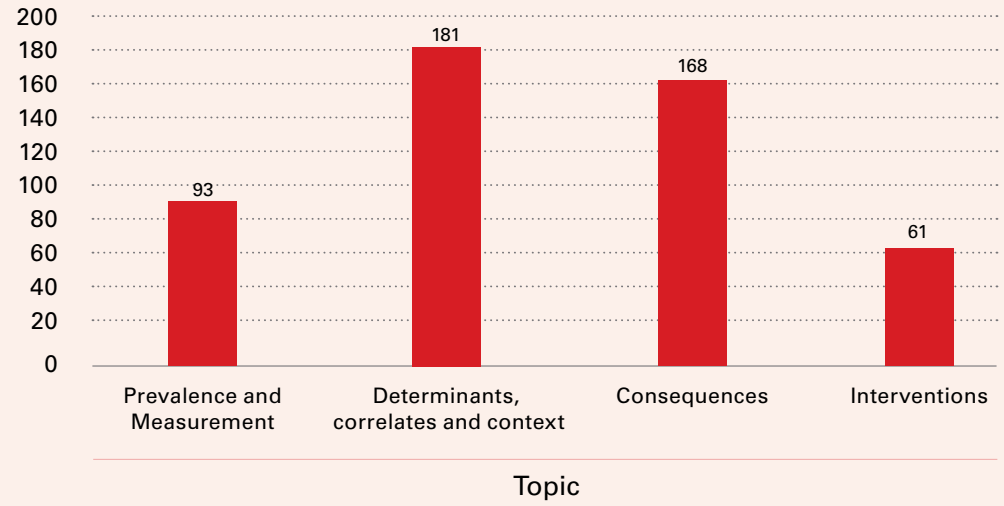
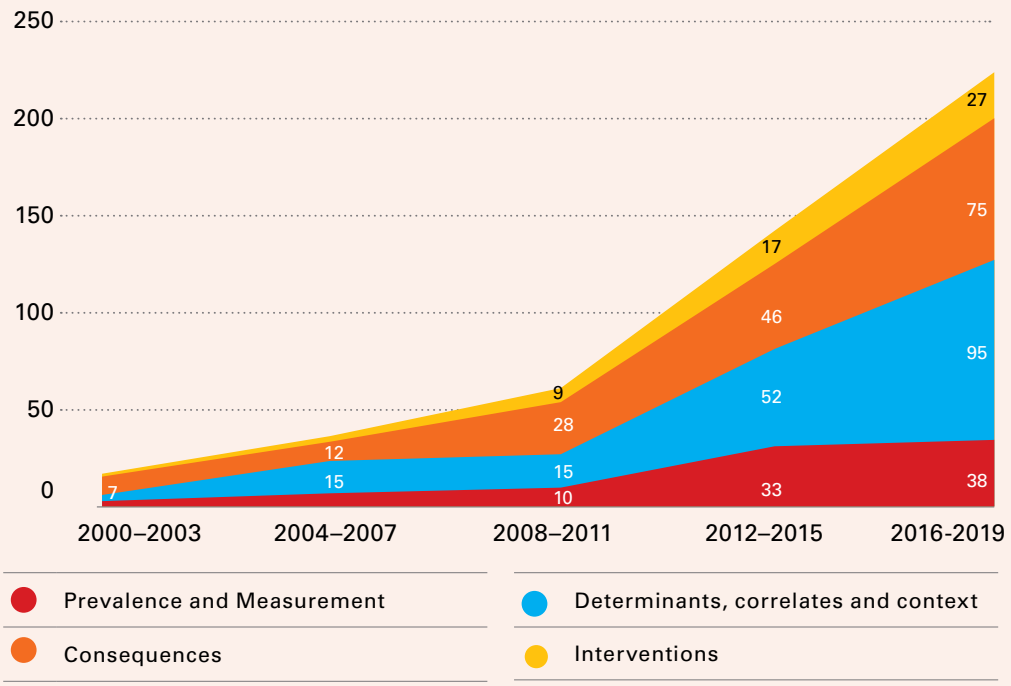


Figure 7: : Trend in topics covered by studies of child marriage, 2000-2019



The volume of publications on consequences increased ten-fold over time, from 7 in 2000-2003 to 75 in 2016-2019. Coverage on prevalence and measurement also increased over time from 4 studies in 2000-2003 to 10 in 2008-2011 and 33 in 2012-2015 but plateaued by 2016-2019 to 38 studies. Intervention studies also show a steady increase over time, from only 2 in the earliest period to 27 studies in the most recent period.

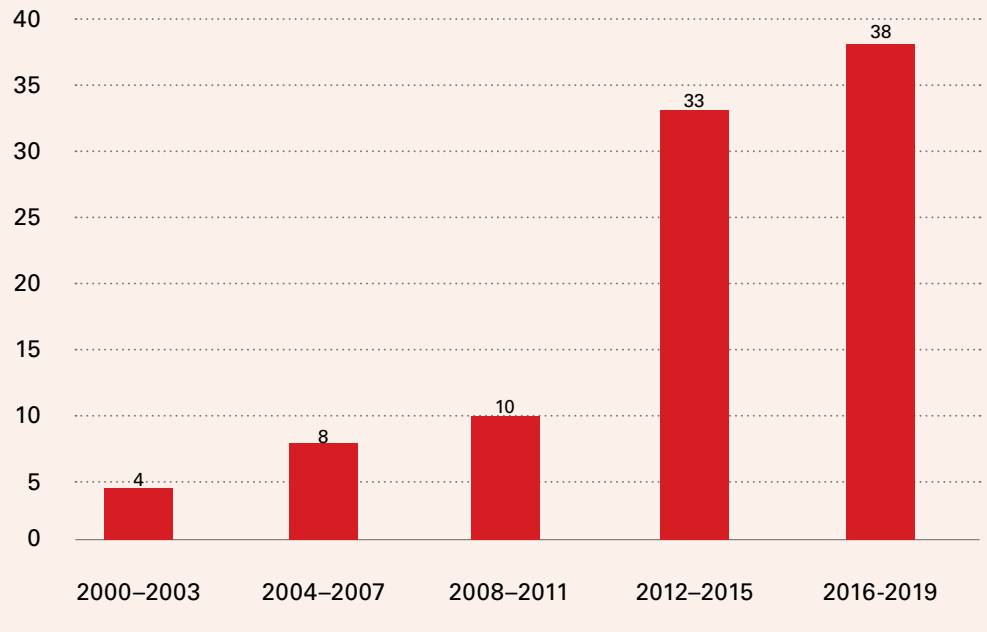
In general, despite the radical increase in publications, the overall distribution of topics covered has not shifted radically as determinants and consequences continue to comprise the bulk of child marriage research. It might have been reasonable to expect that the early years of building the evidence base on child marriage would have concentrated on assessing the scope and nature of the issue through publications on prevalence, determinants, and consequences while the latter years would concentrate more on interventions. However, our mapping of the trend with regard to topical focus indicates that intervention studies have increased only marginally as a share of the evidence base, from 10% in 2004-2007 to 11.5% in 2015-2019, and remain the smallest share in terms of child marriage related topics addressed by research. That said, it is important to note that 43 out of 61 intervention-related articles were published between 2012 and 2019, which hopefully does improve the positioning of the child marriage field with regard to understanding and assessing intervention strategies.

3B Evidence on prevalence and measurement

The availability of fairly reliable data sources and a reasonably well-established indicator for measuring child marriage prevalence have been important contributing factors to the issue gaining momentum as a priority concern on the global development agenda. Over the past 20 years, both the rigor and range of the evidence base on the prevalence of child marriage has expanded significantly, including the geographies and subpopulations covered, the documentation of shifting trends, the effectiveness and range of data sources tapped, and the standardization and regularity of the measures used. Remaining gaps that will require further attention and innovation include more standard methodologies for determining changing prevalence rates and burden over time, and adequate data for capturing prevalence and trends in sub-populations and sub-geographies for better targeting interventions.

As **Figure 8** below shows, the child marriage field has devoted increasing research effort to prevalence and measurement issues with 93 publications that quantified or otherwise addressed the measurement of child marriage in the last two decades[3]. In particular, there was a surge in publications on this topic from 2012 onward, from 10 in 2008-2011 to 33 in 2012-2015, to 38 in the 2016-2019 period.

Figure 8: Trend in volume of studies on prevalence and measurement of child marriage 2000-2019



3. Of the total 93 publications on prevalence and measurement, 86 publications addressed prevalence, 6 addressed issues around reporting and measurement methodology, and 1 addressed both.

1. Progress on Geographic Coverage of Prevalence

The vast majority of articles on prevalence (68% or 59 out of 87[4]) draw from DHS, MICS and other secondary data sources to quantify child marriage prevalence for a significant number of geographies at reasonable periodic intervals. Academic, non-profit and UN researchers are increasingly and more effectively tapping these reliable data sources to estimate prevalence for most regions of the world, covering a large number of countries. For example, UNICEF's overview publication on "early marriage" as a harmful practice in 2005 provided country specific prevalence data for 48 countries (7) whereas for the inaugural "Day of the Girl" in 2012, UNFPA released a publication with data for 107 countries (8). More recently, in 2018 and 2019, UNICEF as the custodian of the SDG indicator on child marriage is now releasing much more detailed data in the form of child marriage profile reports by region and even by country (9).

In addition, a wide range of publications—both peer reviewed and grey—are now providing nationally representative child marriage prevalence estimates with a focus on single countries as well as for comparative multi-country regional and global analyses. For example, 67 of the studies in our review focused in depth on a single country, thus providing extensive prevalence data on 32 countries. Other studies undertook multi-country analysis, such as the 2012 publication by Walker, using DHS data to rank twenty SSA countries based on prevalence of child marriage (10). Another UNICEF-commissioned study conducted by ICRW examined child marriage patterns in 17 countries in West and Central Africa (11).

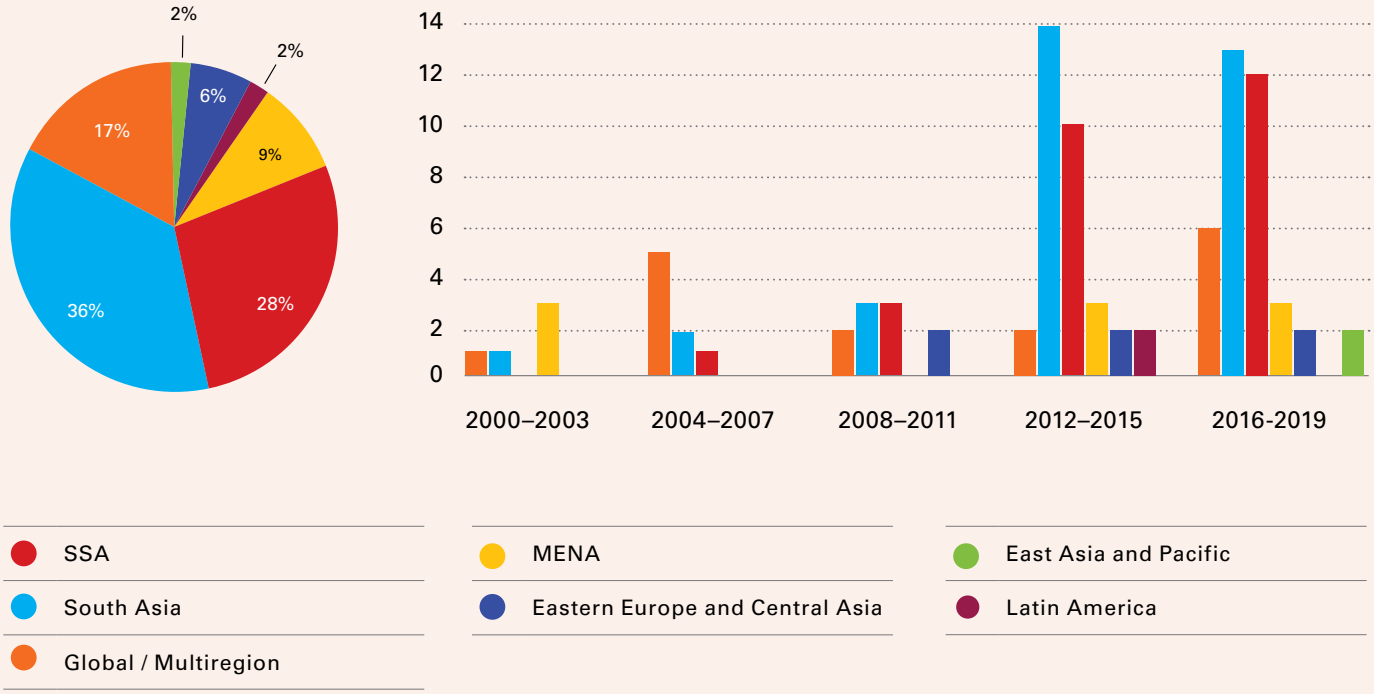
Over the years, the data on child marriage prevalence has told a consistent story on regional patterns in the prevalence and burden of child marriage even as most recent analysis on trends in declining, stagnating or increasing rates have added important nuance. The most recent estimates indicate that the highest prevalence of child marriage is in Sub-Saharan Africa at 37%, followed by South Asia at 30%. In terms of scale, South Asia is the home to the largest number of girls married as children, but over the coming decades, population momentum and slower declines in SSA are likely to take on that status. Latin America follows next in terms of the third highest prevalence at 25%, followed by the Middle East at 17%, Eastern Europe and Central Asia at 11% and East Asia and Pacific at 7% (9).

Given the historic high rates and burden of child marriage in South Asia, prevalence studies have focused most frequently on this region. As **Figure 9** shows, 36% of all the evidence base on child marriage prevalence is for South Asia, followed by 28% for SSA. The figure also shows that the number of studies on SSA have increased from non-existent in 2000-2003 to 10 in 2012-2015 and 12 in 2016-2019, thus focusing greater attention on the high rates in that region. In the earlier years, studies with a multi-regional focus were common as they provided a broad comparative view,

4. We used 87 as the denominator instead of 93, because 87 articles were oriented toward measuring prevalence; whereas the remaining 6 discussed issues concerning reporting and did not quantify prevalence per se.

and the 2016-2019 period has seen their resurgence. Prevalence studies for Eastern Europe and Central Asia, Latin America, and East Asia and Pacific are the fewest in number and have emerged mostly since 2012.

Figure 9: Trend in volume of studies analyzing shifts in child marriage prevalence over time 2000-2019



The Middle East and North Africa region was a focus of two studies on prevalence in the earlier years, but then went into hiatus for almost a decade, remerging again since 2012 with the growing interest in humanitarian settings. Rates of child marriage and shifting trends in the conflict affected areas of the Middle East remain very difficult to measure due to data collection and validity challenges, which may be one reason why among the 31 studies with a focus on the MENA region in our review, a total of only 8 were focused on the issue of prevalence.

2. Progress on Assessing Shifts in Prevalence Over Time

One of the most important improvements in the evidence base on child marriage over the last decade has been the increase in studies examining trends in the prevalence of child marriage within and across regions over time. The growing interest in understanding not just what child marriage rates are in different countries, but whether or not they are declining in recent years has been spurred by the status of child marriage as an indicator in Goal 5 of the SDGs. Leading up to the SDGs, advocates and experts began assessing progress in order to make the case for incorporating the child marriage indicator in the SDGs, and once that was accomplished, of course, there is now a global mandate for tracking progress toward the elimination of child marriage as a harmful practice.

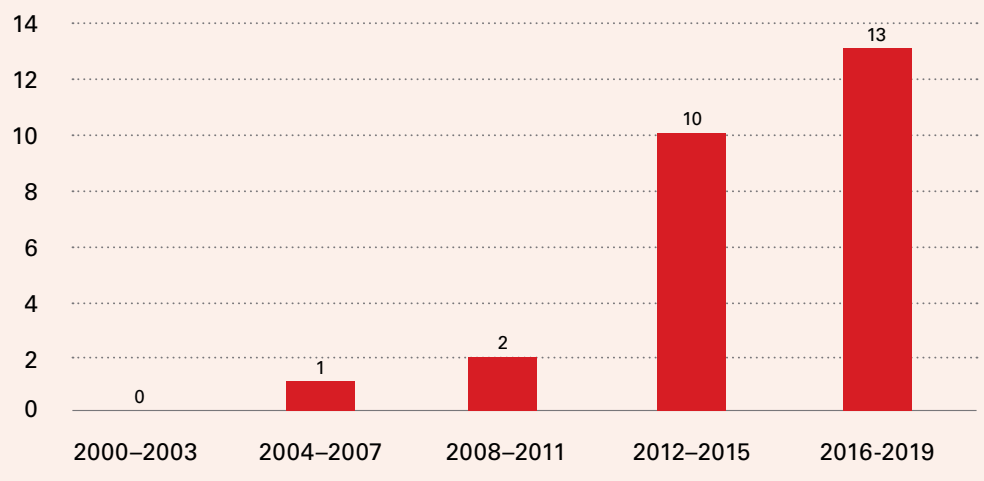
As **Figure 10** shows, therefore, it is not surprising that of the 26 trend analyses on the prevalence of child marriage produced between 2000 and 2019, 23 were generated from 2012 onward. Roughly half of the trend analyses were undertaken by academics for publication in peer reviewed journals, and these tended to be more heavily weighted toward the earlier periods. Most of the other half were publications either produced by UNICEF or UNFPA or commissioned by one or both of these agencies.

Throughout the 2000-2007 period, there was only one publication with a trend analysis, an important contribution by Mensch et al. as part of the 2005 National Academy of Sciences study on the patterns and shifts in adolescents' transitions to adulthood (8). This publication used cohort analysis to determine historic trends in age at marriage among females and males for 73 countries using a combination of DHS, survey and census data. It concluded that with a few exceptions, from 1970 onward, there has been a secular trend toward increasing age at marriage among females and especially males, the exceptions being the LAC region and males in South Asia.

With growing advocacy efforts around the importance of child marriage for the global agenda in 2011 and 2012, UNFPA produced a comprehensive report on child marriage in 2012, including trend analysis for 48 countries using DHS and MICS data from two time points: 1986-2006 and 2001-2010 (8). Based on the available data, the report concluded that little progress had been made in reducing child marriage rates globally even as some countries demonstrated declining trends – with child marriage rates stagnating over 10 years at 50% in rural areas and 23% in urban areas.

More recently, however, as the custodian agency for the SDG indicator on child marriage, UNICEF has published two global trend analyses, one in 2014 and one in 2018, showing more promising results. The 2018 publication is based on a cohort analysis of 106 countries, using a combination of DHS, MICS, census and other survey data and estimates. It was especially well-timed in being able to incorporate recent survey data from some large high prevalence and burden countries—such as India

Figure 10: Trend in volume of studies analyzing shifts in child marriage prevalence over time 2000-2019



and Ethiopia. Recent declines in these and other countries have contributed significantly to global declines in child marriage rates in the past twenty years from 31% to 21% (9,12). This is a very remarkable reduction despite the fact that it is far from the SDG target of eliminating child marriage.

The trend analyses in recent years also highlight the shifting burden of child marriage from South Asia to SSA, the stagnation in regions like Latin America and West Africa, and even decreases in age at marriage in some countries like Mali, Gabon and Central African Republic (11) as well as in some humanitarian settings (13–15). These patterns have motivated greater attention by UN agencies—mostly UNICEF and UNFPA—as well as academics to assess regional and national variations in how trends in child marriage rates and number of girls being married as children are playing out over time. As of 2012, there have been seven separate child marriage trend analyses undertaken for the SSA region, an additional three trend analyses dedicated specifically to West Africa, as well as two trend analyses dedicated to South Asia, the vast majority being published in 2016 or later. For example, Raj et al examined changes in child marriage over two decades in four South Asian countries, finding that declines in child marriage are mostly among younger but not older adolescent girls (16). In addition to regional trend analyses, several studies focused on understanding changing patterns of child marriage in single countries such as in India (17), Bangladesh (18), Nigeria (19), Uganda (20), Mozambique (21), Ghana (22), Zambia (23), Zimbabwe (24), and Turkey (25).

3. Progress on Subnational Analyses of Prevalence

In addition to national level figures and cross-national comparisons, some studies have used high quality secondary data sets to undertake subnational and subpopulation analyses, a focus that is important for effectively targeting advocacy, investments, and interventions. In total, 34 studies focused on subnational analyses of child marriage, 26 of which were published post-2011. For example, a 2006 study in rural Nepal tapped data from Nepal's Demographic Survey on Fertility and Mobility and employed the lifetable technique to quantify the risk of child marriage in Palpa and Rupandehi, two high prevalence districts (26). More recently, a 2016 UNICEF-supported study used population-based household survey data to examine child marriage prevalence among Roma settlements in Serbia, finding that at 50%, child marriage was very common in this understudied group (27).

As the sample sizes and coding structures of standard DHS and MICS surveys and some other secondary data sources do not always permit disaggregation at the district or lower levels, many studies interested in a subnational focus turned to primary data collection for their estimates of prevalence in smaller geographies. Overall, 28 studies used primary data for estimating prevalence, with researcher-led household surveys being the main data source for the vast majority of these (N=22). Only one of these surveys was nationally representative, the rest covering much smaller subnational areas. For example, in a 2008 analysis,

Ertem and Kocturk focused on the prevalence of child marriage among Kurdish-speaking groups in Southeast Asia (28). A few studies used surveys from health facilities (n=3), SMS-based surveys (n=1), or marriage registration data (n=1) to get prevalence estimates for otherwise difficult to measure subpopulations and locations. For example, a 2014 UNICEF-commissioned study in Jordan used marriage registration data to document that the prevalence of child marriage is increasing among Syrian refugee communities (13).

Drawing from the HIV/AIDS terminology, since 2015 three articles have undertaken comprehensive "hotspot" analyses in Zambia (23), India (29) and Ethiopia (30), focusing on especially high prevalence sub-locations—usually districts—in these countries. In Zambia, the Population Council analyzed data from the 2010 Census to identify high prevalence districts and as a way to underscore the need to target child marriage interventions in these locations. In Ethiopia, ODI undertook a national mapping which helped identify hotspot woredas where child marriage rates are the highest and where interventions should be prioritized. The study in India triangulated data from a range of sources—the District Level Household Survey (DLHS) from 2007-2008, the Census 2011, and the Annual Health Survey—to undertake a trend analysis by district and found that while a decline in child marriage prevalence is observed across the country, in some districts, this decline is slowing down or even reversed. Data from the longitudinal Young Lives Study in Vietnam, Ethiopia, India and Peru has also provided in depth understanding of shifting child marriage prevalence among cohorts of children from low-income families within different districts/provinces in these countries (31).

4. Prevalence of Child Marriage Among Boys

In our review we found that the question of child marriage among boys has been of concern for child marriage researchers and advocates periodically ever since the early 2000's. Over the 2000-2019 period, 18 studies were published with a focus on child marriage prevalence for boys. Of these, 5 studies were published from 2001-2011, 9 were generated between 2013-2015, and 4 studies between 2016-2019. The vast majority of these studies focus on single countries, with a few publications focusing on a cluster of countries. Only 2 studies—the 2005 publication by Mensch et al, and a recent 2019 UNICEF publication by Murray et al. undertake a multi-country analysis with a large number of countries. Both these papers—from the early and more recent periods—not only use robust estimation methodologies, but also examine trends over time. In contrast, the wave of studies from 2013-2015 often focused on small locations within specific countries and several had limited ability to establish definitive or generalizable prevalence rates due to data and quality constraints.

As subsequent sections of this report note, the large volume of evidence base on the determinants and consequences of child marriage emphasizes gender inequality as the fundamental dynamic underlying child marriages, with much higher rates for girls than boys as well as the uniquely gendered negative

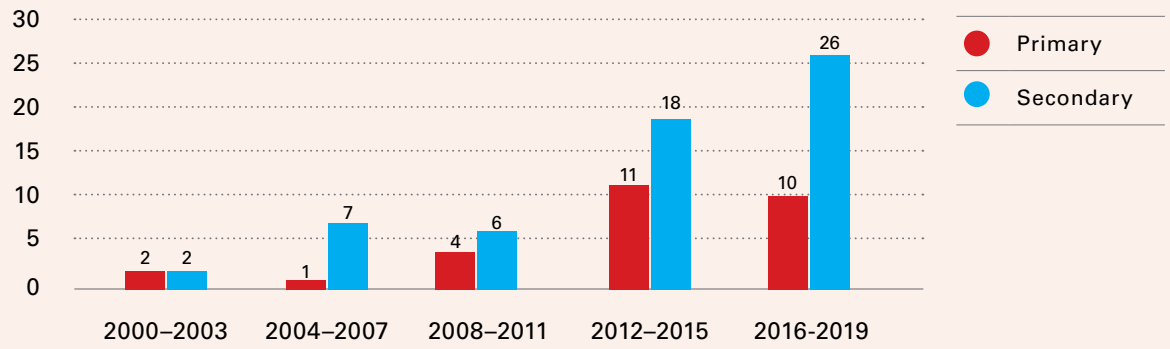
outcomes for girls, including early pregnancies, domestic abuse and power imbalance, social isolation, and financial dependence. With the increasing availability of DHS and MICS data for males as well as females, this logic is now also demonstrated through a more solid body of evidence that documents child marriage prevalence and trends among boys compared to girls. The most recent, comprehensive and definitive of these studies was published by UNICEF in 2019 (32), and it echoes the findings of the 2005 study by Mensch et al, conclusively establishing that child marriage rates are significantly higher for girls than for boys in every country among the 82 for which data are available, with 1 in 5 girls being married as a child globally compared to 1 in 21 boys. Multiples of the proportion of child brides compared to the proportion of child grooms in different countries typically range from 4 or 5 times higher to 10 or even 20 times higher. Also similar to the earlier study, this more recent analysis confirms a substantial secular decline in male child marriage rates over the past several decades, in all regions except Latin America.

5. Progress and Challenges on Data, Measurement, and Methodologies

The timely generation of prevalence and trend analysis has been an important propeller for child marriage advocacy and action, especially in the build-up to the SDGs. Our review makes it clear that researchers have increasingly recognized the value of existing data and tapped it effectively to flesh out a deeper and more nuanced picture of the scope of the problem. Thus, there has been important progress in better utilizing existing, high quality data for measuring child marriage prevalence, even as there has been recognition of the need to generate new data to estimate prevalence when existing sources have proven inadequate. The challenge going forward is to align the generation and use of prevalence and trend data and analyses for effective intervention design and monitoring rather than advocacy efforts alone. While the increasing interest in documenting prevalence for sub-national geographies and populations may suggest this intention, whether findings on prevalence for these locations and groups are being utilized for this purpose remains a yet to be answered question.

Our review also shows that even as the field is generating more primary data on child marriage prevalence, it is increasingly using reliable secondary data effectively for this purpose. In fact, as **Figure 11** shows, even though the use of primary data for prevalence studies has increased since 2008, the use of secondary data has increased much faster. Against a backdrop of growing interest in quantifying the prevalence of child marriage, both data sources shows an inflection point around 2012-2015 when 18 studies based on secondary data were published compared to only 6 in 2008-2011, and 11 studies based on primary data were published compared to only 4 in the previous period. Primary prevalence research however plateaus after 2012, while secondary research has continued to increase rapidly, possibly due to the SDG target on child marriage standardizing an indicator on child marriage that is readily measurable for significant geographies through existing DHS, MICS, and similar national surveys.

Figure 11: Trend in primary vs secondary data sources for studies on child marriage prevalence 2000-2019



More consistent and widespread use of the SDG indicator on child marriage—the proportion of women 20-24 married before age 18—as the standard for measuring prevalence is in fact an area of progress worth noting. Our review shows that during the 2000-2011 period, there was considerable heterogeneity in the indicators used to measure child marriage prevalence. These ranged from the proportion of 15-19-year-old women currently married; proportion of women aged 15-24 and 20-24 married under age 15 and 18; to women 25-49 married under age 18. The cutoff for defining 'early' or 'child' marriage was also less standard, with ages 16, 18 and 19 being used by different studies. Earlier publications were also less frequent in specifying a denominator for prevalence estimates, sometimes using "women of all ages" or women of reproductive age instead. Although some studies throughout the 20-year period under review have tried to measure child marriage prevalence for younger age groups without accounting for right censoring[5], this problem appears to be more common among earlier rather than later publications.

In contrast, many more of the publications emerging since 2012 recognize the SDG indicator on child marriage—proportion of women 20-24 married before age 18—as the established standard. In fact, with only a few exceptions, its use in prevalence estimates published from 2012-2019 was almost universal. Most of the articles published in this latter period were consistent in using 18 as the cutoff age and in explicitly defining women aged 20-24 or aged 20-49 as their denominator. Recent research is also more consistent in capturing both formal and informal unions, a matter of considerable importance when measuring prevalence in regions such as Latin America and the Caribbean. Some more complex techniques for estimating child marriage risk, such as survival or hazard models, were also more common post-2011 rather than prior to that time.

While there has been improvement over time in the number of countries and proportion of populations for which reliable data are available in order to calculate regional and global estimates,

5.Censoring is a condition in which the value of a measurement or observation is only partially known. For measuring the prevalence of child marriage among age groups younger than 18 (as for example the 15-19 age cohort) the actual child marriage rate for unmarried 15, 16, and 17 year old girls or boys is only partially known since they are still at risk of being married by 18 for some additional number of years. This is why strong indicators of child marriage examine the proportions married before 18 for females or males who are above 18 (such as the age group 20-24) and have completed the period during which they were at risk of being married as children.

important gaps remain. UNICEF calculates regional prevalence as population-weighted averages, which are then rolled into a population-weighted average globally. The rates and burden of child marriage released by UNICEF in 2018 were based on available DHS, MICS or other household survey data between 2010-2016 for 102 countries, covering 63% of the global population, with estimates and extrapolations for an additional 23 countries. As the DHS and MICS have a history largely in Africa and South Asia, population coverage from available data for these two regions is very good—99% for South Asia and 93% for SSA, a matter of reassurance since the highest levels of child marriage have been in these two regions. Population coverage from available data for South-East Asia (94%) and North Africa (82%) is also relatively good, but is much less comprehensive for regions like West Asia (70%) Central Asia (52%) and Latin America (52%) which still have fairly significant child marriage prevalence. Coverage is almost non-existent for Australia, New Zealand, North America and East Asia, and while these regions generally have very low levels of child marriage, they also include China, a country with a very large population weight, rates for which are included only as extrapolated estimates in global numbers.

The additional challenge for calculating trends over time is the limited number of countries for which quality, nationally representative survey data are available for a recent time period as well as over multiple time periods covering a decade or more. This problem is pronounced in countries that have experienced or are currently experiencing conflict or humanitarian emergencies. For the 2012 trend analysis by UNFPA, this constraint limited the analysis to 48 countries, requiring estimations for significant numbers of countries. For the 2018 trend analysis, UNICEF was able to include many more countries by relying largely on cohort analysis from the latest surveys. As opposed to comparing child marriage rates for women 20-24 across sequential survey rounds, this methodology compares the child marriage rates of women 45-49 to the rates of women 20-24 from the same survey in order to estimate change over a 25 year period[6].

While this cohort approach allowed for expansion of coverage to 102 countries on trend data, the literature also notes concerns about cohort analysis as a methodology for trend analysis, in terms of reporting, recall, or survival bias. These biases could result in underestimates of child marriage prevalence among older groups, leading to erroneously small estimates of change over time because older women may not accurately remember when they were married, or may report their marriage age closer to the time of the survey than was actually the case, or may no longer be alive to be included in the survey at all. At the same time, however, researchers can often (and UNICEF did) adjust for these biases, and in fact a study in SSA which compared the use of cohort analysis with the use of sequential survey rounds, found remarkably similar results using both approaches (33).

6. Although cohort analysis was the primary methodology for the 2018 trend analysis, because the global burden is significantly affected by the size of India's population and rates—and because the analysis raised questions about comparability across surveys for some cohorts of women—the estimates for India took into account results from all surveys from 1990-2016. This adjustment was not considered necessary for other countries.

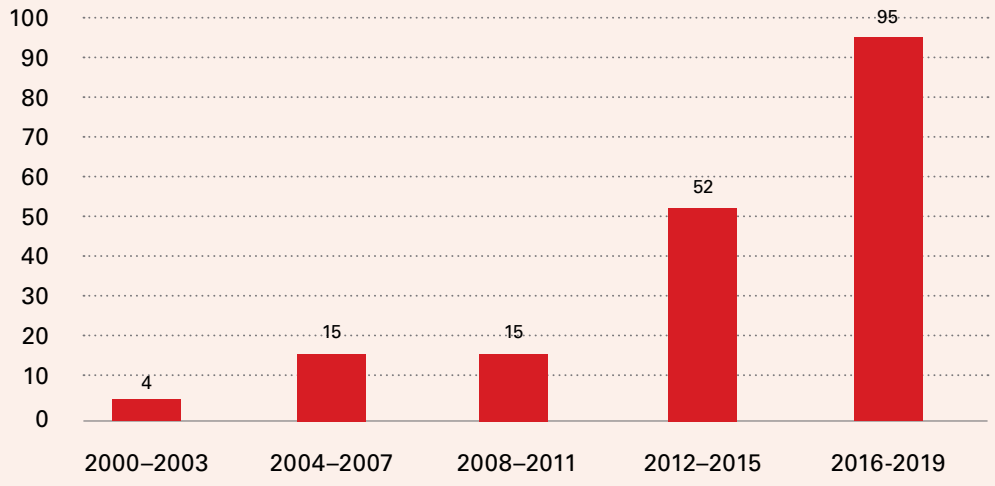
3C Evidence on determinants, correlates, and context

Studies on the determinants, correlates and context of child marriage comprise the largest category in the evidence base produced between 2000 and 2019. In conjunction with the accelerating activism and action to address child marriage since 2012, researchers and practitioners alike have been interested in trying to understand what motivates the practice of child marriage in specific settings. Studies in this category refer to "determinants,", "risk factors," "drivers," or "correlates" of child marriage. More comprehensively, most of these publications aim at understanding the "socio cultural context" of child marriage for their specific locations of interest.

1. Trends in Volume and Regional Distribution of Studies on Context

Thus, more than for any other topic on child marriage, the last decade has experienced an explosion in the evidence base on its determinants, correlates and socio-cultural context. As **Figure 12** shows, only 4 studies addressed this topic from 2000-2003, but the number grew to 15 each in the two subsequent four-year periods, 2004-2007 and 2008-2011. However, the real exponential increase began as of 2012, with 52 studies between 2012-2015, and 95 studies between 2016-2019. While this very large volume of studies—especially in these last 3.5 years—has covered some new geographic areas and provided some new insights, there is also considerable redundancy in the evidence base generated and the core conclusions drawn.

Figure 12: Trend in the Volume of Publications on the Determinates, Correlates and Context of Child Marriage 2000-2019



As depicted in **Figure 13**, South Asia and SSA stand out as regions with the largest evidence base on the socio-cultural context and correlates of child marriage which is not surprising given that these are the regions with the highest prevalence and burden. A subset of the studies (15%) have a global or multi-country focus and 11% feature countries from the MENA region. Latin America, East Asia and the Pacific, and Eastern Europe and Central Asia are relatively under-represented in this body of evidence, a matter of concern as child marriage rates are substantial in specific countries and sub-national locations in these regions.

Figure 13: Distribution of Research on the Context of Child Marriage by Region

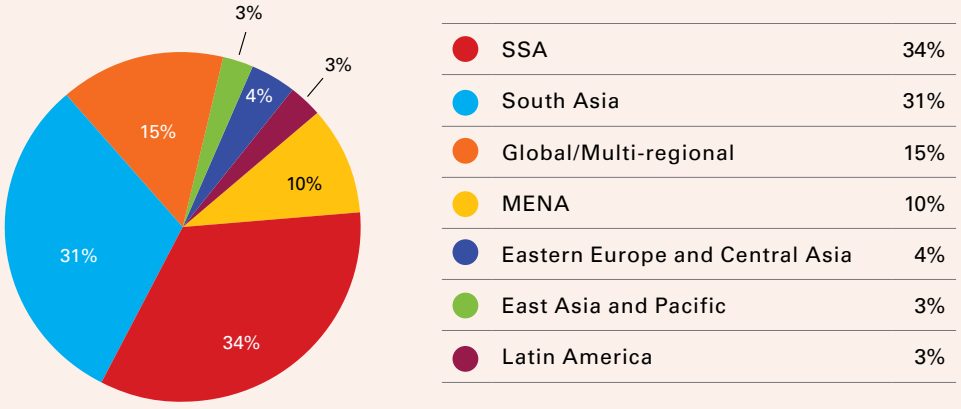


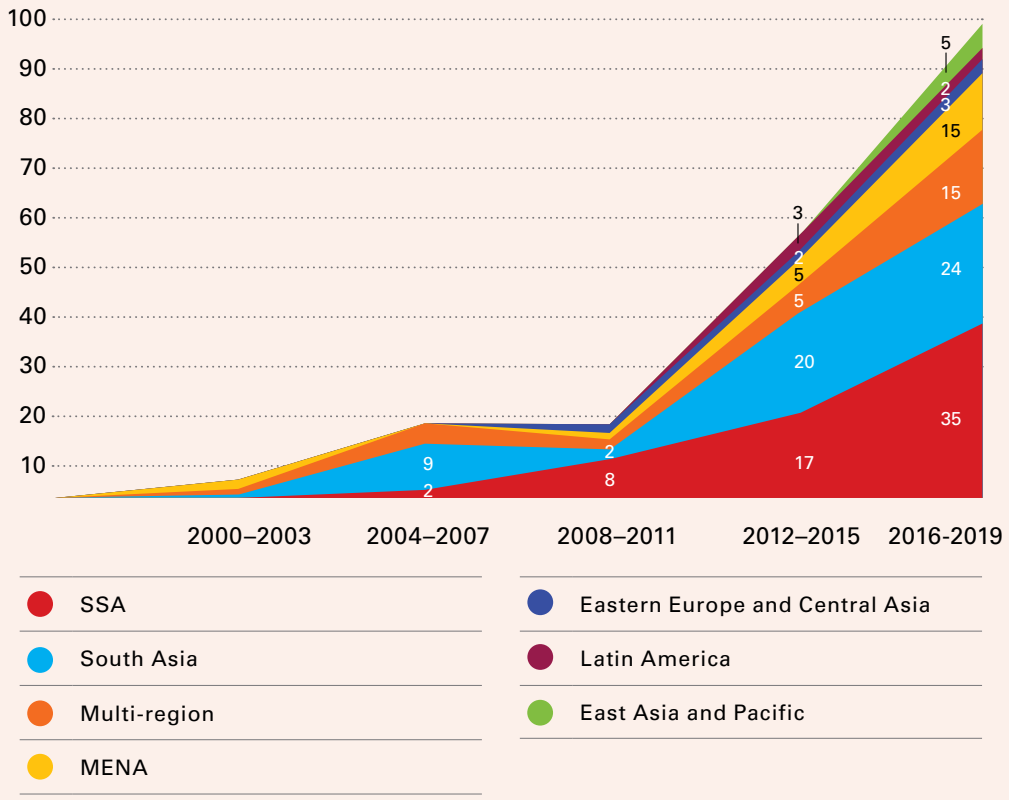
Figure 14 shows that most research on this topic originated in South Asia, with 10 publications as early as 2000 to 2007. During this period, only 3 publications focused on SSA, but over time, the largest proportion of publications on the context of child marriage are for Sub Saharan Africa (35%). The focus began shifting more frequently to Sub-Saharan Africa as of 2008-2011, and in fact, initially during this period, the number of studies on South Asia shrank. From 2012 onward, however, all regions show an increase in the research generated, with the most significant increase for SSA: publications increased from 8 in 2008-2011 to 17 in 2012-2015, and then doubled to 35 in the 3.5 year period from 2016-2019.

Although research on the context and correlates of child marriage in the MENA region was featured in studies undertaken in the early 2000's, attention to the region is largely absent in the literature from 2004 to 2011. With a growing interest in conflict settings, here has been a resurgence of research on this topic for MENA as of 2012 with a total of 16 publications thereafter. Publications with a multi-regional focus have also expanded significantly over time, from 1 to 13 throughout this period. In recent years, there has also been some research on the context of child marriage in the Latin America and Caribbean region, but at a much slower pace.

While the evidence base has been largest for SSA, India and Bangladesh stand out as countries with the largest number of articles on this topic, and Nepal came in third. From SSA,

Ethiopia, was most heavily represented in the literature followed by Kenya, then Zambia, Nigeria, and Malawi. Niger, which has the highest rate of child marriage in the world, was represented in three articles and the Central African Republic was completely absent from the evidence base. Somalia and Somaliland were each represented in one article. From Latin America, the countries represented include Brazil, Honduras, Colombia, Guatemala and Nicaragua. From the Middle East, Lebanon was most heavily featured in the literature followed by Jordan, then Egypt, then Saudi Arabia.

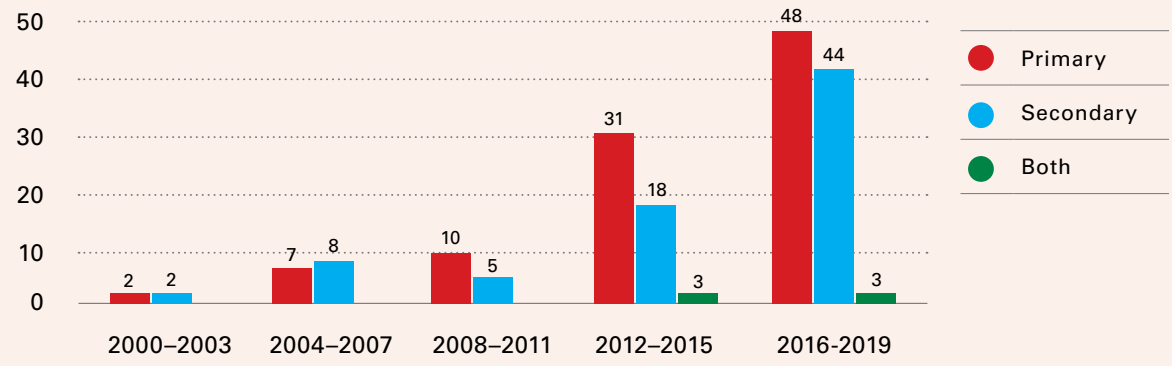
Figure 14: Trend in Volume of Research on Context of Child Marriage by Region, 2000-2019



2. Trends in Data Sources for Analyzing the Context of Child Marriage

Research on the determinants, correlates and context of child marriage is one area in the evidence base we reviewed where primary data sources have been more prominent than secondary data sources, with over half of publications (54%) relying on primary data sources. This distribution is understandable given that studies in this category were interested in specifying the nuanced nature of the context for child marriage in various settings. As **Figure 15** shows, until 2007 there was a relatively even balance between primary and secondary research but since 2008, primary research has been more prominent. Around half of publications which used secondary datasets relied on DHS, MICS or NFHS as a principal data source, but other household and youth surveys, census data, and other publically available datasets have also been important sources.

Figure 15: Primary vs. Secondary Data in Analyzing the Context of Child Marriage, 2000-2019

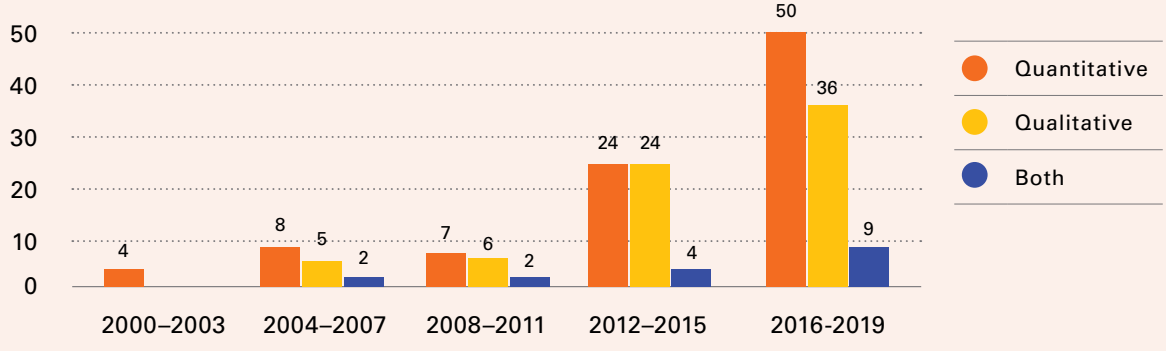


While most of the evidence base on the context of child marriage appeared in peer-reviewed publications (n=106), there was still a substantial share in the grey literature (n=75), comprising 41% of all publications on this topic. These reports, commissioned mostly by international NGOs and UN agencies, speak to the interest among practitioners working on child marriage in seeking an understanding of context-specific drivers to inform intervention efforts. Interestingly, despite their emphasis on the unique nature of the contextual factors driving child marriage in their locations of interest, most of the recommendations for action from these studies are in fact very similar, in that they advocate for "comprehensive efforts at norm change." There is also little documentation on whether the study findings influenced any of the interventions

3. Analysis of Child Marriage Correlates, Determinants, Social Context

A majority of the studies reviewed (51%), conducted quantitative analyses of contextual factors related to child marriage, but a significant proportion (39%) used qualitative analyses; 10% used a combination of both. As **Figure 16** demonstrates, in the early years from 2000-2007, most studies undertook quantitative analyses, but in the 2008-2015 period, qualitative studies were almost at par with quantitative studies. In more recent years, however, quantitative studies have again become more prominent even as studies with qualitative and mixed methods have also increased substantially.

Figure 16: Trends in Quantitative vs Qualitative research in studies on the context of child marriage



A. Quantitative Research

For the quantitative analyses, studies mostly used cross-sectional data to relate various household and individual characteristics of women—such as their rural/urban location, religion, family wealth status, and their education level to the age at which they married. With the exception of the relationship between girls' schooling and marriage, most studies do not establish a "causal" or "temporal" relationship between the various family and individual factors that are correlated with child marriage. As such, most of the quantitative literature has more accurately generated a body of consistent findings on the "correlates" of child marriage rather than on its "drivers." With a few exceptions, these findings consistently show that in a range of settings, girls with less education, from poorer families, and living in rural areas are more likely to marry as children than girls with more education, from richer families, and from urban areas.

A handful of studies have also included variables such as parental education, family structure and birth/sibling order. Research indicates that while mothers' education has a negative effect on child marriage in several settings, father's education does not have a similar effect. A very small number of studies have suggested the possibility that in some settings, the presence of elders in the household may perpetuate child marriage, but the research on this topic is very scant (34–37). Similarly, limited research—emerging from the Young Lives study in India, Peru, and Vietnam—suggests that girls whose next-youngest sibling is a girl face a higher risk of marriage because parents feel the pressure to arrange their daughters' marriage in sequence (38). Again, this relationship may be limited to certain settings and not others. For example, in Ethiopia, this relationship was found to be reversed (38).

Religion has been found to be a significant correlate of child marriage in several quantitative studies, as for example, in Ethiopia and Bangladesh where higher rates of child marriage were found among Muslims as compared to non-Muslims (18,39). A 2005 UNICEF research report found that while in 13 countries for which data was available, being a member of the majority religious group resulted in reduced risk of child marriage, the opposite was true in another nine countries (7).

Despite the overabundance of literature on the topic, few quantitative studies have gone beyond the household level to examine the relationship of aggregate or societal factors to child marriage over time, to accurately fulfill the theoretical promise of understanding the "drivers" of child marriage. As the UNFPA-UNICEF supported study by Dietrich et al. rightly notes in its recent and novel effort to assess the aggregate factors associated with child marriage over time in three South Asian countries, "while micro-level effects on child marriage are extensively documented, the effects of macro-level drivers remain an open area of inquiry." Using an interesting combination of multiple rounds of DHS data in conjunction with the international disaster database and annual satellite night-time light from 1992 to 2013 as a proxy for economic activity, they find that while child marriage rates decline in specific sublocations during periods of economic growth, the rate of

decline could be faster if educational opportunities were more widely available among girls in disadvantaged groups (40). Such studies with macro or meso level data examined over time are the exception rather than the rule in the evidence base examined.

B. Qualitative and Mixed Methods Research

Mixed methods research has generally used qualitative data to add depth and further explain the quantitative associations between child marriage and a set of correlates, such as poverty or education. For example, Ahmed et al.'s research in Bangladesh uses qualitative data to provide two explanations for a positive association between weather related crises and child marriage, suggesting that marrying out a daughter reduces household expenses and also reduces the risk of reputational damage and non-marriageability in the case of sexual violence (41). Research by the Population Council in Ghana combined secondary analysis of the DHS with primary qualitative research to further explore parental and young girls' future aspirations in valuing education as an alternative path to marriage. They were also able to better understand the temporality between early pregnancy and marriage which is not as easily determined from cross-sectional quantitative data.

Studies with qualitative data as their primary source generally focused on community level analyses to examine issues such as social and communal pressure for child marriage, cultural traditions, sexuality and gender norms, laws and legal loopholes, or pronatalism in interrogating the socio-cultural context around child marriage. These articles used a host of methodologies and research traditions, employing case-studies, ethnographies, phenomenological and narrative research, and grounded theory to try and shed light on the underlying mechanisms that foster child marriage. Issues around power were particularly salient in the qualitative literature, with findings pertaining to women's sexuality, agency, gender dynamics, and patriarchy consistently emerging across contexts. For example, research in Bangladesh in 2004 highlighted that child marriage interacts with the cultural and religious custom of purdah – which limits the social interactions between men and women – to control female sexuality (42). Research in Busoga, Uganda in 2016 revealed that cultural and religious beliefs about marriage readiness which dictate that girls who shed menstrual blood must not live in close proximity to their fathers are seen as a powerful driver of child marriage (43).

A subgroup of qualitative articles, however, contends that cultural framings around child marriage deflect attention away from structural drivers of child marriage, especially poverty and lack of opportunities for girls. For example, Schuler et al.'s 2006 work in Bangladesh interprets findings from focus group and indepth discussions to highlight transformations in gendered ideals and aspirations for girls resulting from economic and demographic shifts (44). That such shifts can create tension between new and old norms is also documented by Population Council's 2006 research in Rajasthan, India where the growing interest by both parents and girls to delay marriage is increasingly in conflict with the limited access to secondary schooling for girls and related

concerns about sexual harassment and exploitation given that the educational infrastructure and quality have not kept up pace with demand (45). Archambault's 2011 ethnographic research among Maasai girls in Kenya also contests the assumption that child marriage is driven primarily by patriarchal norms and malicious traditions, arguing instead that it is a form of adaptation to livelihood insecurity in the face of population growth, climactic instability, land-tenure reform, and the insecurities and challenges around formal education (46).

4. Consensus on the Importance of Gender Norms and Power Structures

This body of research confirms that reasons motivating child marriage are multifaceted, complex and interrelated, firmly embedded in the social and cultural context of different geographies and regions. The vast range of this literature is consistent in arguing and documenting that child marriage is an integral part of broader gendered norms and power structures in a society. In several studies there is a pervasive theme of gender norms fundamentally "driving" child marriage, but more often, the data and evidence used also establish that child marriage itself is a gender norm that is part and parcel of the larger system: it is likely that reducing child marriage would improve gender norms as much as changing norms would reduce child marriage. It is not clear, therefore, whether the framing of norms as "drivers" of child marriage does much more than establish a tautology.

Almost all the articles investigating the contextual factors underlying child marriage preface their analysis with a discussion of the critical role of gender inequality. Papers published after 2012 tend to be more explicit in referring to gender dynamics in their findings (N=71). Our review suggests that the almost universal emphasis on gender norms in relation to child marriage stems first and foremost from child marriage being a phenomenon experienced predominantly by girls rather than boys. In one way or the other, publications focusing on norms emphasize that the marriage of ***girls*** as children is a social expectation—even an imperative—not just for families but also for girls themselves, in a way that is not the case for boys[7]. In highly unequal gender systems, marriage of girls at young ages entails positive social sanctions—such as social or familial prestige, protection and security—while delaying their marriage entails negative social sanctions—such as non-marriageability or risk of sexual violation.

In framing child marriage in terms of norms, however, most studies rely on information and discussion around personal, family, and community attitudes and belief systems, and less around gendered power structures or the specifics of the social sanctions involved. Thus, despite the vast literature on this issue, an important gap in the evidence base is more explicit analysis of how power dynamics embedded in family, marriage, and

7. Given that boys in some contexts also marry as children, some of the imperatives of chlld marriage—control of decision-making by the older generation or the prioritization of family labor, reputational, procreation needs, etc.—can also apply to boys in thos contexts. However, the normative forces and social sanctions enforcing early marriages for girls in most contexts are considerably stronger and more widespread in terms of control of sexuality, economic implications, and role expectations, as we discuss in detail below.

economic systems drive child marriage and how sanctions come into play in enforcing and sustaining norms.

This growing body of studies on the social context of child marriage often justifies its purpose in terms of the need to understand the unique factors associated with child marriage in specific locales, countries or regions. Certainly, there is now better documented evidence of a number of nuanced—and sometimes even fundamental—differences in factors associated with child marriage across geographies, as for example the importance of pre-marital pregnancy and sexual activity leading to marriage or cohabitation in many parts of Africa and Latin America, but marriage much more frequently preceding pregnancy in most parts of Asia and the Middle East. At the same time, there is also overwhelming evidence of three basic commonalities in terms of the gendered norms and power structures that underlie and are embedded in the practice of child marriage across most settings. These are: a) Gender and sexuality; b) Gender and economics; and c) Gendered roles and opportunities.

A. Gender and Sexuality

Deeply rooted social norms around gender and sexuality are cited as the primary contextual factor underpinning child marriage in almost every setting. In many contexts—especially in Asia and the Middle East, but also in parts of Africa and some Latin American settings, the close connection between girls' sexuality and child marriage is apparent in the strong concern families have in protecting girls' "chastity," "honor" and "virginity," and in protecting their reputation for not being sexually promiscuous.

Several studies have demonstrated parents' motivation to marry daughters to prevent them from engaging in extramarital relations and to preserve reputation and family honor (47,48). In Morocco, parents admitted to fearing that "their daughters will bring shame on the family" if they were to remain unmarried, and viewed marriage as a way to protect girls from "social diseases such as rape or abduction" (48). In Rajasthan, India, the physical maturation of girls and their emerging sexuality were perceived as threats, eliciting concerns over their safety and the anxiety that they might engage in sexual or romantic relationships (45). In Sudan, schooling and mobility for an adolescent girl raise fears of sexual activity or violation, and marriage makes her protection the husband's responsibility (49). Among Turkish Kurds, girls were considered marriageable some years after menarche with the protection of family honor as the key consideration in the arrangement of early marriages (47). Several studies indicate that religious dictates and norms around gender and sexuality in most religions often intersect, perpetuating child marriage due to the moral value placed around chastity and sexual relations for women within marriage only (49,50).

While the desire to preempt girls' pre-marital sexual activity drives child marriage in many settings across all regions, in several settings, marriage is a quick follow up to and legitimization of pre-marital sexual activity and pregnancy. In many parts of West Africa and Latin America in particular, teenage child marriage often occurs in the aftermath of pregnancy and not vice versa. In

Ghana, for example, teenage pregnancy is often a precursor to marriage, with girls being left with little choice than to marry the man with whom they had sexual relations (22). In Kenya, Uganda, Senegal and Zambia, marriage was commonly a response to pregnancy and early sexual debut (51,52). In their review of the context of child marriage in West Africa, Fenn et al. note that sexual activity frequently precedes marriage in the region, and in a number of settings, marriage follows within a year (11). Similarly, in Latin America, pregnancy is seen as an important driver of child marriage (36,53,54). For example, research in Brazil finds that sexual initiation and anticipation of pregnancy motivate parents to marry daughters before a pregnancy takes place (36). Research in Guatemala indicates that upon pregnancy, not just the families, but the girls themselves saw marriage as a way to ensure that the father did not disappear (54).

Existing research suggests that it is not just the possibility of girls having or being led astray into sexual liasons that is of concern, but in fact there is both a perceived and very real risk of girls being sexually harassed and violated. So the threat and experience of sexual harassment and violence for unmarried girls in their daily lives—both in public and private spaces—is a very real social sanction that is practiced, and it enforces child marriage in a wide variety of settings across the world. For example, research in Chad, Niger and the Andean countries reveals that marriage is frequently employed as a coping strategy following rape (55). The very real fear of sexual violence is especially pronounced in conflict settings where established forms of protection begin to fail everyone, and women's and girls' sexuality becomes especially vulnerable. Illustratively, research conducted in Lebanon with Syrian refugees identified fears around honor and protection as major drivers of child marriage (15,56).

B. Gender and Economics

The relationship between economic factors and child marriage was a subject of analysis for 50% of the studies we reviewed on the context of marriage (n=93), with 80% of this research taking place after 2011. Most articles used measures of individual or household socioeconomic status – usually wealth and asset-based indices, rather than aggregate measures at the district or community levels. More than half the papers relied on quantitative methods (n=51), 33 used qualitative methods, and 9 used mixed methods. Most evidence (60%) is from South Asia and Sub Saharan Africa although other regions are also represented.

Existing research emphasizes gender and economics as a widespread contextual driver of child marriage across almost all settings, even as the precise way in which economic factors are related to child marriage show some differences across locations. We can identify three primary paths through which gender and economic factors are highlighted in this research as being linked to child marriage: poverty constraints, expression of wealth status, and marriage transactions.

B 1. Poverty Constraints

There is extensive and consistent empirical evidence from the last 20 years documenting that for the most part, there is an

inverse relationship between socioeconomic status (SES) and child marriage. Various studies covering locations throughout the different regions of the world show that, in general, girls from poorer households have a higher risk of marrying early as compared to girls from wealthier families (57–61). Moreover, as rural areas are generally poorer than urban areas, the poverty and child marriage relationship is closely linked to the finding that child marriage tends to be higher in rural compared to urban areas (39,62,63).

One dynamic that is frequently discussed in the literature to explain this inverse relationship is the simple need for poorer households to marry off daughters in order to have one less mouth to feed—since in most cases, married daughters live with husbands' or their husbands' families rather than continuing to live with their natal families. By shifting the financial burden onto a suitor, the family is relieved from the financial and social burdens of caring for their daughter. Related to this point, a limited literature also documents that larger family size among poorer families is linked to greater likelihood of child marriage for girls. Early marriage of daughters can be an important survival strategy for coping with the food, clothing, shelter—and increasingly schooling—needs of many children for large families which have to spread out scare resources among many family members (48).

The discussion on poverty also focuses on the role of transactional sex in spurring child marriage. For example, Stark finds that in slums in Dar Es Salaam, poverty and economic disparities pushed girls to engage in transactional sexual activity at a young age. As a result, parents turned to child marriage as a 'risk-reduction measure' (64). The "sugar daddy" phenomenon was highlighted in several studies illustrating these dynamics in transactional sex between young girls and older men, while other studies indicated that exchange of sex for money or other gifts could precipitate marriage for girls also with young men closer to their age (36,65,52,66).

Recent research confirms that economic loss, insecurity, and heightened vulnerability in times of crisis and conflict is especially conducive to not just families, but girls also considering child marriage as a financial coping mechanism. Evidence from the Syria crisis demonstrates that not only fathers resorted to child marriage in response to worsening economic conditions, but that many Syrian refugee girls perceive marriage as a means to escape poverty (14,15,56). This finding is further corroborated by research with Palestine refugees which found that girls were eager to get married at a young age to escape their natal home in part due to crowded and poor living conditions, but also due to a desire to relieve the natal family from financial burden (67).

B 2. Expression of Wealth Status

Nonetheless, poverty is not universally predictive of child marriage, and a few studies – both in the first and second decades of the literature reviewed – indicate that in some settings the relationship is reversed (68,69). Data from rural Nepal points to a higher probability of child marriage among better off families for reasons related to the social prestige and religiosity demonstrated by marrying daughters. Similarly, in Ethiopia, parents' desire for

the social prestige of hosting a daughter's wedding was found to drive ceremonial marriages (68,70). Research conducted in Gezira state in Sudan in 2019 also suggests that when the marriage ceremony itself is an expensive undertaking, wealthier families may be more likely to marry their girls early as a demonstration of their ability to incur the cost of marriage (49).

B 3. Role of Marriage Transactions

A substantial amount of research post 2010 discusses marriage transactions related to both dowry and bride price as important economic dynamics associated with child marriage. In South Asia, dowry payments – or transfers from the bride's family to that of the groom – have been documented as not only common but becoming more widespread with "dowry inflation" impoverishing families of daughters almost to a crippling extent. There is some evidence that dowry demands are lower for younger brides, thus motivating families to marry daughters at an early age (71–74). In contrast, in many parts of Africa, the extensive practice of bride price involves net transfers from the groom's family to that of the bride's (71). Bride price may act as an enticement for families to betroth their daughter to wealthier suitors at young ages, when their value in the transaction is high, and as an early way of securing the financial benefit (52,75–77).

There is some emerging literature on how bride price and dowry may themselves alter and influence marriage timing in crisis conditions. For example, 2013 evidence from northern Uganda and eastern DRC indicates that conflict drastically alters family and community economies, making it increasingly difficult for grooms to provide bride price (78). It is thus conceivable that even as conflict may increase vulnerability and thus exacerbate the risk of child marriage, economic insecurity may concurrently preclude the fulfillment of bride price, thus resulting in the postponement of marriages. The same dynamic could also operate for dowry payments which may be especially difficult for families to pay in conflict or weather-related emergencies.

Research on these points is only beginning to emerge, as for example with a 2017 study by Lucia et al who use a sample of 400,000 women from India and Sub-Saharan Africa to examine the role of dowry and bride price on marriage timing in the context of natural disasters (75). Their study finds opposite effects on marriage practices in the two regions: in Sub-Saharan Africa, droughts were associated which a 3% higher hazard of child marriage, while in India droughts were associated with a 4% lower hazard of child marriage.

C. Gender Roles and Opportunities

The third critical universal aspect of gender norms and systems underlying child marriage as documented by existing research is the nexus of gendered roles and opportunities that define marriage and motherhood as the primary path to adulthood, social standing, and fulfillment for girls. A significant literature affirms that where the main pathway to family and social contribution for girls is by becoming wives and mothers, there are inadequate investments by families in girls' education, limited gainful employment opportunities available to them

through the economic system, and strong social incentives and power dynamics reinforcing early marriage and motherhood as the preferred option (42,46,79,80,52).

C 1. Investments in Female Education

The most prominent theme in the evidence base on gendered roles as the foundation of child marriage refers to the limited educational investment in girls, and that schooling as an important alternative to marriage during childhood and adolescence is non-viable in so many settings. Almost half of articles we reviewed on the topic of determinants and correlates undertook an analysis of girls' education as a determinant of child marriage, in most cases through quantitative research. Numerous cross-sectional studies throughout the past 20 years have consistently documented the negative relationship between girls' schooling and child marriage, indicating that almost universally, when the alternative option of schooling is available and encouraged for girls, their marriage is delayed (18,39,63,71,81–83).

Moreover, while earlier research had found that any level of schooling delayed marriage, more recent research is finding much stronger and more consistent preventative effects at the secondary rather than the primary level. For example, in their 2014 analysis, Raj et al find that while primary education was protective against early marriage in India, it was not sufficiently protective in Bangladesh, Nepal or Pakistan (84). An analysis by ICRW shows that across all regions, girls with secondary schooling are almost six times less likely to marry under age 18 compared to girls who have little or no education (85).

While it is abundantly clear that in most places marriage and schooling for girls are mutually exclusive, several studies have posited that the relationship between these two experiences is endogenous, in that causation can be in either direction (58,82,86). It is conceivable that marriage leads to girls being pulled from school, but conversely, it is also possible that school dropout precipitates early marriage, and a girl not in school is considered marriageable. The preponderance of the evidence shows that the second scenario is the more dominant causal pathway in most settings, and so most frequently, access to education affects marriage timing rather than the other way around. A number of studies demonstrate that for girls who have ever attended school, the gap between school dropout and marriage is often substantial, indicating that their not being in school makes them more marriageable (87). Recent evidence from a large 2018 population- based longitudinal study in Malawi further elaborates this relationship by illustrating that not only are out of school girls at increased risk of early marriage, but that school performance and progression also predict age at marriage (82). Similarly, in a 2015 study in Madagascar, by accounting for endogeneity, the authors were able to elucidate the sequence of events and found that an additional year of schooling results in a delay in marriage of 1.5 years (57).

One important pathway related to norm change that some studies document is the changing perception and aspirations of girls themselves when schooling is a viable option for them. A 2006 study in Nepal found that an overwhelming number of

girls expressed the desire to marry at age 18 or later because they wanted to continue their education and by extension, have the opportunity to learn vocational skills and thereby contribute financially to their family (45). In Afghanistan, research indicates that girls are increasingly valuing education and aware that it can help them secure jobs (88). In fact, many studies indicate that even when schooling is denied to them, girls in most settings are interested in continuing their childhood by remaining in or returning to school rather than entering into the adult roles of wife and mother. Research with married adolescents demonstrates feelings of regret and disappointment at not continuing their education or achieving their employment aspirations (36,44,70,76,89,90).

At the same time, an emerging evidence base indicates that even as an increasing proportion of parents are interested in educating rather than marrying their daughters, this aspiration is frequently dampened and constrained by the poor availability and quality of schooling for girls, especially at the secondary level. Thus, while higher proportions of girls are not marrying as children simply because being in school is incompatible with marriage, some of the promising pathways through which education serves as an alternative to marriage—such as self efficacy, empowerment, and employment opportunities—are being realized less often (87,91). For girls in many countries—and particularly in settings where child marriage rates remain high—hard to access, poor quality school systems are limiting human capital gains and school to work transitions (92). In some settings, moreover, schooling is not necessarily an alternative to early pregnancy since school settings subject girls to sexual exploitation and violence. For example, a 2015 study from Zambia indicates that it was common for girls who lived long distances from school to exchange sex for transport to school to evade punishment for being late (93). This and a perception of low quality dissuaded parents from committing limited resources to girls' education.

One of the most critical gaps in the literature remains a more extensive examination of the normative effects of education in delaying marriage for girls at the aggregate level. Currently no studies examine the attitudinal and normative shifts with regard to the unacceptability of child marriage as some significant proportion of girls begin attending school—especially secondary school—in a given community. It would be helpful to know whether at particular thresholds, girls' educational levels in a community reach a critical mass where all girls in general are then expected to go to school rather than marry during childhood and adolescence. Whether a certain proportion of adolescent girls going to school up to a given grade level is necessary in any setting for a normative switch to make child marriage unacceptable is one of the most important questions future research could examine.

A different approach to the effect of schooling on changing norms and redefining gender roles has been evident in the literature on the generational effect of mothers' education in delaying marriage for their daughters. In contrast to the extensive body of literature linking maternal education with

child health outcomes, the body of literature that has examined this relationship with respect to child marriage is still limited, but encouraging. A number of studies show that education of girls in one generation has a multiplier effect in delaying marriages in their daughters' generation (39,57,59,63,94). For example, Bates et al's 2006 research in rural Bangladesh finds that daughters of women with more education marry later and their daughters-in-law initiate childbearing later (95). In Ethiopia, Erulkar et al find that girls whose mothers were uneducated had over two times the odds of marrying under age 18 compared to daughters of educated mothers (39). That this is likely a normative and role model effect is also confirmed by the fact that as opposed to mothers' education, most studies do not find a consistent relationship between father's education and the marriage timing of their daughters (29, 94).

C 2. Access to Female Employment

Unlike education, the relationship between employment or livelihoods options for young women and child marriage has not been a prominent concern in the evidence base we reviewed, with only a handful of studies examining this connection. Although limited in number and scope, these studies do suggest that in a number of settings, work for pay and marriage for young women are roles seen as mutually exclusive. For example, Islam et al.'s 2016 research in Bangladesh shows that employed girls had 15% lower odds of child marriage compared to unemployed girls (81). In Tanzania, Stark notes that high unemployment coupled with competition for work has meant that even secondary education of girls was insufficient in guaranteeing girls paid work (96). In rural Nepal, females engaged in service were found to have a 43% lower risk of getting married early compared with those engaged in household work (69).

Even more so than for education, there are questions of endogeneity between marriage timing and employment for girls, as it is not clear whether unemployment functions as a cause or effect of child marriage. While the responsibilities of an early marriage could—and do—preclude paid livelihood options for many girls, studies also suggest that once a girl is employed, both she and her parents have less incentive for an early marriage. For families, the opportunity cost of marrying girls who are employed and who generate income is higher compared to girls who are unemployed. Additionally, both parents and daughters are less likely to see marriage as the route to financial support or social standing for a girl if she is earning a viable income. Daughters who earn an income may also be more autonomous and exercise greater control over the decision-making process regarding marriage.

A few studies examine the relationship between child marriage and female workforce participation at the macro level, highlighting the importance of contradictory role expectations between work and marriage for women. For example, Walkers' 2013 research in West Africa finds an inverse relationship between age at marriage and female labor force participation in Mali, Mauritania and Niger (97). In examining shifts in child

marriage rates, Petroni et al's 2017 research in Senegal shows that increasing educational opportunities as well as labor migration among women has resulted in reductions in child marriage (52). Urban to rural migration, increased educational attainment, and labor force participation in some Western and Central African countries are viewed as leading to more individualized rather than familial marriage processes including delays in marriage for girls (11).

New research can fill an important gap by examining the relationship between increasing labor force participation rates and wages for young women with shifts in the plans and aspirations of parents and daughters during early adolescence. In particular, are families and girls more likely to commit to education, training and delayed marriage for girls during their teens in settings where the political economy is making paid work a desirable option for women in their 20's?

C 3. Motherhood, Family Responsibilities, and Adulthood

While education and employment define gendered roles that are deemed alternatives to marriage, motherhood and family responsibilities define prescribed gendered roles in most societies and are seen as compatible with marriage. A significant evidence base in the 2000-2011 period emphasizes the close connection between childbearing and child marriage, manifest in the importance of girls having to prove their fertility soon after puberty (49,98,99). Studies document the importance of child brides having a first pregnancy soon after marriage in several Asian and Middle Eastern settings. Early demonstration of fertility has also been shown to be very important in African and Latin America settings, even as the sequencing of marriage and pregnancy has been shown to be more fluid.

A body of limited literature discusses the imperative in a broad range of societies to marry girls young so that they are adequately socialized and compliant with taking on domestic responsibilities and remaining in a subservient role to husbands and/or in-laws. Research conducted in 2013 in the Middle East indicates that parents favor child marriage because it makes girls' adjustment to the new family faster and easier, "with the philosophy that a younger girl is more easily molded by her new family's expectations, particularly those of the mother-in-law" (100). Recent research in Latin America echoes these findings where parents and suitors – as well as girls themselves – confirmed that girls' younger age makes them easier to "control" and to be "molded" in a marriage (36,101). In fact, a larger spousal gap is often favored because it is conducive to "controlling," "molding" and "shaping" of girls' characters. Early marriages are thus an important way of entrenching domestic gender roles for women and girls of subservience, submissiveness and service to others.

Not only patriarchal family structures, but girls' own expectations often define marriage and motherhood as the most important rite of passage to adulthood when these roles are highly prescribed and alternatives are not available or desirable. Existing research suggests that in many settings girls themselves internalize these prescriptions and may even act autonomously to acquire

the adult status and limited independence that they associate with marriage (54,102). For example, in their 2015 research in Honduras, Murphy-Graham et al. find that given limited courtship choices, severe restrictions on relationships by elders, and few alternative options for the future, many girls exercise "thin" agency in eloping, only to take on prescribed reproductive and domestic roles (103). Echoing these findings, Kenny et al's 2019 research in Somaliland and Puntland shows that elopements among adolescents were intended at demonstrating the achievement of adult independence in defiance of family influence and control (102). Mourtada et al's 2018 research on Syrian refugee girls in Lebanon also indicates that girls are interested in early marriages as an escape from restrictions on mobility and freedom at home (14).

More coherent, updated research on this topic would be helpful in understanding the conditions under which traditional roles and power dynamics that constrain girls begin to give way. Especially useful would be an examination of aggregate shifts in adolescent fertility and family structures in specific sub-geographies and their relationship to girls' and parent's adherence to or deviation from the prescribed gender roles and power dynamics.

5. The Legal and Policy Context of Child Marriage

There has also been a growing body of work reviewing laws and policies as an important contextual factor in defining how child marriage is being practiced in different settings and in assessing the extent to which legislative frameworks are active or effectual in eliminating the practice. We found only one study prior to 2012 on this issue, an analysis undertaken by Pathfinder for the Amhara region of Ethiopia that highlighted the lack of knowledge and enforcement as barriers to the effectiveness of a strong law that had been passed in that country (104). However, in the 2012-2015 period, 10 studies were published on this topic, and in 2016-2019, an additional 12 studies focused on the legal and policy context of child marriage in a broader range of countries, as well as regionally in Asia and Africa, and globally.

As child marriage began growing in important on the international agenda beginning in 2012, a number of child rights and human rights organizations joined international development experts and gender equality proponents in assessing if national and regional policy frameworks were complying with or responding to international standards such as the CRC and CEDAW. Within this context, research was generated on country profiles of child marriage minimum age laws along with the challenges they have presented for governments and advocates in serving as what has been seen as the necessary enabling environment for concerted action in eliminating the practice of child marriage.

In their 2013 and 2015 analyses, Sabbe et al. document that even as Morocco adopted more progressive laws advancing human rights and gender equality, including on minimum age at marriage, there have been strong barriers and resistance to their

implementation (34,48). Similarly, JuRi et al's 2016 study of Nepal discusses how constitutional protections and legal guarantees against child marriage are compromised by loopholes such as the absence of a definition of consent and inadequate penalties and fines for those found in violation (105). Legal profiles of child marriage in the Democratic Republic of Congo (DRC), Malawi, and Zimbabwe make similar conclusions about the constraints posed on implementation by patriarchal structures and general public ignorance about the laws (106–108).

Regional mappings of child marriage laws across Asia and Africa undertaken between 2013-2017 also echo the general conclusion that even as countries are working to comply with international standards and treaties, there is major divergence in the legal versus social conceptualization of child marriage in most countries. The four most common points of divergence noted almost universally by these studies are: 1) the disconnect—and conflict—between customary or religious law and the civil or constitutional frameworks that prohibit child marriage; 2) numerous loopholes and inconsistencies in minimum age laws and the jurisdictions they cover—such as exceptions for parental or other consent or provincial versus national statutes; 3) widespread ignorance about the legal rights of girls under child marriage laws among the population and little concern or fear about likely consequences as a result of violating the laws; and 4) "soft" or unspecified penalties and lack of not just the will for enforcement, but also the extreme inadequacy of the needed machineries and infrastructure (109,110)

In their 2013 analysis across the 8 countries in the South Asia Association of Regional Cooperation (SAARC)[8] —a region accounting for 50% of all child marriages globally—Khanna et al note that while most governments have enacted legislations in alignment with international instruments and framed clear laws to prevent child marriage, enforcement remains the biggest challenge (110). Plan International's 2015 study of laws in Pakistan, Bangladesh, and Indonesia makes a similar case for more effective and widespread awareness raising and enforcement (111). Interestingly, they also indicate that in Bangladesh, where knowledge of the minimum age law was very high, this widespread sensitization does not seem to be associated with better enforcement or lower child marriage rates. WHO and IPU's 2017 review of child marriage laws in 37 Asia-Pacific countries notes that internal consistency, awareness, and enforcement remain huge challenges for most countries despite the fact that most national laws have been crafted to meet international standards, and that all 37 countries have ratified the CRC, and 33 have ratified CEDAW. In fact, once contradictions, inconsistencies and exceptions were taken into account, only four countries—Bhutan, China, Mongolia, Vietnam—had unequivocal minimum age laws of 18 or higher (112).

Regional reviews in Sub-Saharan Africa indicate that while internationally compliant minimum age at marriage laws have emerged more recently in that region than in Asia, the problems of inconsistencies, loopholes, ignorance, and lack of enforcement

8. SAARC countries include Afghanistan, Bangladesh, Bhutan, India Maldives, Nepal, Pakistan, and Sri Lanka.

are very similar. In reviewing the legal frameworks in the five sub-Saharan countries of Ethiopia, Kenya, Rwanda, South Sudan, and Sudan, the African Child Policy Forum found that while these frameworks are stronger in some countries—such as Ethiopia—as compared to others—such as Sudan—there is widespread disconnect between customary (often religious) and legislative dictates as well as lack of awareness and enforcement (113). They suggest that these disconnects seem to be fundamentally driven by poverty and deprivation while others have also emphasized the influence of religion. As part of the Global Programme to End Child Marriage, UNFPA's 2017 review of the legal context in five West and Central African countries reaches a similar conclusion (114). While only Ghana was found to have an unequivocal law prohibiting marriage under 18, all five countries (including Sierre Leone, Niger, Nigeria, and Burkina Faso) faced significant barriers to enforcement. This is due to a combination of inconsistencies in statutory, customary and Sharia laws, plural legal systems, archaic statutes, and lack of clarity and capacity on implementation.

A few publications in the recent evidence base undertake global assessments, examining patterns across countries and shifts over time. Arthur et al's 2015 longitudinal analysis of 191 high, medium and low income countries shows that although there are only 23 countries where girls can legally be married under 18 if exceptions are not taken into account, this number rises to 146 when common exceptions such as parental or court permission, or customary law are taken into account (109). Encouragingly, however, their analysis of 106 LMICS From 1995-2013 shows that there has been some improvement on this front as the proportion of girls legally permitted to marry below 18 without exceptions fell from 24% to 12%, and the proportion allowed to marry before age 18 with parental consent fell from 80% to 57%.

Wodon et al's 2017 global study of 112 countries also shows a positive sign of 9 countries strengthening their minimum age at marriage laws between 2015-2017, including Chad, Costa Rica, Ecuador, Guatemala, Malawi, Mexico, Nepal, Panama, Zimbabwe (115). Unfortunately, during this period a country with very high prevalence and burden of child marriage—Bangladesh—went in the other direction, permitting exceptions to the minimum age with a combined parental and judicial consent. This study also raises concern by estimating that close to 100 million girls are not legally protected against child marriage, due largely to the inadequacy of minimum age laws which include various exceptions. Further, poor enforcement of the laws that do exist—even after accounting for the legal exceptions—means that more than two thirds of child marriages are illegal under current national laws, with 7.5 million girls marrying illegally in 2017 in the 112 countries reviewed (115). Collins et al.'s 2017 study also empirically illustrates the poor enforcement of child marriage laws by using regression discontinuity analysis of multiple rounds of the DHS for over 60 countries (116).

Although the vast majority of the evidence base seems to suggest little or no relationship between legislation on child marriage and its prevalence, two studies suggest that there may be a limited negative relationship between lower prevalence and

minimum age laws when they are without exceptions. In their 2013 study of 114 LMICS from 1989 to 2007, Kim et al examined the relationship between minimum age laws and adolescent fertility levels (and thus not directly child marriage rates), showing that while countries with no legal exceptions did have lower adolescent fertility rates, those that allowed exceptions were indistinguishable from countries with no minimum age at marriage laws (117). Maswikwa et al's also found in their 2015 analysis of 12 Sub-Saharan African countries that prevalence of child marriage was lower in the 4 countries with greater clarity and consistency in their 18+ minimum age at marriage laws compared to the others which had inadequate or inconsistent laws (118). It is important to note that these studies suggest a correlation rather than a causal relationship between consistent legislation and child marriage or adolescent fertility rates.

In addition to the poor implementation and performance of child marriage laws, the studies focusing on legal frameworks universally argue that even if legislation could be strengthened, it would not be sufficient to reduce or eliminate child marriage on its own. Most studies present minimum age legislation as an essential minimal foundation for an enabling environment that then addresses child marriage though a number of other interventions and investments in education, health, poverty reduction, girls' empowerment, social change, etc. (112,114). Some papers also raise the issue of addressing other legal and policy channels—especially those related to education, health, and employment—that might provide more well-resourced, consistent and established foundations in terms of an enabling environment.

One or two papers also articulated the challenge of competing demands for advocates in focusing on laws as an enabling environment versus programmatic approaches that reach girls and communities more directly. Their concerns are expressed in the context of increasing demonstration by national leaders in complying with international standards through passage of laws, but slower commitment of resources to translate the laws into action on the ground (101,117).

This issue also emerges as an important concern in a 2016 review by Girls Not Brides (GNB) of national strategies and action plans on child marriage that had been developed by 20 countries by that time and has generally been seen as a positive development in conjunction with national commitments to SDG 5.3 and declarations at global forums such as the 2014 Girl Summit or the African Union Campaign to end child marriage (119). In lessons learned from the progress of these national strategies in 11 countries[9], the GNB review notes that their implementation is challenged by many technical and financial capacity constraints, and that no government has as yet demonstrated how they will find and allocate sufficient funds for a comprehensive response to child marriage. Moreover, the coordination body is universally the Ministry of Women, Children, and/or Social Welfare, with a large mandate but little capacity, resources or political influence. Civil society organization are also limited in their capacity, technical

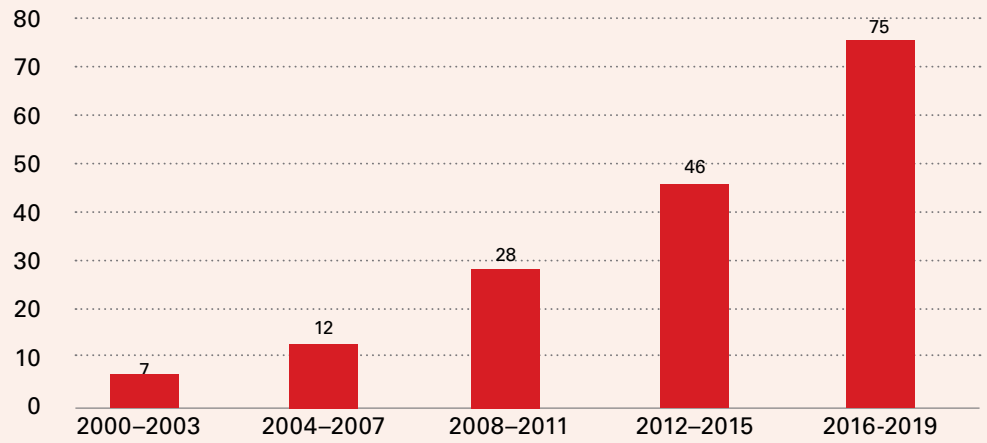
9. The countries include: Bangladesh, Burkina Faso, Chad, Egypt, Ethiopia, Ghana, Mozambique, Nepal, Uganda, Zambia and Zimbabwe.

knowledge and resources to mobilize the effective support and advocacy needed to sustain leadership attention to child marriage or hold governments accountable for their commitments. Some promising emerging strategies to address this concern include costing and benchmarking of budget allocations, or the development of instruments for budget advocacy, as for example in Ethiopia and Malawi. It is to be seen how these nascent efforts evolve to more strategically channel resources and action on National Action Plans.

3D Evidence on consequences

In the last two decades, the consequences of child marriage were almost as well studied—with a total of 168 studies—as its determinants and correlates (181 studies). As **Figure 17** shows, the focus on consequences in the evidence base accelerated after 2007, with 28 studies during 2008-2011, 46 during 2012-2015, and more than these two periods combined, at 75 studies in the 2016-2019 period.

Figure 17: Trend in Volume of Publications on the Consequences of Child Marriage 2000-2019



As the body of this work has expanded, a wider range of country and locational contexts have been covered, and our knowledge base of how child marriage affects life conditions for girls in their late teen years and 20's has expanded remarkably. The overwhelming majority of studies confirm that child marriage has negative consequences for married girls, their children, and their societies and countries. In recent years, however, the evidence base has produced more nuance on exactly how and why these consequences are harmful, and a few studies have even questioned the presumption that all consequences of child marriage are necessarily negative.

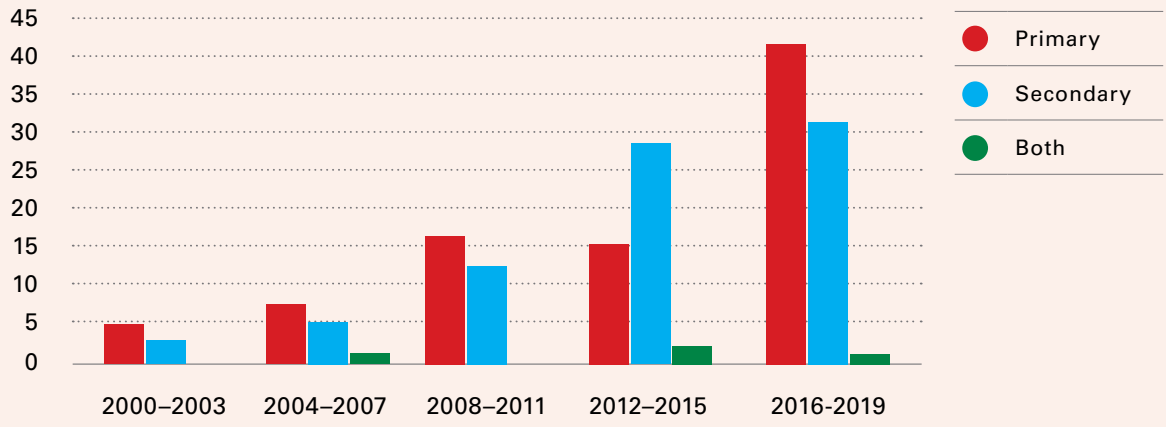
Our review indicates that there has been a trend toward studying the consequences for married girls in a more comprehensive manner over time, with an expansion to cover not just health related outcomes, but also the personal, familial, and social outcomes resulting from child marriage. However, there continues to be very limited research on long term consequences of child marriage, addressing the implications for women as they progress beyond their mid-20's, and there is little to no work on

the economic consequences for girls most immediately or over the longer term. Similarly, the work on the intergenerational consequences of child marriage continues to be limited to the immediate survival and health of children born to young mothers, with little to no work on the longer-term life implications for such children or their mothers. Moreover, while we now have some studies documenting the economic costs of child marriage for the wider society, the body of work on the demographic, social and economic consequences of child marriage for communities and nations remains limited.

1. Trends in Data Sources and Regional Distribution

The research on consequences relied almost equally on primary and secondary data sources, with 84 studies using primary data sources during these two decades, 80 studies using secondary data sources, and 4 using both types of data sources. As **Figure 18** shows, except for the 2012-2015 period where the use of secondary data sources was almost twice as frequent as the use of primary data sources, all other periods show a slight predominance of primary data sources. This healthy mix of the two types of data sources has allowed more nuanced subnational and location specific analyses to flourish along with the more broad-based, national and cross-national and cross-regional comparative analyses.

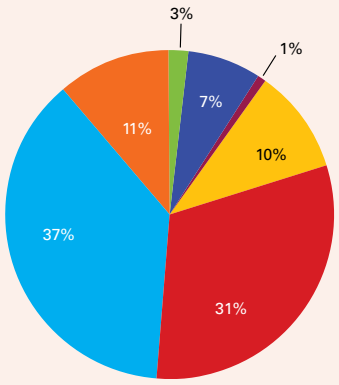
Figure 18: Type of Data Sources for Studies on the Consequences of Child Marriage, 2000-2019



As is the case with most of the research on child marriage, South Asia (with 62 studies) and Sub-Saharan Africa (with 52 studies) dominate the regional and country focus of research on consequences (**Figure 19**). There are also a significant number of multi-regional analyses (n=19) and analyses on the MENA region (n=17). However, Latin America (n=2) and East Asia and the Pacific (n=5) are not well represented in this body of work. As **Figure 20** shows, moreover, the volume of research for SSA, MENA and cross-regionally increased very rapidly since 2015, but this was not the case for research on Latin America and East Asia and the Pacific.

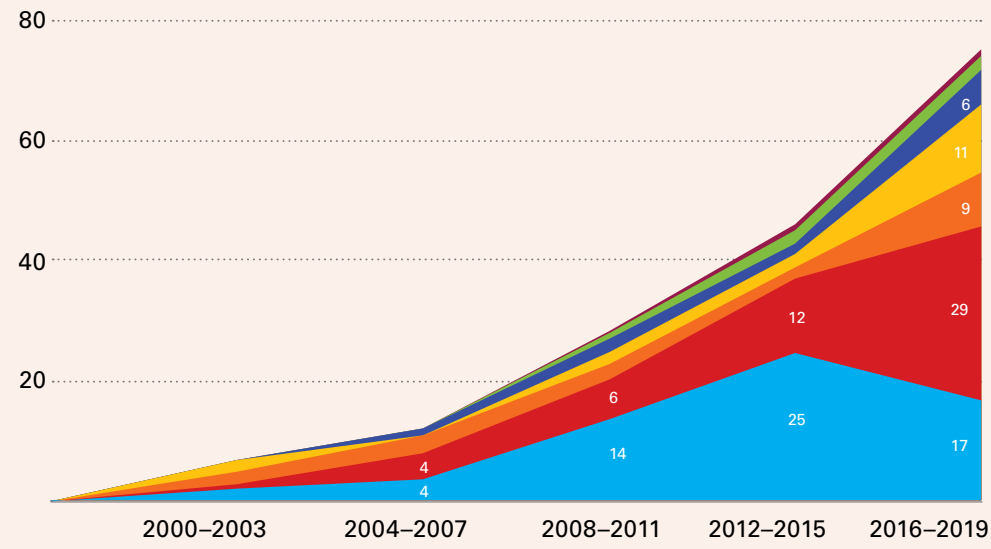
Research on consequences in the South Asia region experienced a rapid increase earlier than for other regions, from 2005 to 2015. This is one reason why the three countries with the highest volume on consequences research are all in Asia, with India (n=26), followed by Bangladesh (n=18), and then Pakistan (n=12) the most well-studied countries on this subject matter. In sub-Saharan Africa, Ethiopia is the country with the largest volume of research on consequences (n=11), but other countries such Ghana, Nigeria, Niger, Kenya, Uganda, Tanzania, Zambia, and Cameroon are also represented in the evidence base, although with fewer number of studies.

Figure 19: Distribution of Research on Consequences of Child Marriage by Region



SSA	31%
South Asia	37%
Global/Multi-regional	11%
MENA	10%
Eastern Europe and Central Asia	7%
East Asia and Pacific	3%
Latin America	1%

Figure 20: Volume of Research on Consequences of Child Marriage by Region, 2000-2019

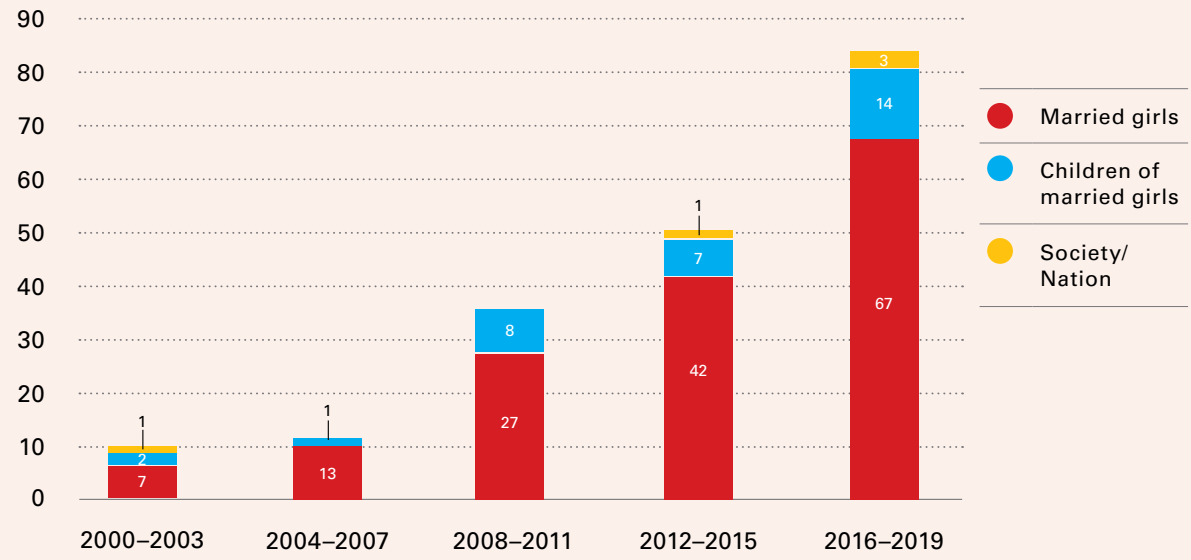


- SSA
- South Asia
- Multi-region
- MENA
- Eastern Europe and Central Asia
- East Asia and Pacific
- Latin America

2. Trends in Research on Different Types of Consequences of Child Marriage

Research indicates that consequences of child marriage can be considered for different population groups—in particular married girls and their children—as well as at different levels of aggregation, such as the individual and her family, or the country and society. **Figure 21** shows that most articles focused on the impacts of child marriage on married girls (n=156), with an almost tenfold increase between 2000-2003 (n=7) and 2016-2019 (n=67). Consequences for children of married adolescent girls and young women was the second most frequent subject matter of study (n=32). It really emerged as a topic of interest in the 2008-2011 evidence base (n=8), and in most recent years has gained even more traction with 14 studies in 2016-2019. Between 2012-2019 there has also been more research interest in consequences of child marriage on societies and nations with 5 studies addressing this question, mainly with a focus on assessing the costs of child marriage.

Figure 21: Subject of Study for Consequences of Child Marriage



A. Consequences for Married Girls

The vast majority of research with regard to consequences for married girls has focused on health outcomes (n=117), and within that subject matter, mostly on sexual and reproductive health outcomes. This is not surprising since sexuality and reproduction are so fundamentally linked to child marriage and a bi-directional relationship in many contexts is now well-acknowledged in the child marriage literature. Often studies have considered 18 as the cut-off for differentiating the consequences for child versus adult brides, but some studies also disaggregate further by age at marriage to consider the impact of girls marrying very young—usually before 15—versus marrying between 15-17. Populations examined in studies have generally been married girls 15-19 or married women 20-24, but research has less often focused on women beyond those ages to assess the longer-term

consequences of child marriage. It should also be noted that although due to the lack of data a specific focus on the age group below 15 is rare, in focusing on 15-24 year olds, research has examined the consequences of marriage before 15.

A 1. Consequences for Girls' Sexual and Reproductive Health

There is a solid body of literature supporting the negative association between fertility-related outcomes and child marriage across a wide range of contexts, including but not limited to India, Bangladesh, Saudi Arabia, Pakistan, Nepal, Niger, Turkey, Iran and Nigeria. These negative outcomes include early and unintended childbearing (89,98,120–130), lower contraceptive use (28,89,99,124,126,128,129,131–134), high fertility (86,125,126,135,136), and rapid repeated childbirth (124–126,137), and pregnancy termination[10] (124–126,138,139).

For example, in their 2013 multi-country study in South Asia, Godha et al find that child brides were more likely to have early and unintended pregnancies, and less likely to use contraception, with this being especially the case for those married before 15 (124). Research in 2017 by Knox among Palestine refugees in Lebanon reveals strikingly low levels of knowledge and poor use of modern contraception, with participants opting instead to use traditional methods such as abstinence and withdrawal (67). Similarly, in their 2015 study in Bangladesh, Ainul and Amin show that girls who marry as children are at a higher risk of mistimed pregnancies in part due to their poorer knowledge of reproductive physiology, menstruation, and contraception (130). In rural Ethiopia, research by Ketema et al in 2018 demonstrates barriers to contraceptive use among married adolescent girls (133). In this setting, power dynamics were the single greatest factor impacting contraceptive use, with partner approval – as well as approval by in-laws – constituting an important prerequisite for girls' use of family planning. That husbands were requested to be present and aware that their young wives were receiving contraception impeded girls from consistently accessing contraceptive methods and reinforced men's control over young girls.

Increasingly, studies are also documenting a negative association between child marriage and other pregnancy related outcomes for girls, including lower levels of delivery in a health facility (98,99,140–143) and lower utilization of maternal health care as well as health care access in general (140,142,144–149). For example, in their 2019 year study in India, Santhya et al find that women who married before 18 had lower likelihood of first delivery at a health facility compared those who married as adults. Similarly, Nasrullah et al's 2013 research in Pakistan shows that child marriage is significantly associated with decreased likelihood of prenatal care and delivery by a skilled birth attendant (140). Paul and Chouhan's 2019 research in India shows that women married as children—and especially those married under 14—are significantly less likely to use maternal health care services than those who married as adults (144). Research in 2013 among married adolescent women in Mali demonstrates poor utilization of pre- and post-natal care and safe delivery among married 15-19 year old girls (148).

10. Defined in most papers as "ever having had a pregnancy that resulted in miscarriage, abortion, or stillbirth."

A number of studies have documented the ignorance of child brides regarding reproductive matters, the high pressure they feel to give birth soon after marriage, and their limited autonomy on reproductive decisions (132,147,150,151). For example, Barua and Kurz's 2001 study in Maharashtra, India documents the intense pressure faced by young married girls from their mothers-in-law to conceive within a year after marriage (151). Klingberg-Allvin's 2008 research in Vietnam shows similar findings in terms of both the ambivalence and lack of power experienced by young brides on decisions around pregnancy, delivery and contraception (150). In a 2018 study in Ethiopia and India, young girls expressed feelings of powerlessness in negotiating contraceptive use due to fears of upsetting the partners and in-laws (132) In some cases, the pressure to give birth prompted in-laws and partners to use violence against girls (132). Afraid of divorce and the shame it brings about, girls acquiesced to pressures to give birth immediately after marriage.

While there are some studies that have explored the links between child marriage and HIV, the evidence on this issue is mixed. Earlier claims that child marriage exacerbates the risk of acquiring HIV has been questioned with arguments suggesting that the same factors may make some girls more susceptible to child marriage and HIV risk (152–157). Articles that contend that married female adolescents are at elevated risk proffer several reasons for this association including the fact that young married girls have unprotected sex with their husbands more frequently, are in marriages characterized by greater age gaps, and are more often junior wives in polygamous marriage arrangements – all of which compromise their negotiation and bargaining power in the marital home. Young married girls also tend to have reduced access to services and information about HIV. In contrast, some recent studies have found empirical evidence to the contrary, suggesting that marriage at a younger age may be protective against HIV/AIDS compared to extramarital sex at a young age (152,155).

A 2. Consequences for Girls on Other Health Outcomes

The evidence on health consequences for married girls other than reproductive health is much more limited. While the number of studies focusing on the health status of adolescents 15-19 and youth 20-24 has increased in recent years, this research frequently targets both young males and females, and does not necessarily use marital status as a criterion in its analysis. In fact, most of the boys and young men included in these analyses are generally not married. The analytical focus, therefore, may or may not fully align between assessing health consequences for adolescents more generally, versus assessing these consequences for adolescent girls and young women married as children per se.

In recent years, two areas beyond reproductive health that have gained some attention in terms of health consequences of child marriage include nutritional status and mental health. It should be noted that these health consequences are not entirely separate from reproductive health issues, as both nutritional and mental health outcomes for child brides often have some connection to sex and pregnancy related matters.

Research on nutritional deficiencies associated with child marriage began emerging from India with Banerjee et al's 2009 study noting higher anemia levels among pregnant teen mothers delivering in a West Bengal hospital compared to mothers in their early 20's (82). A more comprehensive study in 2015 by Goli et al concluded that among women of reproductive age in India, and in high prevalence states in particular, marriage before 18 was significantly associated with both higher anemia levels and lower body mass index (115).

In contrast, Efevbera et al's 2019 study of 35 countries in Africa found a slightly reduced risk of being undernourished for women of reproductive age marriage as children. However, sensitivity analyses displayed this reduced risk in very few countries, suggesting that associations were not overall significant at the country level, and with the analysis restricted to women 20-24, only one country—Malawi—showed significant and negative associations (123). This limited evidence base suggests that the relationship between child marriage and nutritional outcomes may be sensitive to context, both in terms of the overall prevalence and intensity of nutritional deprivation for women, as well as cultural practices associated with marital status and timing.

Similarly, the limited existing research on the relationship between child marriage and mental health status is inconclusive, showing some inconsistent results. For example, Singh and Revollo's 2016 research using longitudinal data from India for 19 year old young women shows more negative psychosocial outcomes—including subjective well-being, self-efficacy, self-esteem and locus of control—for those married by that age as opposed to those who were still single (158). Ghosh et al' 2017 research in rural India shows similar findings of poorer psychological well-being among young women married before 18 compared to those who married as adults (125). Research in Turkey, Ethiopia, and Lesotho shows similar positive relationships between early marriage and stress, anxiety and depressive symptoms (126, 127, 128).

At the same time, there is some emerging research indicating that child marriage may be associated with lower levels of reported stress (145,159), especially compared to other forms of child abuse (160,161). Research also suggests that the effect of child marriage on mental health may be mixed rather than just negative. For example, Gage's 2013 research in Ethiopia found that while child marriage was associated with suicidal ideation, married girls were not more likely to attempt suicide in comparison with their adult counterparts (162).

A 3. Personal, Social, and Economic Consequences for Girls

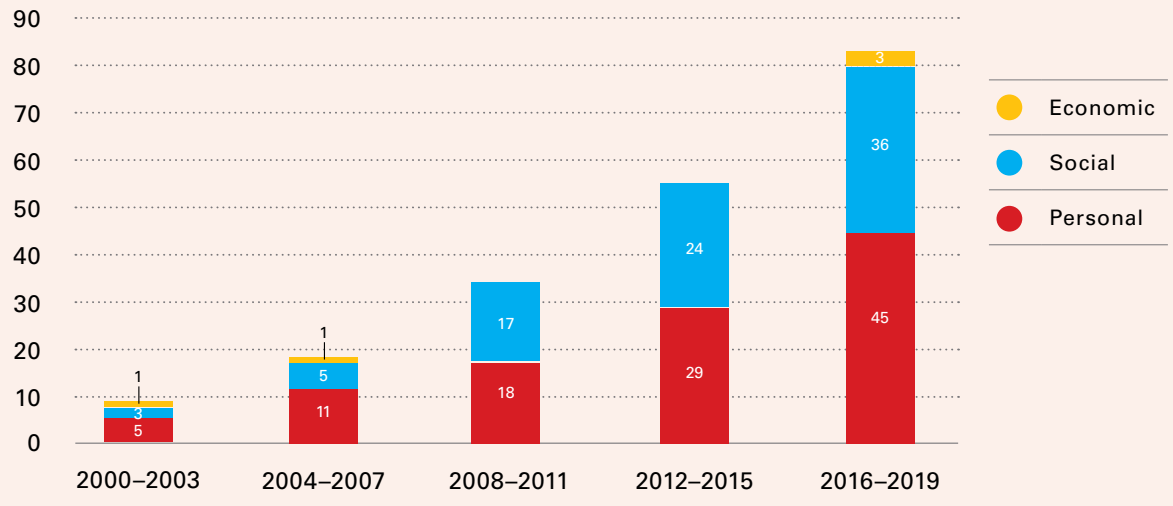
More broadly, there has been an important trend in expanded research beyond the health dimension, focusing also on the personal and social consequences of child marriage for girls, covering topics such as autonomy, marital satisfaction, gender-based violence, and education. As **Figure 22** shows, there has been a substantial body of work generated in this area, with a total of 87 studies between 2000-2019, the vast majority (n=62) being published since 2012. This

also includes studies on the economic implications for girls, but these recent studies are very limited in number (n=5). As has been the case with research on the health consequences, the lion's share of these publications addressed the personal, social and economic effects of child marriage in Sub-Saharan Africa and South Asia.

A number of studies now document the disruption of social networks for young married girls (121,158,163), restrictions on their mobility (121,163,164), and on different aspects of empowerment (15,150,165–167). For example, in their 2019 study in Jordan, Al Kloub et al describe the sense of loss of childhood and youth, personal freedom and mobility, as well as disruption of peer social networks for child brides (163).

There is also evidence linking child marriage with forced marital sex and lack of involvement in spouse selection (99,168–172), and lower levels of autonomy and decision-making (20,173,174). Santhya et al's research in Gujarat and West Bengal, India, found an association between child marriage and forced and unwanted sex (175). In their 2013 research in Ethiopia, Erulkar et al find that women who had married before age 15 had four times the odds, and those married between 15-17 had twice the odds of experiencing forced first sex with their spouse compared to those married at ages 18-19 (168). Also in Ethiopia, John et al find a negative relationship between very early marriage and girls' agency and ability to choose whom they married evidence as well as marital quality (170).

Figure 22: Trend in Research on the Health, Personal and Social, and Economic Consequences of Child Marriage for Married Girls, 2000-2019



The evidence with regard to the impact of child marriage on intimate partner violence (IPV) is wide ranging and conclusive, with a preponderance of empirical data indicating a positive association. The findings of higher rates of IPV among girls married as children is robust across regions and countries, with studies documenting similar patterns in Ghana, Uganda, Ethiopia, Vietnam, Yemen, Pakistan, Bangladesh, India, Jordan, Turkey and Iran (20,92,99,173,176–188). A comparative analysis of the relationship between child marriage and IPV in 34 countries

undertaken by Kidman in 2017 found that past year physical and/or sexual IPV was 1.4 times higher for women married before 18 compared to those married later (182). Increasingly, qualitative studies have also highlighted the vulnerabilities of married girls to domestic violence and abuse, fueled in part by the fact that girls married young tend to have older husbands and to reside with in-laws, in situations with diminished agency and control over decision-making (133,151,165,169,172,177,189).

Sporadically through these two decades, some studies have also attempted to assess the nature and durability of child marriages. For example, as early as 2000 in their research in Ethiopia, Tilsen and Larsen found that the risk of divorce increases for girls who are married at younger ages (190). In contrast, more recent research by Michael et al. in 2018 on Syrian refugees in the Middle East documents the difficulties child brides face in securing divorce due to entrenched gender norms that detract from girls' autonomy and decision-making (186).

Another outcome featured in the consequences literature during the 2008-2011 period is polygamy (20,165,191). A USAID study conducted in Uganda in 2009 found that a larger proportion of women ages 25–49 who married at age 14 or younger were in polygynous unions compared with those who married at age 18 or older. A 2008 study examining the influence of age at first marriage on sexual behaviors among Tanzanian men and women in 2008 revealed a statistically significant association between early marriage and remarriage and polygamy (191).

The most recent evidence base between 2017-2019 has also generated a few studies on marital satisfaction among girls married as children, providing some important insights, but inconclusive findings. For example studies by John et al in Ethiopia, Durgut and Kisa in Turkey, and Hajihasani and Sim in Iran indicate lower levels of overall marriage quality in child marriages (170,192,193). In contrast, Ghosh and colleagues' research in rural India, Schaffnit's research in northwestern Tanzania and Knox's work with Palestine refugees question this as a blanket conclusion, indicating that when girls were involved in the decision to get married, they tended not to report lower levels of marital satisfaction (172,194,195). Of course, this could possibly be because when involved in the decision, girls are more invested in and satisfied in their marriages, or possibly because they are less willing to admit dissatisfaction. Research undertaken by Taylor et al and Murphy-Graham and Leal in several Latin America contexts indicates that even in some adolescent-led marriages where girls sought unions as a means to escape restrictions imposed upon them in the natal home, they described facing new constraints on their mobility and agency (103,121,164).

While the vast majority of the evidence base on the relationship between child marriage and education is with the view of education being a determinant of child marriage, there has been an increasing effort in the last decade to assess the educational impact on girls married as children. These studies note the challenges in quantifying the effect of child marriage on education owing to the endogeneity of education and marriage timing and the simultaneity of the two variables, which makes it difficult to disentangle their effects. As noted earlier, studying

the direction of the relationship is further complicated by the fact that underlying factors – such as poverty, cultural norms and traditions – drive decisions around both marriage and education.

Challenges notwithstanding, there are several papers—most since 2013 onward—which attempt to examine the impacts of child marriage on educational attainment (13,121,123,158,196–203), and which now document a fairly consistent negative impact of child marriage on schooling in different settings. Lloyd and Mensch' early work from 2008 shows that child marriage and pregnancy account for 20 per cent of school dropouts in Francophone Africa. In a region where there are many barriers to girls' schooling, child marriage is one among other factors contributing to the discontinuation of schooling (198). More recent work from Wodon et al's 2016 study uses econometric estimation of the impact of child marriage on secondary school enrollment and completion, finding strong evidence that child marriage reduces secondary school enrollment and completion for girls in Uganda (197).

Field and Ambrus in their 2008 study on Bangladesh isolate the effect of marriage timing using age of menarche as an instrumental variable – and find that each additional year that marriage is delayed is associated with 0.22 additional year of schooling and 5.6 percent higher literacy (73). Similarly, Sakellariou's 2013 analysis of education transitions in Indonesia finds that girls who married early had extremely low odds of completing education transitions and attaining higher levels of education, with marriage being cited as the main reason for school-drop out for the majority of girls married before the age of 18 (202).

In contrast, studies examining the personal and family level economic impact on girls married as children are very limited in number (n=4) despite the fact that poverty related factors and the lack of economic resources for married girls are important issues in both the determinants and intervention literature. In their analysis of DHS data from 1991 to 2014, Efevbera et al find that women 20-49 who married before 18 are more likely to be living in the poorest households when compared to women who had married after 18. It is not clear how much of this long term poverty is associated with the fact that child brides come from poorer households in the first place, and how much of it is the persistence of poverty due to early marriage (123). In their 2017 study across 15 countries using DHS, Wodon et al do not find a consistent or strong relationship between child marriage and labor force participation, or cash employment, but do find a negative relationship with earnings and household welfare levels due to the lower educational levels of child brides (204).

On the other hand, in their 2018 analysis of the Egyptian Labor Market Survey, Yount et al find that women 15-49 who were married at 18 or later were more likely to be engaged in market work and have economic agency in the family (205). Assad et al. also use Labor Market Survey data for their study of women 22-39 in Jordan, Tunisia, and Egypt to demonstrate that in all three countries, women marrying above the median age are more likely to engage in wage work, especially in the private sector (206). They found the results to be strongest in Jordan where such options are the most available. Some of the authors also note

that employment in itself—especially in the informal sector—may be more indicative of poverty and need rather than opportunity and empowerment. Moreover, all these studies examine work and poverty outcomes for married women within broad age ranges, and it is possible that the impact of child marriage on these outcomes varies across the life stage of a child bride as she ages through her marriage. Much more research on this topic is needed to further unpack and elaborate on these limited and mixed findings.

B. Consequences for Children of Adolescent Girls

The vast majority of the evidence base on the impact of child marriage on children focuses on child survival during the neonatal period. We found 29 publications that addressed the association between child marriage and neonatal and child health, most generated after 2012 (n=18).

There is more or less definitive evidence about the association of child marriage with risk of stillbirth (28,99,139,207,208), prematurity and low birth weight (12,11,4). There is additionally a strong body of evidence suggesting a mortality penalty for children born to young mothers (28,145,152,169,211–215) – although some research found this penalty to be exclusive to the first-born child. Most of the evidence base on impacts pertaining to neonatal and child health comes from South Asia and SSA which together make up around 65% of publications.

There is some emerging evidence of the intergenerational effects of child marriage on health and growth outcomes for children during their early years beyond the neonatal period. Efevera's 2016 research in Sub-Saharan Africa suggests that the negative impact of child marriage on stunting and child development outcomes is partially mediated by maternal education and wealth status (216). Several studies in India in 2010, 2011, and 2017 confirmed the negative association between child marriage and anthropometric outcomes (143,212,217). A 2016 analysis by Yu et al for 18 countries in in Africa, Asia, and Latin America shows evidence of a negative relationship between maternal age and height-for-age among children in several Asian and African countries (218). Research by Chari et al in 2017 found that a one year delay in marriage among Indian women increased the probability that their children complete the full set of WHO-recommended vaccinations (143).

There is only a very small body of evidence, emerging only since 2017, that examines ways in which child marriage is affecting a broader set of **social outcomes for children**, such as educational attainment and performance. In their research on Sub-Saharan Africa, Delprato et al find that both boys and girls—but especially girls—born to mothers married as children were less likely to enter and complete primary school (131). In their research on India, Chari et al find that delayed marriage increases both the probability of school enrolment for a mother's children as well as the years of education they receive (143). Due to its far-reaching human capital investment implications, this is certainly an area of research that requires further exploration and investment.

C. Consequences for Societies and Nations

There is now a body of research on the ***economic impacts*** of child marriage on societies and nations. Rabi's 2014 research in Nepal shows that the cost of child marriage from lost labor market potential alone accounted for 3.87 percent loss in Gross Domestic Product of Nepal (220). In their 2016 research, Wodon et al. used demographic projections and a costing model to demonstrate that ending child marriage and early childbearing in Niger corresponded to potential savings of US$ 1.9 billion from 2013 to 2030 (221). Moreover, in their 2017 analysis, Wodon and colleagues estimated the economic savings globally associated with potential improvements in key well-being outcomes if child marriage were ended, from 9 billion dollars in savings from reduced under-five stunting to 44 billion dollars in savings from reduced under-five mortality (204).

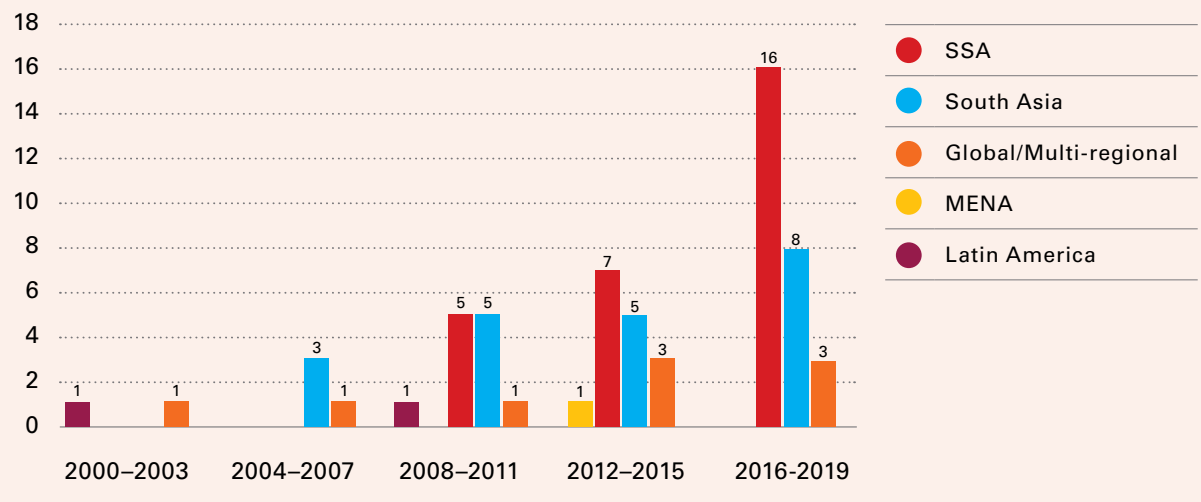
Other than economic costs savings and benefits, however, there are a number of potential positive outcomes for societies and nations that have been theorized but not empirically documented. Especially as child marriage is a target in the Sustainable Development Goal on gender equality, an investigation of specific ways in which reductions in child marriage promote women's empowerment and gender equality at the aggregate level in the society—from shifts in family structures to visibility in public spaces, to representation in the labor force—would be a particularly useful agenda for the future.

3E Evidence on interventions

As noted in the overview section, intervention research comprises the smallest share of all the publications from 2000-2019 identified in our review: only 61 of the 386 total publications in the scoping review focused on interventions to prevent or mitigate child marriage. **Figure 23** shows that similar to the other categories of research on child marriage we have examined, there was a significant increase in the volume of intervention research over the last 20 years, although not at quite the rapid rate of growth experienced by research on determinants or consequences, or even prevalence.

Figure 23 shows that geographically, intervention research has expanded exponentially for Sub-Saharan Africa over time, from no studies at all in the 2000-2007 period to 5 studies in 2008-2011, 7 in 2012-2015, and 16 studies in the 2016-2019 period. As has been the case for the other areas of research we have covered, the evidence base on interventions for South Asia is also substantial, but its increase has been more incremental over time, from 4 studies in 2000-2003 to 5 each in 2008-2011 and 2012-2015, and 8 studies in 2016-2019. Cumulatively, with a total of 28 studies from 2000-2019, intervention research on Sub Saharan Africa has now significantly surpassed intervention research on South Asia, with 22 studies during that period. MENA and LAC as regions continue to be underrepresented in intervention research as has been the case for all other areas of child marriage research we have mapped. On the other hand, global and multi-regional interventions have shown some increase in recent years, with 6 studies in 2012-2019 compared to only 2 studies in the 2000-2011 period.

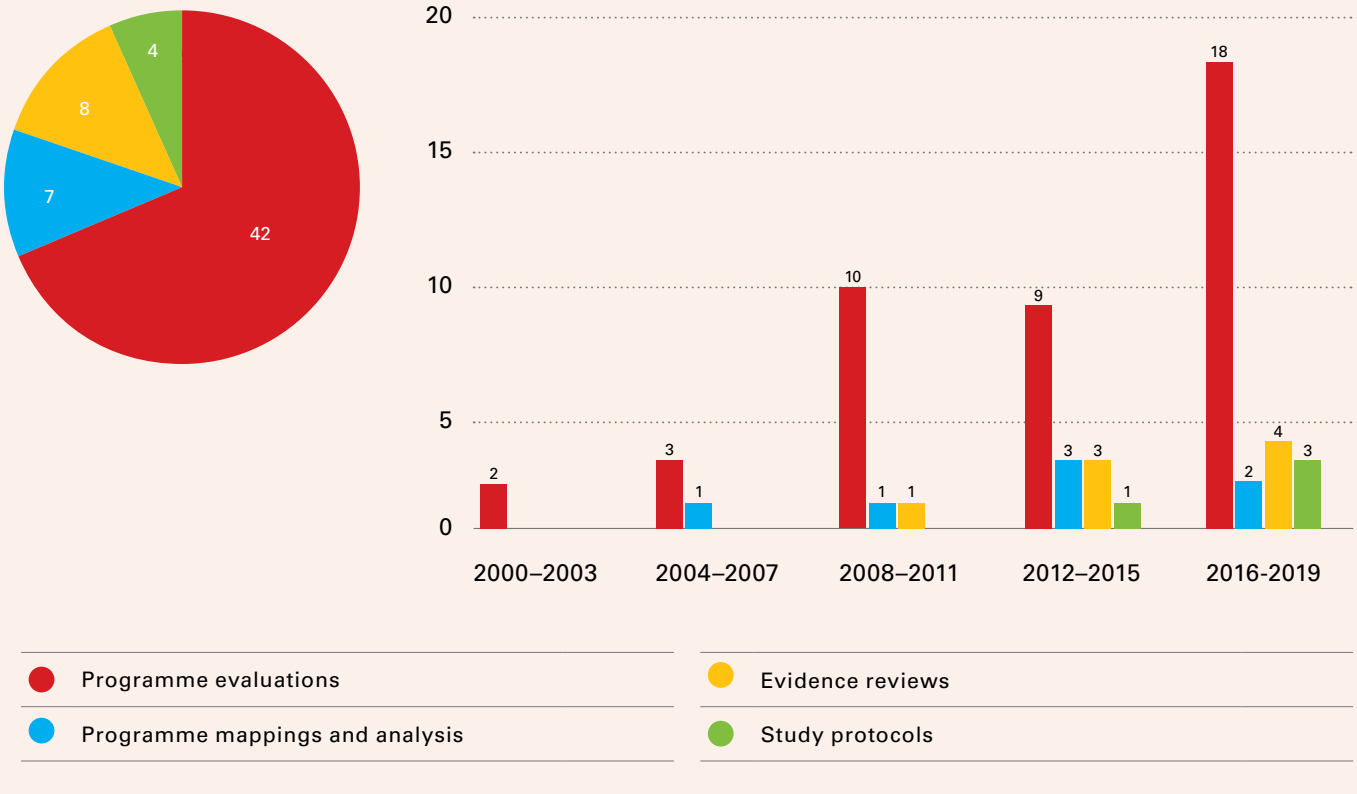
Figure 23: Regional Distribution of Intervention Studies Over Time 2000-2019



As **Figure 24** shows, the good news is that 42 of the 61 articles on intervention research cover programme evaluations. In particular, there were 18 programme evaluations in the most recent 2016-2019 period, compared to only 2 in 2000-2003, 3 in 2004-2007, and even 10 in 2008-2011 and 9 in 2012-2015. Additionally, we found 8 studies with evidence reviews of evaluations, 4 of which are from the most recent 2016-2019 period. Since 2015, there have also been 4 study protocols of planned evaluations of interventions yet to be implemented. Thus, the body of research focusing on the impact of interventions has grown substantially over time and can be very helpful in charting future direction for more effective programmes.

Aside from effectiveness, however the evidence base is scant on the implementation science of child marriage related interventions. We identified only 7 mappings and analyses of programme implementation over the last 20 years that provide some understanding of the broader programmatic environment and focus across regions and countries on the scope, range and specifics of the vast number of child marriage interventions which are not formally evaluated. Thus, our understanding remains limited with regard to what exactly comprises a child marriage programme in different settings, how simple or complex such programmes are, where exactly they are being implemented, how many girls they are reaching, who is implementing them, what challenges they are facing, and what is their trajectory for scale and sustainability.

Figure 24: Intervention Studies on Child Marriage by Focus Area and Over Time 2000-2019



1. Studies on Programmatic Mapping and Analysis

Although limited in number and scope, the 7 publications during 2000-2019 that mapped or analyzed programmatic efforts to address child marriage across different countries or regions are helpful in providing some sense of the range of interventions and policy efforts being undertaken in different contexts as well as the environment in which child marriage programmes have been designed and implemented over time and locations. As the summary of these studies in **Table 1** shows, they also provide some documented understanding on the details and implementation challenges of child marriage programmes and their evolution over time. Other than what emerges from these studies—and what is only inconsistently included in some impact evaluation studies—the specifics of child marriage programmatic elements, context, and implementation processes remain poorly documented in both the published and grey literature on child marriage interventions.

These 7 mappings and analyses provide some important insights on the progress and challenges with current and past programmes and also direct us to priority areas for future studies to address:

» **Over the last two decades—and even prior to that—a significant and increasing number of programmes on preventing and mitigating child marriage have been implemented; while clear that the number of programmes ranges in the hundreds, we currently do not have a more precise estimate of how many and where.**

Four of the seven landscaping studies undertook an effort to map the number and type of programmes in different geographies at least illustratively if not comprehensively. The earliest of these studies, in 2007 by Jain and Kurz, undertook a global landscaping effort to identify a total of 105 programmes, the vast majority in Sub Saharan Africa (49) and South Asia (34), but also several (18) across multiple countries. Two subsequent analyses have been focused on India (DasGupta et al 2008 and Harma et al 2015) and one on Ethiopia (Jones et al 2016), providing a rich understanding of the programme landscape in these countries and documenting above 50 programmes in each of these countries alone.

However, regional or global follow up on programme mappings has been lacking to assess which countries have seen an increase, status quo or decrease in the number and range of programmes. We do know that most programmes with a focus on child marriage prevention and mitigation were pioneered in South Asia—especially India and Bangladesh—even prior to 2000, and that some countries in the Middle East and East Africa began programmes early in the Millennium with a greater expansion in Sub Saharan Africa subsequently. At the same time, we do not have a more precise understanding of the geographic distribution and scope of programmes in the last decade. In particular, we do not know if there has been change with regard to Jain and Kurz's 2007 finding that in the early 2000's, a number of key countries with high prevalence had no ongoing programmes to address child marriage.

Table 1
Mappings and Implementation Analyses of Child Marriage Programmes, 2000-2019

2007 Jain and Kurz; Global (189)

» METHOD: Program scan via internet search

» NUMBER OF PROGRAMMES: 49 Africa, 34 South Asia, 4 other regions; 18 multiple countries. No programs in 5 of 20 countries with highest prevalence — Cameroon, Chad, Central African Republic, Nicaragua, Yemen.

» CONTEXT: Growing global interest & advocacy on relevance of child marriage for RH, HIV, girl's rights.

» INTERVENTIONS: Most have behavior change interventions with family, community, influentials, girls; aim to change norms; Life skills for girls; legal advocacy; Less common—education & livelihood skills

2008 Gupta et al; India (222)

» METHOD: Internet, document review, key informants, snowball expansion to organizations and experts

» NUMBER OF PROGRAMMES: 58 documented interventions 1961-2005; 18 Govt; rest NGO

» CONTEXT: Programmes emerging from RH concerns, value of girls concerns; recent accelerated interest by Govt; few evaluations

» INTERVENTIONS: Mostly awareness raising and life skills; Govt focus on cash transfers

2013 Walker; Africa (97)

» METHOD: Document review

» NUMBER OF PROGRAMMES: Not mentioned; select information on select prevention & mitigation programs

» CONTEXT: Need for sub-regional strategy as countries taking reactive but not effective legislative & policy action in response to push by UN, donors, advocates, to emphasize high rates of child marriage in violation of international standards such as CRC and CEDAW

» INTERVENTIONS: Minimum age laws but with many exceptions & poor enforcement; community engagement, life skills models, CCT models from places like India; OVC services; *Less common education, economic skills*

2014 Population Council; Africa (223)

» METHOD: Extraction from documents on select Population Council supported programmes.

» NUMBER OF PROGRAMMES: 4 Programme summaries—in Ethiopia (pilot and follow up), Burkina Faso, Tanzania

» CONTEXT: Research interest in providing demonstration model to civil society and Gov of tested and costed core package of interventions in select African contexts that can be scaled up

» INTERVENTIONS: 5 components building on 2004-2008 Ethiopia Berhane Hewan Pilot 1) community conversations on norms 2) life skills & safe spaces; 3) schooling support; 4) conditional economic incentives; 5) Parallel program for husbands on support to wives, gender-equitable relationships

2015 Sharma et al; India (224)

» METHOD: Field visits to 19 organizations and consultation with 38 organizations.

» CONTEXT: Concern about development sector & Northern institutions influencing Indian civil society toward interventions with narrow focus on results on marriage before 18 rather than broader empowerment.

» INTERVENTIONS: Alternative spaces, awareness raising, behavioral change, role models—report considers these "instrumentalist"; *Advocates deeper, holistic empowerment approach—collectives, aspirations for young people, livelihoods, education, SRHR, media, sports, art.*

2016 Jones et al; Ethiopia (225)

» METHOD: Field visits, documents, internet search, consultations with contacts and experts

» NUMBER OF PROGRAMMES: 54 programmes in 7 regions of country; examine 7 programmes in more depth

» CONTEXT: Govt interest in developing national strategy following SDGs and global commitments; UNICEF, ODI partnering to support with good practice programme review

» INTERVENTIONS: Mostly programmes are NGO's run; community conversations, school-based clubs; laws/policies enforced through local committee structures; communications campaigns. *Only few programmes on economic incentives (small amounts for school materials, scholarships); very few with women's savings.*

2018 Chandra-Mouli et al; India (226)

» METHOD: Document review, in-depth, group interviews, surveys of frontline workers.

» NUMBER OF PROGRAMMES: One large NGO implementation effort of a multi-sectoral child marriage programme thru support to Govt depts in several districts and blocks in Bihar & Rajasthan.

» CONTEXT: WHO interest to assess design, implementation, monitoring and outputs of convergent programmes

» INTERVENTIONS: Community mobilization, IEC, life skills, safe spaces, SRH services, legislative enforcement. NGO not successful in scale up or coordination/establishment of govt joint-working mechanism. *Competing priorities, lack of clear govt directives, fear of negative community reactions prevented functional convergence.*

» **While in the early 2000's interventions to address child marriage were operating in the context of multiple related issues—adolescent sexual and reproductive, HIV/AIDS, girls' rights—recent interventions have a more specific focus on child marriage, especially in the context of national action plans.**

The 2007-08 mappings globally and in India clearly place child marriage in the context of SRHR and girls' rights in India, and SRHR and HIV/AIDS in Sub Saharan Africa. But as Walker's 2013 review of efforts in Africa indicates, after 2012, child marriage itself has emerged more up front and center for programmes with increasing international attention to the issue. The deeper analysis in two countries—Jones at al.'s 2016 study in Ethiopia and Chandra-Mouli et al's 2018 analysis in India—shows the importance of taking stock of both programmes and coordination efforts in relation to national and state level formulation and implementation of national action plans.

The analysis by Walker suggests that although in many ways the pressure for African governments and stakeholders to honor international frameworks such as the CRC and CEDAW has been a positive development, she also notes that such pressure may be manifest in more symbolic initiatives such as national campaigns and legislative reforms on paper rather than more substantial programmes and resource commitments. Sharma et al's mapping raises question on whether international influence is diluting or strengthening efforts in a country like India where native grown programmes had already been implemented for well over two decades. Certainly, studies that rigorously assess clear pathways for specific programmatic strategies to benefit from lessons learned in other contexts—globally, regionally, or nationally—would be extremely useful.

» **Most child marriage programmes are operated by NGOs rather than governments and incorporate multiple components—with life skills, community mobilization, safe spaces, and legislative advocacy being the most common bundle. Most of these programmes are not at scale and are not being formally evaluated.**

The limited number of programme mappings globally, across Africa, Ethiopia, and India repeatedly document that the majority of intervention efforts are being implemented by civil society organizations with limited budgets and geographic reach and scope. The two most common government-led efforts noted are cash transfer programmes in India and national awareness campaigns and legislative initiatives in Africa. The Africa and Ethiopia studies note interest in conditional cash incentives, but there is incomplete documentation on where and how often such programmes are being implemented. These reviews specifically note that NGO-run child marriage programmes with a link to formal schooling or with a focus on economic or livelihoods opportunities have been especially limited in Africa, and that a connection with women's economic empowerment efforts has also been lacking. We also do not know how long programmes last once they have been started, and how often do they expand

to cover larger populations and geographies. Documentation and analysis of the scale and sustainability of child marriage programmes in different settings is one of the biggest evidence gaps in the field.

» **Comprehensive programmatic efforts face significant challenges on implementation, costs, sustainability, and scale up. Equally, efforts at multi-sectoral coordination across government departments nationally and sub nationally have not been met with great success.**

The documentation from these 7 studies indicates numerous challenges in the implementation of comprehensive or multicomponent programmes, the most common being the lack of adequate resources and capacity in the implementing organization as well as the limited timeframe to effectively design and execute the various intervention components. The few evaluation studies (discussed in the next section) that provide details and analyses regarding their intervention designs and implementation also echo these concerns. Moreover, complexity often makes the actual scope, quality and reach of comprehensive interventions more limited than intended, and thus it is not clear if the full range of beneficiaries actually end up receiving a comprehensive package. Additionally, while community engagement and mobilization are seen as essential for both buy in and norm change related to child marriage programmes, research also documents the sense of burden, overload—and sometimes disappointment – that communities experience in facilitating NGO efforts without tangible payback in terms of improved services (227,228).

Existing studies also indicate that despite best intentions and heroic efforts, sectoral coordination for comprehensive intervention efforts often remains a dream rather than reality. Chandra-Mouli et al. in 2018 (see Table 1) provide considerable insight on this issue in their process evaluation of the implementation of a district level multi-component programme in India, concluding that despite the dedicated attempts by a large and experienced NGO to mobilize and forge coordination across different government departments in the target districts in two Indian states, ultimately such coordination could not be achieved (226). The findings of this process evaluation echo the insights from GNB's 2016 policy review of national action plans across 20 countries which also noted disappointing progress on coordination efforts in implementing most national action plans given the limited resources and power of the nodal Ministries of Women, Children, and/or Social Welfare and the lack of specification by governments on how they will find and allocate the resources for a multi-sectoral response to child marriage (119).

In order to not just understand what works, but what is feasible to implement at scale, there is tremendous need for a larger number of implementation science oriented studies on designing, adapting, delivering, sustaining and scaling up child marriage programmes.

2. Evidence Reviews on the Effectiveness of Child Marriage Programmes

We identified 8 publications capturing 7 studies that undertook reviews of programmatic evaluations with child marriage prevention or mitigation—or both—as outcomes. Four of these evidence reviews were specifically focused on child marriage prevention. The remaining three evidence reviews actually did not focus on child marriage per se, but covered broader issue areas from a gender, health, or reproductive health perspective. In these reviews of interventions and outcomes from a broader perspective, child marriage prevention and/or mitigation was just one sub-area of interest.

A. Evidence Reviews of Intervention Outcomes for Child Marriage Prevention

Table 2 summarizes the timing, scope, approach, and findings of the four evidence reviews that specifically assessed intervention evaluations on child marriage prevention. These were published between 2011 and 2017, with the earliest being a systematic review of 23 programme evaluations undertaken by Malhotra and colleagues in 2011. This was published both as an ICRW report (229)and as a journal article (230). Subsequently, there has been one selective review of 7 cash transfer and structural evaluations undertaken by Parson and Mcleary-Sills in 2015 and published as a World Bank information brief (231); and two systematic reviews—one in 2016 by Kalamar et al. covering 11 evaluations and published as a journal article (232), and another in 2017 by Chae and Ngo covering 22 evaluations and published as a Population Council brief (233).

Overall, these evidence reviews have been helpful in consolidating and improving our understanding of evaluations on child marriage prevention on some key dimensions such as the types of interventions that are being evaluated, the countries and geographies of focus, the intentionality and scale of the interventions to prevent child marriage, and the level of evaluation rigor. With regard to shedding light on what works to prevent child marriage, however, there has only been limited progress since the first systematic review in 2011 to the latest one in 2017. None of the three systematic reviews conclude with an overwhelming preponderance of positive or null findings, and so our view of whether different interventions are effective in preventing child marriage remains equivocal.

All four evidence reviews focus on evaluations covering one or more LMICs where child marriage prevention was at least one outcome of interest. They cover somewhat different time frames and have different inclusion criteria, as a result of which there are some evaluations that overlap across all four reviews, whereas other evaluations are included in some reviews but not others. While the Malhotra et al 2011 review assesses both behavioral and knowledge/attitudinal outcomes related to delayed marriage, age at marriage, or child marriage, the other reviews focus on

behavioral outcomes only.

All the evidence reviews point out that the evaluations they covered almost always included a number of other outcomes – such as school retention, pregnancy or HIV prevention, broader empowerment of adolescents, norm change, etc, and that the specific outcomes included varied considerably across evaluations. Moreover, they highlight that not only was child

Table 2
Evaluation Reviews with a Focus on Interventions for Child Marriage Prevention, 2000-2019

Evaluation Review	Countries Covered	Classification of Interventions	Findings
Malhotra et al. 2011 **Lee-Rife et al. 2012** Systematic Review: 23 studies with CM as a behavioral and/ or attitudinal outcome published 1991 to 2011. Included hi, med, lo quality studies	1 Afghanistan, 6 Bangladesh, 2 Egypt, 2 Ethiopia, 5 India, 1 Indonesia, 1 Kenya, 1 Malawi, 1 Nepal, 1 Senegal, 1 Yemen	1. Girls' empowerment (skills, safe spaces, mentoring)—18 studies 2. Community mobilization—13 studies 3. Formal schooling access—9 studies 4. Economic support/incentives—8 studies 5. Legislative action—3 studies	Behavioral Outcomes: 9 Positive, 7 Mixed; 2 Null only 13 were hi or med rigor Attitudinal Outcomes: 6 Positive, 4 Mixed & 2 Null only 4 were hi or med rigor
Parsons and McLeary-Sills 2015 Selective Review: 7 studies on cash transfer & structural interventions with CM as one among other outcomes in World Bank Gender Impact Database	1 Pakistan, 2 Bangladesh. 2 Malawi, 1 Uganda, 1 Kenya	1. Cash transfers—conditional (fees, stipend uniforms) for school attendance) or unconditional to help poor—6 studies 2. Employment opportunity—presence of garment factory near villages—1 study	Behavioral Outcomes: 4 Positive, 3 Mixed, 4 Null Other outcomes: 7 Positive on school retention
Kalamar, Lee-Rife, & Hindin 2016 Systematic Review: 11interventions and evaluations rated by them as high quality, with behavioral outcomes on CM, published from 2000-2015.	1 Bangladesh, 1 Columbia, 1 Ethiopia, 2 India, 2 Kenya, 2 Malawi, 1 Mexico, 1 Zimbabwe	1. Conditional or unconditional cash transfers—4 studies 2. School vouchers/uniforms/fees—3 studies 3. School support & life skills curric-1 study 4. Life skills curriculum—2 studies 5. Multicomponent—1 study	Behavioral Outcomes: 4 Positive, 3 Mixed, 4 Null
Chae and Ngo 2017 Systematic Review: 22 rigorous evaluations (RCT, quasi-experimental or natural experiment) with CM as behavioral outcome and interventions implemented 1997-2016	5 Bangladesh, 1 Burkina Faso, 1 Colombia, 1 Ethiopia, 4 India, 2 Kenya, 1 Malawi, 1 Mexico, 1 Nepal, 1 Pakistan, 2 Tanzania 1 Uganda, 1 Zimbabwe	1. Empowerment (life skills, livelihoods, gender, RH, groups, mentors)—14 studies 2. Economic incentives (to raise girls, stay unmarried or in school)—10 studies 3. Schooling- fees, uniforms, tutors—7 studies 4. Community engagement, awareness—6 studies	Behavioral Outcomes: 11 Positive, 6 Mixed, 5 Null

marriage prevention a peripheral outcome for a significant proportion of these evaluations, but it was not an originally intended result for a number of the intervention programmes that were evaluated. The evidence reviews also point out that "child marriage prevention" can only be considered a broadly indicative outcome based on the evaluations they are covering, only a few of which directly assess the proportion of girls married under 18, or the hazard of marriage up to age 18. Many evaluations instead measure either the proportion of girls married within a certain age range, the proportion who delayed married within a given time frame, or the hazard of marriage at or up to various age ranges.

These reviews also highlight the importance of categorizing interventions that can intentionally or unintentionally result in child marriage prevention in some schematic way. As a pioneering study, the Malhotra et al 2011/Lee-Rife et al 2012 systematic review made an important contribution in providing a five-category framework for categorizing the most common interventions associated with child marriage prevention efforts. This categorization has facilitated subsequent discussions and analyses of child marriage prevention programmes around some of the key intervention elements—schooling, economic support, community engagement, girls' empowerment, legislative advocacy—that are commonly found in such programmes. In the latest systematic review to date, Chae and Ngo 2017 use a very similar classification. In their selective review of 7 structural interventions, Parsons and Mcleary-Sills assess select World Bank supported interventions only with the schooling and economic support elements, especially highlighting cash transfer programmes. The Kalamar et al 2016 systematic review makes a further distinction between conditional and unconditional cash transfer programmes and also directs more specific attention to the life skills component of girls' empowerment programmes. This progress suggests the importance of fine-tuning intervention categories more precisely in assessing the impact on child marriage prevention.

Malhotra et al's 2011 analysis also framed important questions around the impact of comprehensive or multicomponent interventions—which were frequently small in scale but intended to prevent child marriages and more broadly empower girls—as compared to single or fewer component interventions which were more often larger in scale but often with other outcomes as their primary objective. Kalamar et al and Chae and Ngo also indicate the duality of larger at scale programmes often containing fewer intervention components but not intending to prevent child marriage.

While providing some tentative indications, the findings from the three systematic reviews do not provide a clear indication for any specific intervention type(s) being substantially more effective in preventing child marriage than the alternatives. Of the two systematic reviews published in peer-review journals, Lee-Rife et al 2012 concluded that while both comprehensive horizontal and more focused vertical interventions showed some promise, neither intervention type provided clear unequivocal positive results in preventing child marriage. They also noted that the rigor of evaluations of legal changes was often low and

showed the least effectiveness. The other systematic review that was published in a peer-reviewed journal, Kalamar et al 2016, also concluded that every category of interventions had positive, negative and mixed results.

The review by Chae and Ngo 2017 also finds that different types of interventions were both successful and unsuccessful, but emphasizes "empowerment" interventions as being more successful than others. In examining their results further and in comparing them to the findings from the other reviews, however, this conclusion is problematic for at least two reasons. First, their classification of "empowerment" interventions includes not only life skills and other girl focused interventions, but also economic opportunities for women associated with macro-economic policies—such as the garment industry in Bangladesh or the IT out-sourcing industry in India. In contrast, Parsons and McLeary-Sills 2015 classify these as "structural" interventions, a classification more in alignment with how these interventions are grouped in the literature more generally. But perhaps even more important is the fact that many of the "empowerment" interventions in Chae and Ngo's review were part of a multi-component programme where the evaluation could not assess the effectiveness of each component separately. So, while it is possible that programmes with this element had a higher rate of success, it would not be correct to conclude that the success was due to the empowerment component.

The Chae and Ngo evidence review does note a growing trend in child marriage prevention evaluations toward a multi-arm design which is the effective strategy for distinguishing the relative impact of specific intervention components. In fact, not only which interventions, but whether single or multi-component interventions are more effective in delaying marriage remains one of the key unanswered questions to date. The reviews by Kalamar et al. and Parsons et al indicate that perhaps single component interventions may be more effective, but as these are the evidence reviews covering the fewest studies—11 and 7 respectively—and the latter review is purposefully selective, their findings can be considered suggestive only.

Hopefully, as additional evaluation studies have been emerging since these reviews were generated, the question of the relative effectiveness of single versus multicomponent interventions can be answered more definitively with the accumulation of a critical mass of studies. Equally, it would be helpful for future evidence reviews to not just specify the relative effects of programmes along the lines of the 4-5 broad intervention categories suggested by Malhotra et al, but to unpack the specific intervention types even further. For example, instead of just knowing whether girl-focused empowerment interventions are effective, it would be helpful to know if low intensity or high intensity life skills interventions are effective, or whether they are effective with or without safe spaces. Having a critical mass of evaluations—beyond the maximum of 23 assessed in the Malhotra et al. review and 22 assessed in the Chae et al review—would be necessary to see clearer patterns as to the success or failure of different intervention types in different contexts.

A larger evidence base would also be helpful in assessing how much credence different results should be given based on the level of rigor used, and the extent to which findings from the evaluations are short term or sustained over a longer term.

B. Evidence Reviews of Broader Intervention Outcomes, including Child Marriage

Table 3 summarizes the timing, scope, approach, and findings of the three evidence reviews which covered interventions and outcomes on broader gender, health, and reproductive health issues, but also incorporated child marriage prevention and/or mitigation as part of this analysis. All three of these were systematic reviews published between 2013 and 2018 which suggests that in recent years, child marriage is beginning to feature in the evidence assessments for related fields, a positive development that child marriage experts should increasingly be able to leverage in expanding programme, research, and advocacy linkages.

In their 2017 systematic review of systematic reviews on the effectiveness of interventions to prevent violence against adolescent girls, Yount et al include child marriage prevention as one outcome, along with child abuse, FGM/C, sexual violence and intimate partner violence (234). In fact, of the 27 evaluation studies the review ultimately extracted from the various systematic reviews, almost half (n=13) were on child marriage prevention.[11] Their overall findings on which interventions are effective in preventing violence against adolescent girls are very similar to the equivocal findings from the evidence reviews focused just on child marriage prevention[11]: 7 positive, 11 mixed, and 9 null outcomes. Within this limited range, the authors note that "bundled" two component interventions were more likely to have positive results than single component or multi-component interventions.

Yount et al.'s categorization of interventions to address violence against adolescent girls is also very similar to the classification provided by Malhotra et al 2011 for child marriage interventions, suggesting that evaluated interventions for these related outcome areas are very similar. Both Yount et al and Sarkar et al—in an evidence review that focuses on child marriage mitigation and has a similar grouping of interventions (235) – further frame their intervention categories within the socio-ecological framework, thus more explicitly emphasizing the importance of targeting not just girls at the individual level, and a range of actors at the community level, but also service providers at the institutional level. This explicit focus on service providers and institutions is often missing from systematic discussions of child marriage interventions and evaluations—especially with regard to prevention efforts—a gap that the intervention evidence base needs to address going forward.

Sarkar et al's 2015 systematic review focuses on the mitigation of child marriage with regard to the reproductive health of young married couples, addressing contraceptive use and pregnancy outcomes of young married women 15-24 as their key areas of impact. Based on their inclusion and quality criteria, the authors were able to identify only 8 evaluations with this focus, 5

Table 3
Evaluation Reviews on Interventions and Outcomes for Broader Issues but Incorporating Child Marriage Prevention or Mitigation, 2000-2019

Evaluation Review & Child Marriage Link	Outcomes of Interest & Geographies covered	Intervention Categorization and Analysis	Findings & Insights
Sarkar et al. 2015 *Systematic Review* Examining: the effect of community based reproductive health interventions for young married couples **Child Marriage Mitigation**	**Focus: Reproductive health** improving contraceptive access, pregnancy care, safe abortion services for young women 15–24 years through community level interventions 8 studies: 5 India, 2 Nepal, 1 Malawi	**A. Young married women** 1. Individual counseling 2. Group formation, support, discussion 3. Savings safety net **B. Family & community members** 4. Couple counseling 5. Community educ campaigns, fairs, plays, poster 6. Community group counseling-husbands, elders, mothers-in-laws, leaders **C. Service providers** 7. Sensitization, training of community health care workers, PHC doctors/providers. No studies-safe abortion, health system strngthning	**Limited positive results** Contraceptive use-6 studies Positive: Use-1, Knowledge-1; Attitudes-1 Delayed 1st preg: 4 studies Positive: 1 Pregnancy care: 5 studies Positive: ANC-1; Institutional delivery-0 **A major issue: barriers to good implementation**
Yount, Krause & Miedema 2017 *Systematic review of reviews:* Examining the impact of interventions to prevent violence against adolescent girls and young women. **Child marriage Prevention**	**Focus: Violence prevention** Prevention of child abuse, FGMC, child marriage, IPV, sexual violence among adolescent girls & young women 3 of 18 med-hi quality reviews focused on CM. Assessed 27 RCT quasi- experimental evaluations— 13 on CM Malawi, Kenya-2, Nepal, Egypt Ethiopia, Zimbabwe, India-4, Bangladesh-2	**20 multicomponent & 7 single component progs.** **Individual level components:** 1. Voice/agency: life skills-17 2. Social network resources: mentors, safe space-14 3. Human resources—education, vocational, livelihood skills-10 4. Economic resources—school fees, uniforms, cash transfers, microcredit, savings groups (9) **Community level components:** 5. Community norms: engagement, mobilization-1 6. Community institutions: hlth, edu infrastructure-6	**Some positive results** **For all violence outcomes:**[b] 7 Positive; 11 mixed, 9 null (bundled interventions had more positive results—simple 2 component better than many components) **Recommend that future interventions should target poly-victimization**
Owusu-Addo, Renzaho & Smith 2018 *Systematic Review* Examining the impact of evaluated Cash Transfer programmes on the social determinants of health and health inequalities in Africa. **Child marriage Prevention & Mitigation**	**Focus: Cash transfers & social determinants of health** Outcomes of interest: poverty, education, nutrition, child labor, sexual behavior, employment, pregnancy, empowerment(which includes reduced child marriage) Of 53 studies covering evaluations of 24 cash transfer programmes, 3 CM prevention evaluations: Malawi, Kenya, and Zambia; 8 CM mitigation evaluations—on adolescent pregnancy prevention—Malawi-3, Kenya, South Africa-2, Zimbabwe.	Compared to Latin America & other settings, cash transfer (CT) programs in SSA tend to focus on extremely poor, labor-constrained households. They are more likely to be unconditional (UCT) than conditional (CCT)—with "soft conditions" that are rarely monitored; implementation relies more on community rather than official systems. Review of 24 CTs: 11 UCT; 8 CCT; 5 combined. 12 were large scale; 12 small scale pilots CM Prevention: 2 UCTs; 1 UCT & CCT CM Mitigation: 4 UCT; 2 CCT; 1 UCT & CCT	**Limited positive results** **Prevention:** 3 programs 0 Positive; 1 Mixed; 2 null (unconditional cash either null or not sustained but conditional cash successful) **Mitigation:** adol pregnancy reduction 8 progs 3 positive ; 4 null **CT impact in Africa on CM outcomes more price effect (school access) than income effect (poverty reduction)**

of which were in India, 2 in Nepal, and 1 in Malawi. They find very limited positive results, with no more than 1 in 6 studies to 1 in 4 studies showing improvement in measures such as contraceptive use, knowledge, and attitudes, or delayed first pregnancy, better ante-natal care, and institutional birth delivery.

With the small number of studies and the geographical skew, it is difficult to generalize the results from this review, but they are not promising. It is also difficult to map results against intervention categories, but it is noteworthy that most of the interventions involved some type of knowledge impartation or counseling support, suggesting that these may not be enough to overcome the more structural constraints young married girls—and couples—face with regard to the availability and accessibility of services. The authors note in particular, that they were not able to identify any studies evaluating the effects of health system strengthening. They also note that the evaluated studies do not document barriers to good implementation, indicating that the quality of intervention implementation may have been an important factor in limiting success.

The final systematic review by Owusu-Addo et al 2018 is very specifically focused on the impact of cash transfer programs in Africa, with a very broad range of outcomes covered under the umbrella of "the social determinants of health." These includes everything from poverty, education, nutrition, child labor, to sexual behavior and "empowerment"—one of the measures of which they consider to be reductions in child marriage. On the prevention front, they consider the impact of 3 cash transfer programmes, finding mixed results in Malawi and null results in Kenya and Zambia. On the mitigation front, they consider 8 evaluations with an impact on pregnancy reduction (3 in Malawi, 1 Kenya, 1 South Africa, 2 in Zimbabwe), with positive outcome in 3 studies.

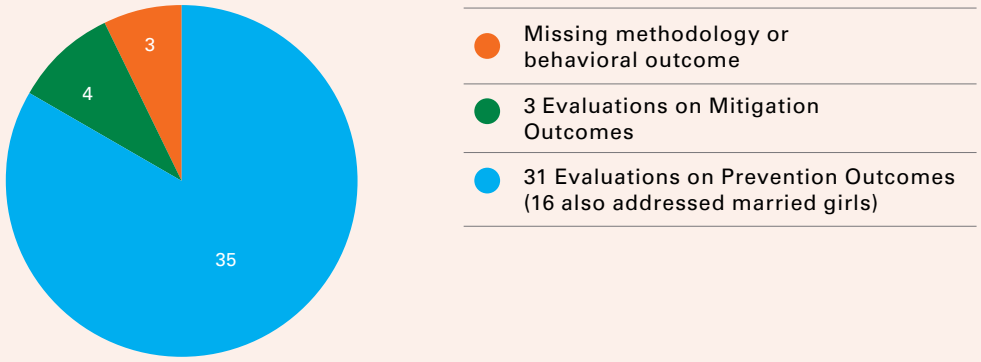
In contrast to these null or tepid positive results on child marriage prevention and mitigation, Owusu-Addo et al note generally positive results on the other social determinants of health in their evidence review – such as poverty reduction, immunization, education, etc. They note that unlike in Latin America and other settings, cash transfer programs in sub-Saharan Africa tend to focus on extremely poor, labor-constrained households, and as such, are much more likely to be unconditional, or with "soft" conditions that are poorly monitored and enforced. It seems that on the whole, delayed marriage and pregnancy in Africa may not be responsive to such programs which create an "income" effect to reduce poverty, whereas the possibility remains that child marriage outcomes may be more responsive to conditional cash transfer programs which create a "price" or "substitution" effect with conditions that require girls to attend school. This hypothesis, however, would have to be tested with a broader set of programme evaluations of cash transfer programs.

11. Two of the 3 systematic reviews on child marriage that Yount et al 2017 draw from are the Lee-Rife et al 2011 and Kalamar et al 2016 studies. They also include a systematic review by Kraft et al 2014 on "Gender-integrated interventions in reproductive and maternal-child health," which refers to 2 child marriage related evaluations that were also included in the Lee-Rife et al systematic review. Thus all 13 reviews of child marriage programmes covered in the Yount et al study were covered in either Lee-Rife et al 2011 or Kalamar et al 2016.

3. Programme Evaluations to Prevent or Mitigate Child Marriage

As **Figure 25** shows, we were able to identify 42 studies published between 2000-2019 that focused on evaluations of programmes to either prevent or mitigate child marriage. Three of these studies were difficult to interpret because they lacked either a clear evaluation methodology or a child marriage related behavioral outcome. Of the remaining publications, 35 studies documented 31 evaluations with child marriage prevention as a behavioral outcome. Several of them also documented additional behavioral and attitudinal outcomes. The remaining 4 studies documented 3 evaluations with behavioral and attitudinal outcomes related to child marriage mitigation. As we discuss below, however, it is likely that a much larger number of interventions are mitigating the effects of child marriage, but interventions and evaluations are generally not structured to isolate these mitigation effects.

Figure 25: Studies on Intervention Evaluations to Prevent or Mitigate Child Marriage 2000-2019



A. Evaluations on Child Marriage Mitigation

One of the clear insights emerging from this scoping review is that there is no agreed definition as to what constitutes an intervention or evaluation to mitigate child marriage, which makes it difficult to specify the number, scope, and effectiveness of such interventions. To some degree a broad range of interventions—from employment and cash transfer schemes to family planning and maternal health programmes—that aim to improve the economic, health, social and familial outcomes for married women of all ages, can be said to be mitigating the impact of child marriage since women married as children are frequently participating in such programmes. However, such interventions are generally not considered as child marriage mitigation efforts as neither the programme nor the evaluation are set up to assess the extent to which child brides are participating in or being affected by the intervention.

In using the precise criteria of either child brides being clearly the target of an intervention, or a broader intervention separately assessing its impact on women/girls married as

children, we were able to find and classify only 4 studies, covering three evaluations on child marriage mitigation. All 3 studies were in sub Saharan Africa and undertaken between 2015-2019, the first on intimate partner violence in Cote D'Ivoire, the second on SRHR and economic empowerment in Ethiopia, and the third on pregnancy prevention in Niger.

The 2015 evaluation by Falb et al is a multi-arm study in Cote D'Ivoire assessing the separate and joint impact of Village Savings and Loan Associations (VSLAs) as well as "Gender Dialogue Groups" (GDGs) on intimate partner violence (IPV) experienced by married women 18-45+. The evaluation is highly unusual in that it used these women having been married as children as an explicit criterion for assessing differential impact. The evaluation did find a rather complex differential impact in that while the VSLA alone actually increased rather than decreased IPV among all married women, it did not have this unintended negative impact on women married as children. On the other hand, the combined VSLA and GDG intervention had a positive effect on all married women, but not on women married as children. As this is a single evaluation result based on an intervention limited to less than 1000 women in a small geography, it is not clear what such findings imply for the effectiveness of broader economic and social interventions aimed at limiting IPV among child brides.

The intervention which Brooks et al's 2019 study in Niger focuses on—outreach by community health workers (CHWs)—was also targeted at women across the reproductive age spectrum, with the aim of improving contraceptive use and reducing pregnancies. The evaluation in this case can be considered as examining the effect on child marriage mitigation because the study limits its analysis to married girls 13-19 of age. The results show that CHW visits are associated with higher contraceptive use by young married girls, but also that younger married girls who have not yet had a child are not well served by CHWs whose visits are biased toward older (18-19 yr old) married girls who are already mothers.

The TESFA programme in Ethiopia specifically targeted married girls 10-19 with the aim of improving the reproductive health and economic outcomes of child brides, and so is most clearly both an intervention and evaluation on child marriage mitigation. The evaluation uses a multi-arm design to test the joint and separate impact of an economic intervention (VSLA) and a reproductive health intervention (SRH training curriculum) on the reproductive and economic empowerment of child brides (Edmeades, Lantos & Mekuria 2016; Edmeades, Hayes & Gaynair no date). The results showed that even with the VSLA and SRH interventions administered separately, both outcomes were improved for married girls, but the SRH effect was stronger in the SRH arm, and the economic effect was stronger in the VSLA arm. Interestingly, the combined effect of VSLA and the SRH intervention was not as strong on either the economic or the contraceptive and pregnancy outcomes compared to the effect from the single interventions alone.

The findings from this study are intriguing, and there may well be other studies targeting young married girls with SRH or economic interventions that could provide a comparative

perspective. However, unlike the TESFA evaluation, the vast majority of studies targeting young married girls do not specify child marriage as either a criterion for their analysis or as a motivation for undertaking the intervention and evaluation in the first place. Without a clear mention of child or early marriage, they would not show up in our scoping review.

In fact, the evidence base is known to have a range of evaluated interventions aimed at improving social, economic and reproductive outcomes for adolescents and young women which could well be mitigating the effect of child marriage, but it is difficult to isolate them as such and/or interpret their impact in terms of child marriage mitigation for several reasons: a) if they do not specifically mention early or child marriage, it is impossible to identify them in reviews; b) such interventions frequently target and report results jointly for married and unmarried young women which makes it difficuilt to separate the mitigation impact on the married girls only; and c) the age range of married and/or unmarried girls targeted tends to be anywhere from 10-25, making it impossible to isolate the impact on married girls above 18 by whether or not they were married as children. While at least some of the girls such programmes are reaching are child brides, others may well not have married before 18, or be married at all. The research community working on child marriage needs to reach consensus on whether such interventions and evaluations—where child brides are part of a broader target group but not specifically identified—should be considered "mitigation" interventions or not.

We faced this precise dilemma in deciding how exactly to classify 16 evaluations in this scoping review that assessed child marriage prevention as an outcome, but targeted both married and unmarried young women for a number of other outcomes as well, several of them which could be considered as mitigation efforts. At least half of these evaluations assessed outcomes such as school retention and completion; work and economic opportunity; empowerment in terms of mobility, self-worth, negotiations, etc; and reproductive trajectory in terms of pregnancies, contraceptive use and maternal care. However, given the evaluation and intervention designs of these studies, interpreting results on such outcomes as "mitigation" to child marriage was problematic for the reasons specified above: a) the age cap for the target group was frequently in the mid 20's making it impossible to assess what proportion of the married girls had been married as children; b) the evaluations did not consistently report results by the marital status of the young women, thus making it impossible to know the extent to which child brides—or even just married girls—are being affected by the intervention.

Another point that is important to consider is that many of the interventions that prevent child marriage—such as schooling, empowerment, cash transfers etc., can—and do—also mitigate its negative effects after marriage by preventing early pregnancies, and increasing human and social capital, etc. In fact, there were 9 studies in our prevention category where the intervention was targeted at unmarried girls, but the evaluation examined whether or not in addition to delaying marriage, the intervention also delayed pregnancy, improved maternal care, or in particular,

improved schooling outcomes. Again, with only a few exceptions, it is almost impossible from these study designs to determine if these effects were necessarily before or after marriage, and if the nature of the effect was differential for girls who married as children versus those who did not.

Going forward, it would be important for researchers working on the child marriage evidence base to agree on shared criteria for child marriage mitigation evaluations, addressing the following issues that are currently unresolved:

1. Should targeting married girls and/or women be an essential criterion for considering an evaluation and intervention a "child marriage mitigation" effort?
2. If so, within what age range for married women targeted does a programme qualify in being considered a mitigation effort? Should it be 18 or19 as the cusp for child marriage or should older age ranges be included?
3. If older age ranges are included in considering child marriage mitigation, should interventions specifically target child brides in some special way? How can evaluation designs be encouraged to set up analyses to determine the specific impact on child brides?
4. How do we classify and/or learn from the broad range of adolescent/youth programmes that target or include young women 20-24 or 20-29 (often in conjunction with 10-19 or 15-19 year old girls and boys)—but may not be limited to married girls and generally do not specify child marriage as a particular criterion for their intervention approach?

B. Evaluations on Child Marriage Prevention

Next we turn to analyzing the 35 studies covering 31 evaluations on child marriage prevention. As **Figure 26** shows, almost half—or 14 – of these evaluations were published in the 2016-2019 period, thus adding a significant share of very recent evidence on what works to prevent child marriage. In the 8-year period from 2000-2007, there were only 4 published evaluations on child marriage prevention, with an increase to 13 evaluations from 2008-2015. The number of evaluations in the 4-year period from 2016-2019 has surpassed even the combined number in the previous 8 year period.

Figure 26: Evolution in Number of Program Evaluations on Child Marriage Prevention 2000-2019

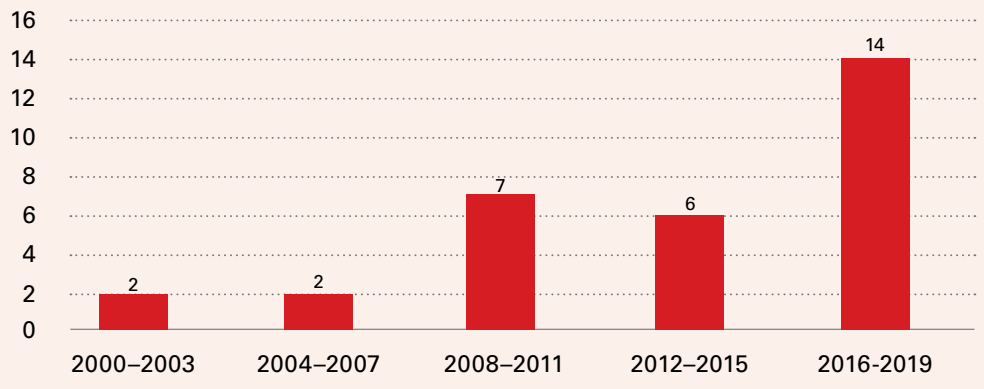
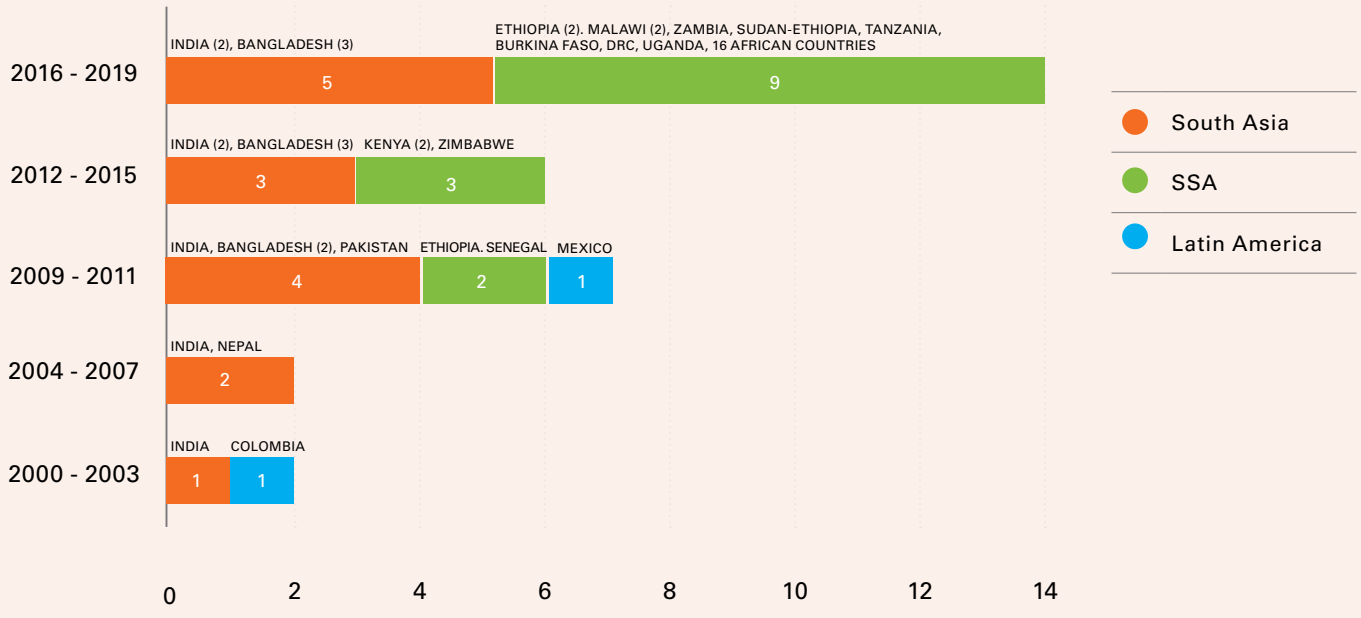


Figure 27 shows the geographic pattern of child marriage prevention evaluations over the last 20 years, both regionally and by the countries covered. Of the 31 evaluations published between 2000-2019, 14 were in sub Saharan Africa, the first two in Ethiopia and Senegal in the 2008-2011 period, followed by three studies in the 2012-2015 period, two in Kenya and one in Zimbabwe. However, the real explosion in evaluations for African countries was with nine publications in the 2016-2019 period, with two studies on Ethiopia, two on Malawi, and one each in Tanzania, Burkina Faso, DRC, Uganda. There was also one evaluation among Sudanese refugees in Ethiopia and one across 16 African countries. In contrast, evaluations on child marriage prevention in South Asia began earlier, were concentrated mostly in India and Bangladesh, and have increased very gradually, from one in 2000-2003 to two in 2004-2007, to four in 2008-2011, 3 in 2012-2015, and 5 in the most recent 2016-2019 period. There are two evaluations for Latin America, one in Colombia in 2000-2003, and one in Mexico in 2008-2011, but there has been nothing in the most recent period, and there are no evaluations for any country in the Middle East.

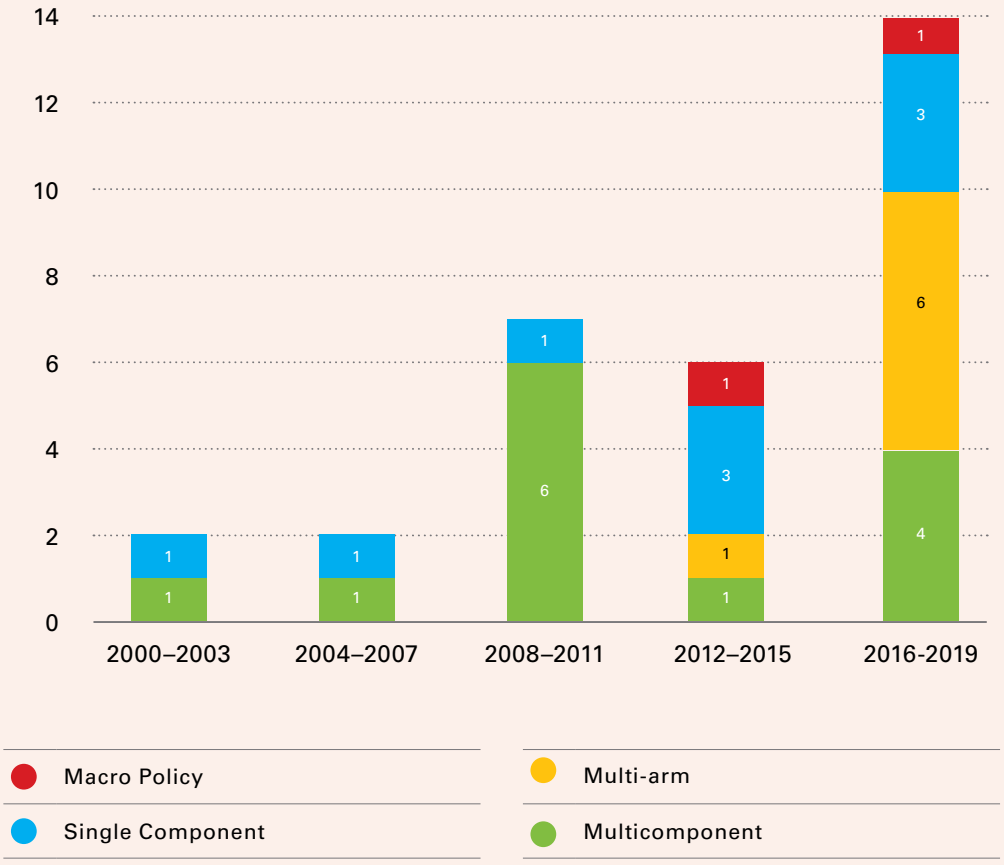
Figure 27: Evolution in Number of Program Evaluations on Child Marriage Prevention 2000-2019



B 1. Key Characteristics of Evaluations on Child Marriage Prevention

Figure 28 shows that the types of programmes being evaluated over time has shifted, from a heavier focus on evaluating multicomponent interventions as a package in the earlier years (2000-2011) to a much larger share of single intervention programmes—and even the impact of macro policies—being evaluated in the latter years (2012-2019). The 2016-2019 period in particular has seen the evidence base focus more on multi-arm evaluation designs to assess the impact of competing intervention options for child marriage prevention, both in unbundled and bundled formulations.

Figure 28: Child Marriage Prevention Evaluations by Intervention Components, 2000-2019

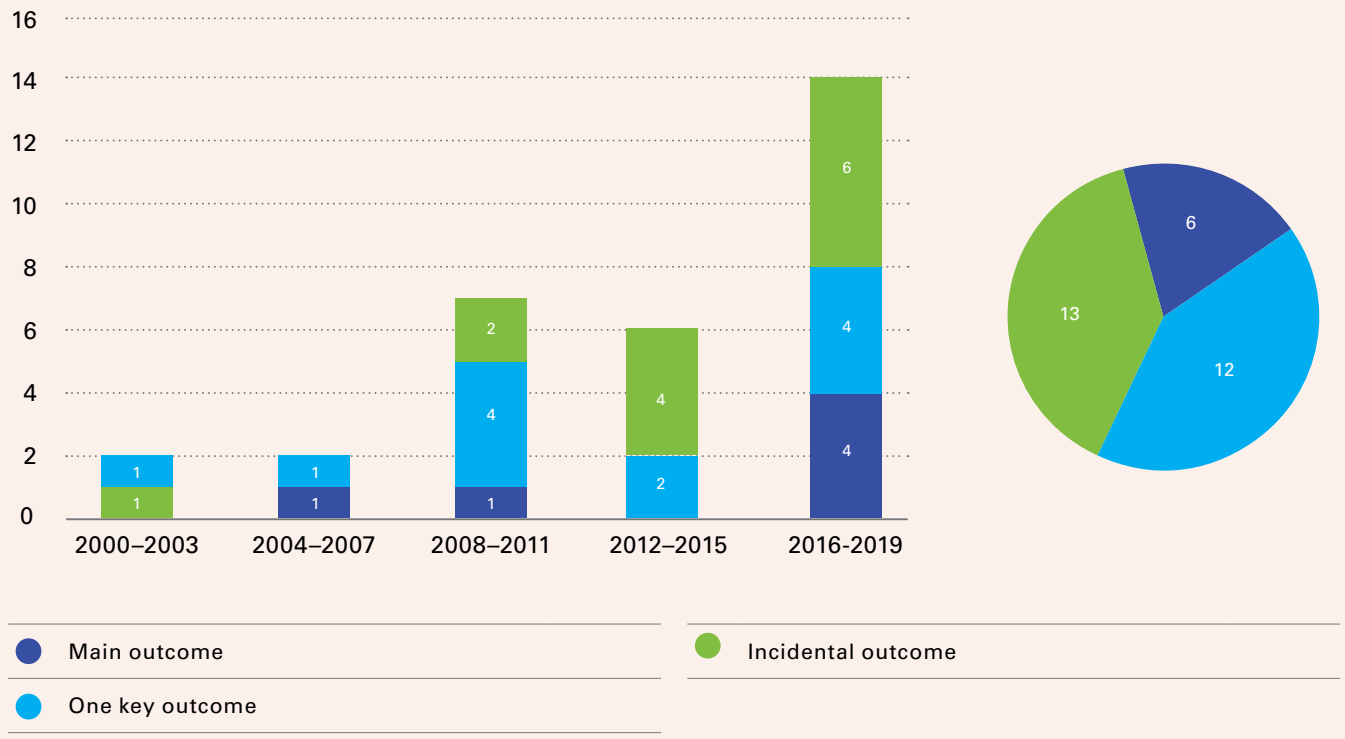


The increased focus on macro policy and single component interventions in recent years is in part related to a larger share of evaluations focusing on programmes that had originally been intended with other outcomes in mind, but with the growing interest in child marriage since 2012, were later investigated by researchers for their impact on child marriage prevention. As several of the evidence reviews discussed in the previous section have noted, this pattern of evaluating the impact of an intervention on children marriage as an "after-thought"—for interventions not really designed with the intention of delaying marriage in mind—has been present throughout the last 20 years. As Figure 29 shows, however, it has become more common in recent years. Of the 11 evaluations published from 2000-2011, child marriage prevention was the primary or one key outcome of interest in 8 evaluations, and an incidental outcome of interest in only 3 evaluations. In the 2012-2019 period, on the other hand, of the 20 evaluations published, delayed marriage was an incidental outcome in half—or 10 evaluations.

As a result, therefore, the largest share of all evaluations in the last 20 years has actually been on those interventions where child marriage prevention was not intended as a result and was an incidental outcome; as shown in the pie chart in **Figure 29**, this comprises 13 of the 31 evaluations in our scoping review. Child marriage prevention was one key outcome in 12 evaluations overall, and a main outcome of interest in only 6 of 31 evaluations. It is important to note that this focus in the evaluation literature on macro policies, single or unpacked components of interventions

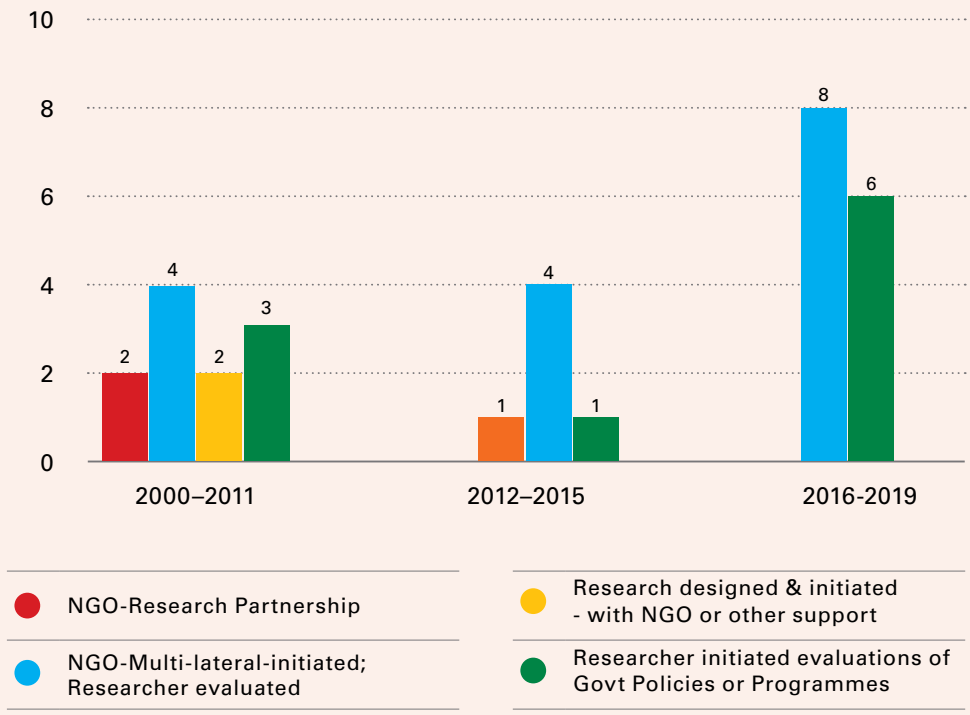
that were not necessary intended to delay marriage is in contrast to the vast majority of unevaluated child programmes on the ground that take multicomponent approach with child marriage as the primary focus. This disconnect between what is being implemented and what is being evaluated suggests that child marriage advocates need to pay at least as much attention to interventions that were not originally directed at their key issue as those that were, as these programmes are contributing a significant share to the evidence base.

Figure 29: Intentionality for Child Marriage Prevention in Evaluated Interventions, 2000-2019



The current disconnect between the implementers of the vast majority of child marriage prevention programmes that are not formally evaluated and the interventions that are increasingly formulating a robust evidence base becomes even clearer if we examine the evolution in the actors who implemented and evaluated the 31 programmes covered in our review. As **Figure 30** shows, in the 2000-2011 period, a significant share of the interventions (6 out of 11) were being implemented by NGOs who either requested or contracted researchers to evaluate their programme after implementation (N=4), or were a research-NGO partnership from the beginning (N=2). The share of the evaluations initiated by researchers was a little lower (5 out of 11). In these cases, researchers such as ICRW or the Population Council either conceptualized and set up the intervention with the help of NGOs because they wanted to test the effectiveness of a particular approach (N=2), or in the case of World Bank or other economists, they were undertaking an impact evaluation of a government programme where they had no direct engagement with the implementation at all (N=3).

Figure 30: Implementer and Researcher Role in Child Marriage Prevention Evaluations 2000-2019



Since 2012, however, with increasing interest among a broad range of researchers to contribute to the evaluations on child marriage, we see that evaluations either initiated by or in equal partnership with NGOs or multilaterals have almost disappeared. During 2012 and 2019, only 1 out of 18 evaluations were in this category. As of 2016, in particular, all the evaluations are researcher-initiated. Of the 17 researcher-initiated evaluations since 2012, 12 were smaller scale multi-arm or other study designs developed and structured by research institutes to test out a specific hypothesis regarding child marriage programming. NGO or private sector partners were engaged to help carry out the programme, but were generally not primary or equal managers of the intervention design. An additional 6 studies were evaluations of large government programmes by researchers interested in assessing whether such programmes prevented child marriage in addition to the programme's original goals.

B 2. Scale and Sustainability of Evaluated Programmes on Child Marriage Prevention

Our review suggests that in general, evaluated programmes on child marriage prevention have not been sustained over time. Based on the information available, we could ascertain that only 9 of the 31 evaluated programmes were sustained over time, while 15 programmes were definitely not sustained; the sustainability of the remaining 7 programmes was not determinable based on the information available. Of the 9 programmes that were sustained, 7 were government-implemented policies or interventions. The only two NGO-implemented programmes that were sustained

were delivered by BRAC which happens to be in a unique position as the world's largest NGO, almost at the scale of a parallel government in some settings.

As **Figure 31** shows, most evaluated child marriage interventions are not at scale: 18 of the 31 evaluated interventions reached less than 20,000 beneficiaries, and half (N=9) of these interventions reached less than 5,000 beneficiaries. In fact, a significant share of this latter category of interventions reached only a few hundred girls, and even in the 5000-20,000 category, several interventions topped at a reach of about 8,000-12,000 girls, many of them in very large countries like India, Bangladesh, and Ethiopia, where millions of girls face the risk of child marriage.

From the information available, we could ascertain that only 3 of 20 evaluated programmes in the less than 50,000 beneficiary category scaled up. Two of these were in India, and one in Bangladesh, both countries where well-established NGO's and advocates were able to work with the government to adapt, modify, and simplify the programme to a more streamlined version for implementation with a larger population base. We could also ascertain that 8 of the 20 programmes definitely did not scale up while there was not information available on the remaining 9 programmes with regard to scaling up.

Figure 31 shows that of the 10 evaluations of programmes with a reach of 50,000 girls or more, 8 were published in the 2012-2019 period. It can also be seen that in general, single component and macro policy interventions are much more likely to be operating at scale than multi-component interventions. While 10 of the evaluated single component interventions were reaching 50,000 or more girls and only 1 was reaching less than 5,000 girls, the reverse is true of multi-component interventions; only 1 such intervention was reaching more than 50,000 girls whereas 9 multi-component interventions reached less than 20,000 girls.

Figure 31: Scale of Beneficiaries Reached by Period, Study Design and CM Centrality

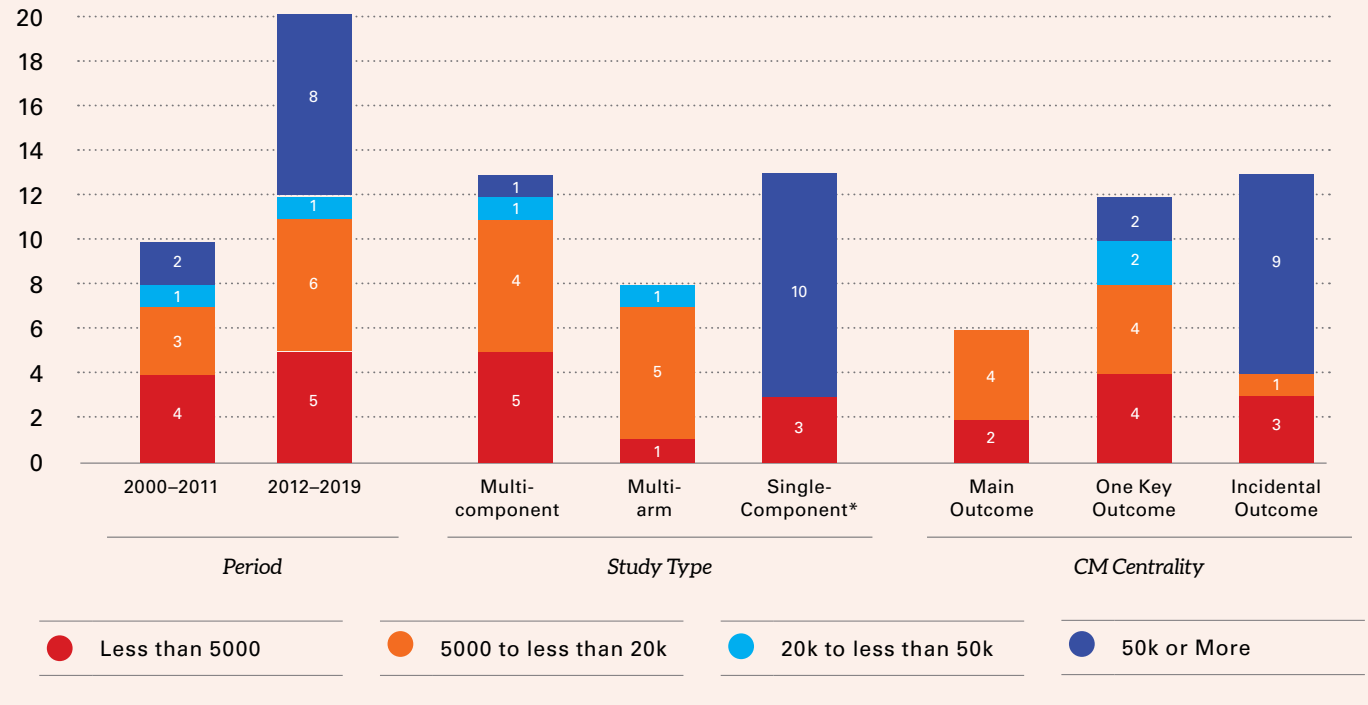


Figure 31 also confirms the inverse relationship between the scale and intentionality of an intervention to prevent child marriage. None of the 6 interventions where child marriage was the main outcome of interest were at scale, reaching no more than 20,000 girls. Among the 12 interventions where child marriage was a key outcome along with some other outcomes, 8 programmes reached less than 20,000 girls, and only 2 reached 50,000 girls or more. In contrast, among the 13 interventions where child marriage was an incidental outcome, 9 were at scale, reaching 50,000 girls or more. In fact, some of these interventions reached several million girls.

Thus, whether it is from the perspective of their increasing share in the evidence base, or from their greater scale and sustainability, single component and macro policy interventions not originally intended to affect child marriage need to be considered with more deliberation by those programming and advocating to end child marriage.

B 3. Results of Evaluated Programmes on Child Marriage Prevention

In keeping with the key characteristics discussed above, we analyze the results of evaluated programmes on child marriage prevention in three categories:

1. **Multi-component studies where the evaluation assesses the impact of a bundled package of interventions as a whole.** Most frequently the interventions included in such packages include life skills, safe spaces, and community mobilization with various levels of intensity and duration. Several comprehensive intervention packages also included livelihoods—and sometimes microcredit—interventions. Sometimes, the bundled programmes included support for schooling, other cash or in-kind incentives, or sexual and reproductive health services and/or training of providers.

2. **Multi-arm studies where the research design compares the impact of two or more intervention options or components.** Multi-arm studies most often assessed the impact of single components of bundled interventions, sometimes also adding an arm to assess the comparative impact of the bundled version. Beginning with the 2011 study by Baird et al on the impact of conditional versus unconditional cash transfer programmes in Malawi, multi-arm studies have especially picked up pace since 2015, including Baird et al's medium term follow in Malawi in 2016[12] as well as four studies by the Population Council, 3 in Africa and 1 in Bangladesh.

3. **Single component and macro policy interventions where there is one prime intervention focus.** Most frequently, evaluated single component interventions on child marriage prevention have focused on conditional cash transfer programmes with school attendance and/or progress as the main condition. Other demand side interventions intended to reduce the cost of schooling have included school stipends, vouchers, uniforms, etc., which by their very nature are

also conditional on school attendance and progress. These interventions have been evaluated in sub-Saharan Africa, South Asia, and Latin America. In Africa and Latin America, the interventions have generally targeted both girls and boys although they have found stronger effects for girls than boys. In South Asia, the interventions have specifically targeted girls. The level of schooling targeted also varies, with some interventions targeting primary schooling, others middle or secondary schooling, and some targeting a combination of schooling levels.

Less often, evaluations of single component interventions have focused on unconditional cash transfer programmes—generally in sub Saharan Africa. Other type of incentive programmes have included long term savings that are conditional on delayed marriage to age 18, life skills, as well as employment support in an environment of rising job opportunities for women; all of these intervention evaluations were in India. Macro policies that have been evaluated for their impact on child marriage prevention have included increased employment opportunities for young women through garment work in Bangladesh as well as the elimination of primary school fees in multiple countries in Africa.

Table 4A presents the consolidated results for the 11 multi-component interventions we identified in our review. These interventions span the entire 2000-2019 period, with a heavier focus on South Asia in the earlier period (total 6 studies) and on Sub Saharan in the latter period (total 5

Table 4A
Results on Child Marriage Prevention from 11 Multicomponent Intervention Evaluations 2000-2019: By Study

Multicomponent Evaluation	Country	Result
CEDPA 2001	India	POSITIVE
Mathur et al 2004	India	MIXED
Kanesthasan et al 2006	India	NULL
Shahnaz & Karim 2008	Bangladesh	POSITIVE
UNICEF 2008	Senegal	NULL
Erulkar & Muthengi 2009	Ethiopia	MIXED
Amin et al 2011	Bangladesh	NULL
Daniel and Nanda 2012	India	POSITIVE
Stark et al 2018	Ethiopia	NULL
Stark et al 2018	DRC	NULL
Bandiera et al 2018	Uganda	POSITIVE

Positive Results: 4 of 11 **Mixed Results: 2 of 11** **Null Results: 5 of 11**

studies). Only 4 of the 11 evaluations found positive results, 2 studies found mixed results, while 5 studies found no effect of the intervention on preventing child marriage. ***On the whole, multicomponent or comprehensive interventions do not present a resounding rate of success in preventing child marriage.***

Table 4B presents the consolidated results for the 7 multi-arm interventions from our review. Most of these studies—5 of 7—were in African countries, with 2 studies in Bangladesh. As it is rare for all the arms of multi-arm study to yield positive results, most such studies would be classified as having "mixed results." However, since the whole point is to see if any given intervention arms are more effective than the others, here we present the results from multi-arm studies unpacked by intervention arm, providing comparability on specific intervention arms across studies.

Table 4B
Results on Child Marriage Prevention from 7 Multi-arm Intervention Evaluations 2000-2019: By Study & Intervention Arm

Multi-arm Evaluation	Country	Result by Intervention Arm: CCT school fee, stipend, support	UCT Poverty Mitigation	Gender, Empower-ment	HIV Education	Livelihood skills	Community Mobilization	Multi-component	Asset transfer condition not marrying
Duflo et al 2015	Kenya	POSITIVE			NULL			NULL	
Baird et al 2016	Malawi	POSITIVE	NULL						
Amin et al 2016	Bangladesh	POSITIVE		POSITIVE		POSITIVE			
Erulkar et al 2016a	Ethiopia	MIXED					MIXED	MIXED	MIXED
Erulkar et al 2016b	Tanzania	NULL					NULL	MIXED	POSITIVE
Erulkar et al 2016c	Burkina Faso	NULL					POSITIVE	NULL	NEGATIVE
Buchmann et al 2018	Bangladesh			NULL				NULL	POSITIVE
Positive results ratio		**3 of 6**	**0 of 1**	**1 of 2**	**0 of 1**	**1 of 1**	**1 of 3**	**0 of 5**	**2 of 4**

It is noteworthy that the most common intervention arm tested across six of these seven studies was some type of a conditional cash transfer (CCT) for supporting girls' schooling (with the exception of Kenya where the CCT supported both girls and boys). The next most common intervention arm was the multicomponent or bundled interventions, included in five studies. In order to maintain the differentiation between different type of cash transfer or incentive programmes, here we classify asset transfer interventions which were conditional on a daughter not marrying as distinct from CCTs conditional on school attendance. This intervention was the third most common component, included in 4 multi-arm studies, by Erulkar et al in Ethiopia, Tanzania, and Burkina Faso, and by Buchmann et al in Bangladesh. Community mobilization as a distinct intervention was tested in 3 multi-arm studies, and gender/empowerment training in 2 studies. Three interventions—unconditional cash transfer for poverty mitigation, HIV education, and livelihood skills—were each included in only one multi-arm study.

Thus, while there are not enough studies to decipher a pattern for all of the single component interventions in multi-arm studies, patterns do emerge for some of the components. **First, even when tested as part of multi-arm studies, we do not see a high success rate for multicomponent interventions: in none of the 5 multi-arm studies do they show positive outcomes**. At best, 2 out of the 5 multicomponent arms show mixed results—in Ethiopia and in Tanzania. In Ethiopia, single component arms also had mixed results, but in the other 4 countries, the single component arms performed better than the multicomponent arms. **The two most common single interventions in multi-arm studies—CCTs for school support, and asset transfers conditional on delayed marriage—each have about a 50% success rate,** with 3 out 6 CCTs conditional on school attendance showing positive results, and 2 out of 4 asset transfers conditional on marriage showing positive results.

Table 4C shows the consolidated results from the evaluations of the 13 single component and macro policy studies in our review. Again, like the unpacking of multi-arm studies, here we group results by the type of single component intervention, with CCTs for school attendance or progress being the most common intervention among 5 studies, two in Latin America (Colombia and Mexico), 2 in South Asia (Bangladesh and Pakistan), and 1 in Africa (Zimbabwe). **Remarkably, with 5 evaluated studies across the geographic spectrum, CCTs for school support is the only intervention category with a significant number of evaluated studies and all positive results in preventing child marriage.** Further if we consider these results in conjunction with the results from CCTs for school support from multi-arm studies, **we actually have a critical mass of evaluations in this category—that makes a compelling demonstration of positive results with a success rate of 8 out of 11.**

Unfortunately, there is not a critical mass of studies for any of the other single component interventions to provide more definitive direction on the success rate of programmes such as life skills on their own. However, we do have some indicative findings. For example, the 2 null findings on the unconditional cash transfer programmes echo the finding of no effect for the UCT in the

Table 4C

Results on Child Marriage Prevention from 13 Single Component or Macro Policy Intervention Evaluations 2000-2019 By Study & Intervention Type

Single Component or Macro Policy Evaluation		Result by Intervention Arm						
Study	Country	CCT school fee, stipend, support	UCT extreme Poverty alleviation	School Fee Elimination	Life Skills (1 year course)	Ready access to modern Job Market	Asset transfer condition marry post 18	Nutrition Supplement in childhood
Angrist et al. 2003	Colombia	POSITIVE						
Pande et al. 2006	India				POSITIVE			
Gulemetova 2011	Mexico	POSITIVE						
Alam et al. 2011	Pakistan	POSITIVE						
Jensen 2012	India					POSITIVE		
Heath & Mobarek 2014	Bangladesh					POSITIVE		
Halifors et al. 2015	Zimbabwe	POSITIVE						
Handa et al. 2016	Kenya		NULL					
Nanda et al. 2016	India						NULL	
Dake et al. 2018	Malawi, Zambia		NULL					
Koski et al. 2018	8 African countries			MIXED				
Nandi et al. 2018	India							POSITIVE
Hahn et al. 2018	Bangladesh	POSITIVE						
Positive Result Ratio Single Component Evaluations		**5 of 5**	**0 of 2**	**0 of 1**	**1 of 1**	**2 of 2**	**0 of 1**	**1 of 1**

Malawi Zomba cash transfer programme in table 4b (236,237). This particular evaluation result is especially intriguing since in their 2011 evaluation, Baird et al had found that after 1 year of intervention, the UCT was preventing marriage and pregnancy for girls, whereas the CCT had only kept girls in school without any impact on marriage and pregnancy timing (238). However, in their 2016 publication of results after the programme had ended for 2 years, Baird et al found the UCT result not sustained, and instead the CCT to have been the more successful approach on all fronts (239).

In fact, the long term sustainability of child marriage prevention and other outcomes through cash or in kind support conditional on schooling for girls is supported by a number of these studies, as for example the Duflo et al 2015 study in Kenya which finds the results sustained even after 7 years (240). Similarly, Alam et al's study of school fee support in Pakistan and Hahn et al's study of secondary school stipends in Bangladesh show sustained effects both within and across cohorts of girls benefitting from these government initiatives (241,242).

The other result that is intriguing—but unfortunately without a critical mass of studies not generalizable—is the consistent positive impact on delayed marriage in the two studies assessing the effect of a positive job market for women in Bangladesh and India. For the Bangladesh study, Heath and Mobarek argue that the effect of access to the garment industry was more powerful by far in delaying marriage and childbearing and improving schooling for girls than even the government's secondary school stipend programme. Similarly, providing recruitment support to young women in communities with potential access to India's call center industry, Jensen et al demonstrate a broad-based positive effect not just on the marriage, human capital and job access of currently marriageable girls, but also for younger cohorts of girls whom parents are more motivated to keep in school and expose to the requisite skills and networks for future job market success. It can perhaps be considered indicative that the livelihood arm in the Amin et al 2016 multi-arm study also shows a positive effect. This is definitely an area of intervention research that requires further investigation. Similarly, it would be worth understanding better why the single life skills interventions as well as the single gender/empowerment curricula (with a lot of similarities with life skills) are successful on their own.

In summary, with a critical mass of 31 evaluations of interventions to prevent child marriage over the last 20 years, we can reach some more definitive conclusions with regard to what works to delay marriage than we have been able to in the past. Although largely limited to Africa and South-Asia, recent years have shown an expansion in the pool of evaluations especially for Sub Saharan settings, and with regard to more single component, multi-arm, and at scale interventions. This has also meant that there is a larger share of evaluated interventions that originally did not intend to address child marriage.

One benefit of the larger pool of studies is that we are able to analyze the impact of different types of interventions with more nuance. In particular, instead of considering all

"economic incentive" interventions in one grouping, our analysis examines the effects of different types of economic interventions more specifically. First, we separate livelihoods and economic opportunity interventions from economic support interventions. Second, we unpack cash/in kind interventions into three categories: conditional cash/kind for schooling support, unconditional cash, and asset transfer conditional on delayed marriage. We are also able to take advantage of the findings from multi-arm studies and examine the results of some specific components in conjunction with other studies that examined the impact of only those components. This approach allows us to assess the impact of more fine-tuned programme strategies by reviewing a critical mass of similar interventions.

We see the most definitive pattern of sustained success in preventing child marriage among interventions that supported girls' school attendance and progress through cash or in kind transfers. In contrast, a smaller base of asset transfers conditional on delayed marriage show a 50% rate of success, an approach that requires further exploration and evidence for more definitive results. In contrast, the three evaluations of unconditional cash transfers intended for poverty mitigation show no success at all in preventing child marriage, whereas the two evaluations of better access to a female-favorable job markets show promise, with both studies finding very large effects in child marriage reduction.

These results suggest that advocates working on child marriage need to more proactively collaborate with large scale school related cash transfers and macro-economic policy initiatives to fully understand and influence the potential of these initiatives to address child marriage at scale. Moreover, the success of demand side interventions to promote girls' schooling through cash and in kind support begs the question of the potential positive effects of supply side interventions for girls' schooling. Currently, our evidence base does not include a single evaluation of large government initiatives to increase the number of secondary schools, improve transportation for girls to get to school, increase the number the number of female teachers, or improve the quality and skills set girls' education. It would be important for researchers and advocates to consider these supply side interventions and their potential impact on child marriage and related outcomes.

With a critical mass of studies now available on multi-component interventions, our analysis also highlights the low success rate of comprehensive programmes in preventing child marriage, which in conjunction with the accumulated evidence of their low rates of scale up and sustainability, should raise questions regarding continued advocacy for and investment in this approach, especially as it is currently being most commonly implemented among the large range of unevaluated child marriage programmes.

©UNICEF/
UNI272560/
Badre Bahaji

4 Conclusion

© UNFPA/Thein Zaw Win

Our review indicates that research on child marriage in the last 20 years has generated an incredibly robust and varied evidence base, covering important insights on prevalence and measurement, determinants, correlates and context, consequences, and interventions. The research from 2000-2011 provided a solid foundation that brought the issue to global attention, and the 2012-2015 period built on this foundation to support the efforts to get child marriage incorporated as a target in the SDGs. That achievement has further spurred production of child marriage related evidence at an exponential pace since 2016, resulting in the doubling or even tripling of the number of studies on several topics.

The increased evidence base has also resulted in the expansion of geographies and populations covered, with remarkable growth in research on SSA, balancing the previous weight of research on South Asia. The evidence base now covers a much larger range and number of countries, and even though regions such as Latin America and the Middle East are not well represented, recent research is moving toward correcting that imbalance, and also on better covering conflict related situations. Similarly, although there has been some expansion in research on West Africa, those efforts need to be accelerated, especially with regard to assessing consequences and interventions. It is also necessary to expand research at the subnational level, moving to a higher level of aggregation than communities, but to perhaps a lower level than state or province.

The evidence base also shows a trend toward the use of more reliable data sources, better and more consistent measures and standards, as well as increased rigor in both intervention and non-intervention research. The evidence on the negative reproductive, personal and social consequences of child marriage is well substantiated in a range of contexts, with the gaps largely on longer term and economic consequences. The research on the determinants and context of child marriage is overabundant and can be effectively tapped to not only consider contextual differences, but also reaffirm common structural and normative factors that sustain child marriage.

For the agenda going forward, it is equally important to assess the common structural factors that reduce or eliminate child marriage. To this end, aggregate level trend analyses are needed on the relationship between macro level demographic, economic, educational, and employment shifts, and shifts in child marriage. These analyses are essential if the child marriage community is to leverage the impact of the vast majority of policies, programmes, and resource investments at scale that are not within its purview, and not rely on small scale interventions alone. Assessing the macro and meso levels conditions and levers which lead to large scale change is also essential for the child marriage community to generate research not just for advocacy, but for a more concerted focus on implementation of action.

The evidence base on interventions also suggests that it is important to revisit long cherished intervention strategies, especially as most of them have not been sustained or scaled up over a period of 20 years. The recent critical mass of intervention evaluations on child marriage prevention provides a lot of food for thought, both on unpacking education and economic interventions into more fine-tuned classifications, and in raising doubts as to the effectiveness of multicomponent, comprehensive intervention approaches. In the next phase of intervention research on child marriage, it will be important to develop strategic research and programme alignment partnerships with select actors in the education, social protection and employment sectors to fully figure out how their platforms and resources can be the go to option for action to end child marriage.

References

1. Arksey H, O'Malley L. Scoping studies: towards a methodological framework. International Journal of Social Research Methodology. 2005 Feb 1;8(1):19–32.
2. N. Mays and E. Roberts and Jennie Popay. Synthesising research evidence. In: N. Fulop and P. Allen and A. Clarke and N. Black, editor. Methods for studying the delivery and organisation of health services. Routledge; 2001.
3. Levac D, Colquhoun H, O'Brien KK. Scoping studies: advancing the methodology. Implement Sci. 2010 Sep 20;5:69.
4. UNICEF. Adolescence and Youth [Internet]. UNICEF. [cited 2020 Jan 11]. Available from: https://www.unicef.org/laos/adolescence-and-youth
5. John NA, Edmeades J, Murithi L. Child marriage and psychological well-being in Niger and Ethiopia. BMC Public Health. 2019 Aug 1;19(1):1029.
6. Girls Not Brides. Child marriage in Latin America and the Caribbean [Internet]. Girls Not Brides. [cited 2020 Jan 11]. Available from: https://www.girlsnotbrides.org/resource-centre/child-marriage-latin-america-caribbean/
7. UNICEF. Early marriage: a harmful traditional practice : a statistical exploration. [Internet]. New York, N.Y., USA: UNICEF; 2005 [cited 2018 Dec 28]. Available from: http://www.unicef.org/publications/files/Early_Marriage_12.lo.pdf
8. Loaiza E, Wong S. Marrying too young: end child marriage [Internet]. New York, NY: United Nations Population Fund; 2012 [cited 2018 Dec 28]. Available from: https://www.unfpa.org/sites/default/files/pub-pdf/MarryingTooYoung.pdf
9. UNICEF. Child marriage [Internet]. UNICEF DATA. [cited 2019 Dec 8]. Available from: https://data.unicef.org/topic/child-protection/child-marriage/
10. Walker JA. Early marriage in Africa—trends, harmful effects and interventions. African journal of reproductive health. 2012;16(2):231–40.
11. Fenn N, Edmeades J, Lantos H, Onovo O. Child marriage, Adolescent pregnancy and family formation in West and Central Africa. 2015.
12. UNICEF. Ending Child Marriage. Progress and prospects [Internet]. UNICEF DATA. 2014 [cited 2019 Oct 7]. Available from: https://data.unicef.org/resources/ending-child-marriage-progress-and-prospects/
13. UNICEF. A study on early marriage in Jordan 2014 [Internet]. Jordan: UNICEF; 2014. Available from: https://www.unicef.org/jordan/UNICEFJordan_EarlyMarriageStudy2014-E_COPY_.pdf
14. Bartels SA., Michael S., Roupetz S., Garbern S., Kilzar L., Bergquist H., et al. Making sense of child, early and forced marriage among Syrian refugee girls: a mixed methods study in Lebanon. BMJ global health. 2018;3(1):e000509.
15. El Arab R, Sagbakken M. Child marriage of female Syrian refugees in Jordan and Lebanon: a literature review. Global health action. 2019;12(1):1585709.
16. Raj A., McDougal L., Rusch M.L.A. Changes in prevalence of girl child marriage in South Asia. JAMA - Journal of the American Medical Association. 2012;307(19):2027–9.
17. Srinivasan, Padmavathi; Khan, Nizamuddin; Verma, Ravi; Giusti, Dora; Theis, Joachim & Chakraborty, Supriti. (2015). District-level study on child marriage in India: What do we know about the prevalence, trends and patterns? New Delhi, India: International Center for Research on Women.
18. Kamal SMM, Hassan CH, Alam GM, Ying Y. Child marriage in Bangladesh: trends and determinants. J Biosoc Sci. 2015 Jan;47(1):120–39.
19. Adebowale SA. Dynamics of child marriage and marital timing in Nigeria: A retrogression or progression? Health Care for Women International. 2018;39(9):975–93.
20. Rubin, D; Green, C.; Mukurla, A. Addressing Early Marriage in Uganda [Internet]. Cultural Practice. 2009 [cited 2019 Nov 26]. Available from: http://www.culturalpractice.com/resources/addressing-early-marriage-in-uganda/
21. UNFPA. Child Marriage and Adolescent Pregnancy in Mozambique: Causes and Impact [Internet]. UNFPA ESARO. 2017 [cited 2019 Nov 25]. Available from: https://esaro.unfpa.org/en/publications/child-marriage-and-adolescent-pregnancy-mozambique-causes-and-impact
22. UNFPA and Population Council. Situational Analysis of Adolescent Girls and Young Women in Ghana - Synthesizing Data to Identify and Work with the Most Vulnerable Young Women [Internet]. 2016 [cited 2020 Mar 5]. Available from: https://ghana.unfpa.org/en/publications/situational-analysis-adolescent-girls-and-young-women-ghana-synthesizing-data-identify
23. Population Council. Child marriage in Zambia [Internet]. 2017 [cited 2020 Jan 13]. Available from: https://www.girlsnotbrides.org/resource-centre/child-marriage-zambia/
24. Sayi TS, Sibanda A. Correlates of Child Marriage in Zimbabwe. Journal of Family Issues. 2018;39(8):2366–88.
25. Yüksel-Kaptanoğlu İ, Ergöçmen BA. Early Marriage: Trends in Turkey, 1978-2008. Journal of Family Issues. 2014;35(12):1707–24.
26. Aryal TR. Age at first marriage in Nepal: differentials and determinants. J Biosoc Sci. 2007 Sep;39(5):693–706.
27. Hotchkiss DR, Godha D, Gage AJ, Cappa C. Risk factors associated with the practice of child marriage among Roma girls in Serbia. BMC International Health & Human Rights. 2016;16:1–10.
28. Ertem M, Saka G, Ceylan A, Deger V, Çiftçi S. The factors associated with adolescent marriages and outcomes of adolescent pregnancies in Mardin Turkey. Journal of Comparative Family Studies. 2008;39(2):229–39.
29. ICRW. District-level study on child marriage in India [Internet]. 2015 [cited 2020 Jan 13]. Available from: https://www.icrw.org/publications/

district-level-study-on-child-marriage-in-india/

30. Overseas Development Institute. Surprising trends in child marriage in Ethiopia [Internet]. ODI. [cited 2019 Sep 25]. Available from: https://www.odi.org/publications/10451-surprising-trends-child-marriage-ethiopia
31. Bhan N, Gautsch L, McDougal L, Lapsansky C, Obregon R, Raj A. Effects of Parent–Child Relationships on Child Marriage of Girls in Ethiopia, India, Peru, and Vietnam: Evidence From a Prospective Cohort. Journal of Adolescent Health [Internet]. 2019;((Lapsansky C.; Obregon R.) Communication for Development, Programme Division, UNICEF, New York, NY, United States). Available from: http://www.embase.com/search/results?subaction=viewrecord&from=export&id=L2002213781
32. Gastón CM, Misunas C, Cappa C. Child marriage among boys: a global overview of available data. Vulnerable Children & Youth Studies. 2019;14(3):219–28.
33. Koski A, Clark S, Nandi A. Has Child Marriage Declined in sub-Saharan Africa? An Analysis of Trends in 31 Countries. Population and Development Review. 2017;43(1):7–29.
34. Sabbe A., Oulami H., Zekraoui W., Hikmat H., Temmerman M., Leye E. Determinants of child and forced marriage in Morocco: Stakeholder perspectives on health, policies and human rights. BMC International Health and Human Rights [Internet]. 2013;13(1). Available from: http://www.embase.com/search/results?subaction=viewrecord&from=export&id=L52819545
35. Bajracharya A., Amin S. Poverty, marriage timing, and transitions to adulthood in Nepal. Studies in family planning. 2012;43(2):79–92.
36. Taylor A, Lauro G, Segundo M, Greene M. "She goes with me in my boat." Child and Adolescent Marriage in Brazil. Results from Mixed-Methods Research. Rio de Janeiro and Washington DC: Instituto Promundo & Promundo-US.; 2015.
37. Ghimire A, Samuels F. Change and continuity in social norms and practices around marriage and education in Nepal. London: Overseas Development Institute. 2014.
38. Pesando LM., Abufhele A. Household Determinants of Teen Marriage: Sister Effects Across Four Low- and Middle-Income Countries. Studies in family planning. 2019;50(2):113–36.
39. Erulkar A. Early marriage, marital relations and intimate partner violence in Ethiopia. International Perspectives on Sexual and Reproductive Health. 2013;39(1):6–13.
40. Dietrich S, Meysonnat A, Cebotari V, Reinold J, Gassmann F, Roosen I, et al. Key Drivers of the Changing Prevalence of Child Marriage in South Asia. UNICEF ROSA/UNFPA APRO. 2018.
41. Ahmed K, Atiqul Haq SM, Bartiaux F. The nexus between extreme weather events, sexual violence, and early marriage: a study of vulnerable populations in Bangladesh. Population and Environment. 2019 Jan 30;40:303–324.
42. Chowdhury FD. The socio-cultural context of child marriage in a Bangladeshi village. International Journal of Social Welfare. 2004;13(3):244–53.
43. UNICEF, 2016. Ending Child Marriage and Teenage Pregnancy in Uganda: A Formative Research to Guide the Implementation of the National Strategy on Ending Child Marriage and Teenage Pregnancy in Uganda. Kampala: UNICEF.
44. Schuler SR., Bates LM., Islam F., Islam MK. The timing of marriage and childbearing among rural families in Bangladesh: choosing between competing risks. Social science & medicine (1982). 2006;62(11):2826–37.
45. Santhya KG, Haberland N, Singh AK. She knew only when the garland was put around her neck': Findings from an exploratory study on early marriage in Rajasthan. 2006.
46. Archambault C.S. Ethnographic empathy and the social context of rights: "Rescuing" maasai girls from early marriage. American Anthropologist. 2011;113(4):632–43.
47. Ertem, Kocturk. Opinions on early-age marriage and marriage customs among Kurdish-speaking women in southeast Turkey. Journal of Family Planning and Reproductive Health Care. 2008;34(3):147–52.
48. Sabbe A., Oulami H., Hamzali S., Oulami N., Le Hjir F.Z., Abdallaoui M., et al. Women's perspectives on marriage and rights in Morocco: risk factors for forced and early marriage in the Marrakech region. Culture, health & sexuality. 2015;17(2):135–49.
49. Dean L., Obasi A., El Sony A., Fadul S., El Hassan H., Thomson R., et al. "He is suitable for her, of course he is our relative": a qualitative exploration of the drivers and implications of child marriage in Gezira State, Sudan. BMJ global health. 2019;4(3):e001264.
50. Hattar-Pollara M. Barriers to Education of Syrian Refugee Girls in Jordan: Gender-Based Threats and Challenges. Journal of nursing scholarship : an official publication of Sigma Theta Tau International Honor Society of Nursing. 2019;51(3):241–51.
51. Menon JA, Kusanthan T, Mwaba SOC, Juanola L, Kok MC. "Ring" your future, without changing diaper - Can preventing teenage pregnancy address child marriage in Zambia? PLoS ONE [Internet]. 2018;13(10). Available from: http://www.embase.com/search/results?subaction=viewrecord&from=export&id=L624439170
52. Petroni S., Steinhaus M., Fenn N.S., Stoebenau K., Gregowski A. New Findings on Child Marriage in Sub-Saharan Africa. Annals of Global Health. 2017;83(5–6):781–90.
53. Plan International and UNICEF. Experiences and accounts of pregnancy amongst adolescents - Girls Not Brides [Internet]. 2014 [cited 2020 Mar 5]. Available from: https://www.girlsnotbrides.org/resource-centre/experiences-accounts-pregnancy-amongst-adolescents-2/
54. Taylor AY., Murphy-Graham E., Van Horn J., Vaitla B., Del Valle Á., Cislaghi B. Child Marriages and Unions in Latin America: Understanding the Roles of Agency and Social Norms. The Journal of adolescent health : official publication of the Society for Adolescent Medicine. 2019;64(4S):S45–51.
55. World Vision. Untying the knot. Exploring early marriage in fragile states. | POPLINE.org [Internet]. [cited 2019 Aug 25]. Available from: https://

www.popline.org/node/649215

56. Mourtada R, Schlecht J, DeJong J. A qualitative study exploring child marriage practices among Syrian conflict-affected populations in Lebanon. Conflict and Health. 2017 Nov 14;11(1):27.
57. Glick P., Handy C., Sahn DE. Schooling, marriage, and age at first birth in Madagascar. Population studies. 2015;69(2):219–36.
58. Paul P. Effects of education and poverty on the prevalence of girl child marriage in India: A district–level analysis. Children & Youth Services Review. 2019;100:16–21.
59. Magadi MA., Agwanda AO. Determinants of transitions to first sexual intercourse, marriage and pregnancy among female adolescents: evidence from South Nyanza, Kenya. Journal of biosocial science. 2009;41(3):409–27.
60. Hotchkiss DR, Godha D, Gage AJ, Cappa C. Risk factors associated with the practice of child marriage among Roma girls in Serbia. BMC International Health & Human Rights. 2016;16:1–10.
61. Guragain AM, Paudel BK, Lim A, Choonpradub C. Adolescent Marriage in Nepal: A Subregional Level Analysis. Marriage and Family Review. 2017;53(4):307–19.
62. Berliana SM, Kristinadewi PAN, Rachmawati PD, Fauziningtyas R, Efendi F, Bushy A. Determinants of early marriage among female adolescent in Indonesia. 2018.
63. Choe MK, Thapa S, Mishra V. Early marriage and early motherhood in Nepal. J Biosoc Sci. 2005 Mar;37(2):143–62.
64. Stark L. Early marriage and cultural constructions of adulthood in two slums in Dar es Salaam. Culture, Health & Sexuality. 2018;20(8):888–901.
65. Råssjö EB., Kiwanuka R. Views on social and cultural influence on sexuality and sexual health in groups of Ugandan adolescents. Sexual & reproductive healthcare : official journal of the Swedish Association of Midwives. 2010;1(4):157–62.
66. Råssjö EB, Kiwanuka R. Views on social and cultural influence on sexuality and sexual health in groups of Ugandan adolescents. Sexual & reproductive healthcare : official journal of the Swedish Association of Midwives. 2010;1(4):157–62.
67. Knox SE. How they see it: young women's views on early marriage in a post-conflict setting. Reproductive Health Matters. 2017 Oct 27;25(sup1):96–106.
68. Marshall EP, Lyytikainen M, Jones N. Child marriage in Ethiopia: A review of the evidence and an analysis of the prevalence of child marriage in hotspot districts. :52.
69. Aryal TR. Age at first marriage in Nepal: differentials and determinants. J Biosoc Sci. 2007 Sep;39(5):693–706.
70. UNICEF. One size does not fit all [Internet]. [cited 2019 Oct 24]. Available from: https://www.unicef.org/ethiopia/reports/one-size-does-not-fit-all
71. Mensch BS, Singh S, Casterline JB. Trends in the timing of first marriage among men and women in the developing world. In: The changing transitions to adulthood in developing countries: Selected studies [Internet]. Washington, DC: National Academies Press; 2005. p. 118–71. Available from: http://search.ebscohost.com/login.aspx?direct=true&db=psyh&AN=2012-26074-005&site=ehost-live&scope=site
72. Amin S. Empowering adolescent girls in rural Bangladesh: Population Council. Kishori Abhijan. 2011. Available from: https://knowledgecommons.popcouncil.org/departments_sbsr-pgy/811/
73. Field E, Ambrus A. Early marriage, age of menarche, and female schooling attainment in Bangladesh. Journal of Political Economy. 2008;116(5):881–91.
74. Wahhaj Z. An economic model of early marriage. Journal of Economic Behavior & Organization. 2018;152:147–76.
75. Corno L, Hildebrandt N, Voena A. Age of Marriage, Weather Shocks, and the Direction of Marriage Payments [Internet]. National Bureau of Economic Research; 2017 Jul [cited 2019 Oct 31]. Report No.: 23604. Available from: http://www.nber.org/papers/w23604
76. Ministry of Health, Community Development, Gender, Elderly and Children of Tanzania. National survey on the drivers and consequences of child marriage in Tanzania [Internet]. 2017 [cited 2020 Mar 6]. Available from: https://www.girlsnotbrides.org/resource-centre/national-survey-drivers-consequences-child-marriage-tanzania/
77. Forward and Children's Dignity Forum. Voices of child brides and child mothers in Tanzania. 2010. Available from: https://www.girlsnotbrides.org/resource-centre/voices-of-childbrides-and-child-mothers-in-tanzania/
78. Schlecht J, Rowley E, Babirye J. Early relationships and marriage in conflict and post-conflict settings: Vulnerability of youth in Uganda. Reproductive Health Matters. 2013;21(41):234–42.
79. Cislaghi B., Mackie G., Nkwi P., Shakya H. Social norms and child marriage in Cameroon: An application of the theory of normative spectrum. Global Public Health [Internet]. 2019;((Nkwi P.) Catholic University of Cameroon, Bamenda, Cameroon). Available from: http://www.embase.com/search/results?subaction=viewrecord&from=export&id=L626840410
80. Henry E.G., Lehnertz N.B., Alam A., Ali N.A., Williams E.K., Rahman S.M., et al. Sociocultural factors perpetuating the practices of early marriage and childbirth in Sylhet District, Bangladesh. International Health. 2015;7(3):212–7.
81. Islam MdK, Haque MdR, Hossain MB. Regional Variations in Child Marriage in Bangladesh. Journal of Biosocial Science. 2016 Sep;48(05):694–708.
82. Glynn J.R., Sunny B.S., DeStavola B., Dube A., Chihana M., Price A.J., et al. Early school failure predicts teenage pregnancy and marriage: A large population-based cohort study in northern Malawi. PLoS ONE [Internet]. 2018;13(5). Available from: http://www.embase.com/search/results?subaction=viewrecord&from=export&id=L622125421
83. Sekine K, Hodgkin ME. Effect of child marriage on girls' school dropout in Nepal: Analysis of

data from the Multiple Indicator Cluster Survey 2014. Gammage S, editor. PLOS ONE. 2017 Jul 20;12(7):e0180176.

84. Raj A, McDougal L, Silverman JG, Rusch MLA. Cross-Sectional time series analysis of associations between education and girl child marriage in Bangladesh, India, Nepal and Pakistan, 1991-2011. PLoS ONE [Internet]. 2014;9(9). Available from: http://www.embase.com/search/results?subaction=viewrecord&from=export&id=L608759189
85. Mathur S, Greene M, Malhotra A. Too Young to Wed: Education and Action Toward Ending Child Marriage. Washington, DC: International Center for Research on Women. 2003.
86. Shapiro D, Gebreselassie T. Marriage in Sub-Saharan Africa: Trends, Determinants, and Consequences. Popul Res Policy Rev. 2014 Apr 1;33(2):229–55.
87. Chae S. Timing of orphanhood, early sexual debut, and early marriage in four sub-Saharan African countries. Studies in Family Planning. 2013;44(2):123–46.
88. Blum RW, Li M, Pasha O, Rao C, Natiq K. Coming of Age in the Shadow of the Taliban: Education, Child Marriage, and the Future of Afghanistan From the Perspectives of Adolescents and Their Parents. Journal of Adolescent Health. 2019;64(3):370–5.
89. Mitra N. Child Marriage and early motherhood: Understanding from the lived experience of young people. Tata Institute of Social Sciences; 2015.
90. Barr H. Marry before your house is swept away: child marriage in Bangladesh. New York, N.Y.: Human Rights Watch; 2015 Jun.
91. Lloyd CB., Mensch BS. Marriage and childbirth as factors in dropping out from school: an analysis of DHS data from sub-Saharan Africa. Population studies. 2008;62(1):1–13.
92. Oxfam. 'Born to be married': addressing child, early and forced marriage in Nyal, South Sudan. 2013.
93. UNICEF. Qualitative Study of Child Marriage in Six Districts of Zambia. 2015. Available from https://www.unicef.org/zambia/reports/qualitative-study-child-marriage-six-districts-zambia-2015
94. Early Marriage and Childbearing in Indonesia and Nepal [Internet]. East-West Center | www.eastwestcenter.org. 2002 [cited 2019 Nov 12]. Available from: https://www.eastwestcenter.org/publications/early-marriage-and-childbearing-indonesia-and-nepal
95. Bates LM., Maselko J., Schuler SR. Women's education and the timing of marriage and childbearing in the next generation: evidence from rural Bangladesh. Studies in family planning. 2007;38(2):101–12.
96. Stark L. Poverty, consent, and choice in early marriage: ethnographic perspectives from urban Tanzania. Marriage & Family Review. 2018;54(6):565–81.
97. Walker J-A. Mapping child marriage in West Africa. Ford Foundation. [Internet]. 2013 [cited 2020 Mar 7]. Available from: https://www.girlsnotbrides.org/resource-centre/mapping-child-marriage-in-west-africa/
98. The Influence of Child Marriage on Fertility, Fertility-Control, and Maternal Health Care Utilization: A Multi-country Study from South Asia — MEASURE Evaluation [Internet]. [cited 2019 Nov 30]. Available from: https://www.measureevaluation.org/resources/publications/wp-11-124
99. Santhya KG, Ram U, Acharya R, Jejeebhoy SJ, Ram F, Singh A. Associations between early marriage and young women's marital and reproductive health outcomes: evidence from India. International perspectives on sexual and reproductive health. 2010;36(3):132–9.
100. UN Women. Gender-based violence and child protection among Syrian refugees in Jordan, with a focus on early marriage: Inter-agency assessment [Internet]. 2013 [cited 2020 Mar 3]. Available from: https://jordan.unwomen.org/en/digital-library/publications/2013/7/gender-based-violence-and-child-protection-among-syrian-refugees-in-jordan
101. Rosa Bransky, Alexandra Bennett-Clemmow, Josephine Pearse & Cecily Long. Child marriage in Nicaragua: cultural roots And girl centred solutions [Internet]. 2017 [cited 2020 Mar 7]. Available from: https://www.girlsnotbrides.org/resource-centre/child-marriage-nicaragua-cultural-roots-girl-centred-solutions/
102. Kenny L., Koshin H., Sulaiman M., Cislaghi B. Adolescent-led marriage in Somaliland and Putland: A surprising interaction of agency and social norms. Journal of Adolescence. 2019;72:101–11.
103. Murphy-Graham E, Leal G. Child Marriage, Agency, and Schooling in Rural Honduras. Comparative Education Review. 2015 Feb;59(1):24–49.
104. Pathfinder International. Causes & Consequences of Early Marriage in the Amhara Region of Ethiopia [Internet]. Available from: https://www.pathfinder.org/publications/causes-and-consequences-of-early-marriage-in-the-amhara-region-of-ethiopia/
105. Sonali Regmi, Melissa Upreti, Purna Shrestha. Ending impunity for child marriage in Nepal: a review of normative and implementation gaps [Internet]. 2016 [cited 2019 Sep 25]. Available from: https://www.girlsnotbrides.org/resource-centre/ending-impunity-child-marriage-nepal-review-normative-implementation-gaps/
106. Free the Slaves. Wives in slavery: Forced marriage in the Congo [Internet]. 2013 [cited 2020 Mar 25]. Available from: https://www.girlsnotbrides.org/resource-centre/wives-in-slavery-forced-marriage-in-the-congo/
107. Plan International. In-depth review of legal and regulatory frameworks on child marriage in Malawi. 2016. Available from: https://ams3.digitaloceanspaces.com/girlsnotbrides-org/www/documents/PLAN_18_country_report_malawi_final.pdf
108. Plan International. In-depth review of legal and regulatory frameworks on child marriage in Zimbabwe. 2016. Available from: https://www.girlsnotbrides.org/wp-content/uploads/2016/11/PLAN_18_country_report_zimbabwe_final.pdf

109. Arthur M, Earle A, Raub A, Vincent I, Atabay E, Latz I, et al. Child Marriage Laws around the World: Minimum Marriage Age, Legal Exceptions, and Gender Disparities. J Women Polit Policy. 2017 Nov 22;39(1):51–74.

110. Khanna T, Verma R, Weiss E, Glinski AM, Weiss E, Shetty A. Child marriage in South Asia: Realities, responses and the way forward. 2013; Available from: https://www.icrw.org/publications/child-marriage-in-south-asia-realities-responses-and-the-way-forward/

111. Yarrow E. Getting the evidence: Asia child marriage initiative. Coram Children's Legal Centre (CCLC); 2015. Available from: https://plan-international.org/publications/getting-evidence-asia-child-marriage-initiative#:~:text=The%20purpose%20of%20the%20ACMI,environmental%20factors%20which%20influence%20them.

112. World Health Organization. Child, early and forced marriage legislation in 37 Asia-Pacific countries. 2016; Available from: who.int/reproductivehealth/publications/gender_rights/cefm-asia-pacific/en/

113. The African Child Policy Forum. Gender and child rights in Eastern Africa: a survey of laws and policies on child marriage, economic exploitation and inheritance. 2015. Available from: https://www.africanchildforum.org/index.php/en/component/com_sobipro/Itemid,158/pid,2/sid,190/

114. UNFPA. Review of Adolescent and Youth Policies, Strategies and Laws [Internet]. 2017 [cited 2020 Mar 25]. Available from: https://wcaro.unfpa.org/en/publications/review-adolescent-and-youth-policies-strategies-and-laws

115. Wodon Q, Tavares P, Fiala O, Nestour AL, Wise L. Child Marriage Laws and Their Limitations. 2017;12. Available from: http://pubdocs.worldbank.org/en/134161519943385981/WBL2017-Child-Marriage-Laws.pdf

116. Collin M, Talbot T. Do Age-of-Marriage Laws Work? Evidence from a Large Sample of Developing Countries - Working Paper 458 [Internet]. 2017 [cited 2020 Mar 6]. Available from: https://www.cgdev.org/publication/do-age-marriage-laws-work-evidence-large-sample-developing-countries

117. Kim M, Longhofer W, Boyle EH, Nyseth H. When Do Laws Matter? National Minimum-Age-of-Marriage Laws, Child Rights, and Adolescent Fertility, 1989–2007. Law Soc Rev. 2013 Sep;47(3):589–619.

118. Maswikwa B., Richter L., Kaufman J., Nandi A. Minimum Marriage Age Laws and the Prevalence of Child Marriage and Adolescent Birth: Evidence from Sub-Saharan Africa. International perspectives on sexual and reproductive health. 2015;41(2):58–68.

119. Girls Not Brides. Lessons learned from selected national initiatives to end child marriage - 2015. Available from: https://www.girlsnotbrides.org/resource-centre/lessons-learned-from-selected-national-initiatives-to-end-child-marriage/

120. Adedokun O, Adeyemi O, Dauda C. Child marriage and maternal health risks among young mothers in Gombi, Adamawa state, Nigeria: Implications for mortality, entitlements and freedoms. African Health Sciences. 2016;16(4):986–99.

121. Taylor A, Lauro G, Segundo M, Greene M. Child and adolescent marriage in Brazil. Results from mixed-methods research. 2015 p. 148. Available from: https://promundoglobal.org/wp-content/uploads/2015/07/SheGoesWithMyBoat_ChildAdolescentMarriageBrazil.pdf

122. Chapagain RC, Adhikari AP. A study of marriage and first child bearing pattern on Jirel community of Nepal. JNMA; journal of the Nepal Medical Association. 2006;45(164):347–52.

123. Efevbera Y, Bhabha J, Farmer P, Fink G. Girl child marriage, socioeconomic status, and undernutrition: Evidence from 35 countries in Sub-Saharan Africa. BMC Medicine [Internet]. 2019;17(1). Available from: http://www.embase.com/search/results?subaction=viewrecord&from=export&id=L626648474

124. Godha D., Hotchkiss D.R., Gage A.J. Association between child marriage and reproductive health outcomes and service utilization: A multi-country study from south asia. Journal of Adolescent Health. 2013;52(5):552–8.

125. Nasrullah M, Muazzam S, Bhutta ZA, Raj A. Girl child marriage and its effect on fertility in Pakistan: findings from Pakistan Demographic and Health Survey, 2006-2007. Maternal and child health journal. 2014;18(3):534–43.

126. Raj A., Saggurti N., Balaiah D., Silverman JG. Prevalence of child marriage and its effect on fertility and fertility-control outcomes of young women in India: a cross-sectional, observational study. Lancet (London, England). 2009;373(9678):1883–9.

127. Dut R., Al RA. A brief study on the knowledge and choice of contraception methods in married adolescent girls. International journal of adolescent medicine and health. 2019;

128. Rahman MM. Early motherhood and contraceptive use among adolescents: A study from Rajshahi district of Bangladesh. Journal of Nepal Paediatric Society. 2010;30(1):8–17.

129. Mardi A., Ebadi A., Shahbazi S., Esmaelzade Saeieh S., Behboodi Moghadam Z. Factors influencing the use of contraceptives through the lens of teenage women: a qualitative study in Iran. BMC public health. 2018;18(1):202.

130. Ainul S, Amin S. Early marriage as a risk factor for mistimed pregnancy among married adolescents in Bangladesh. Asia-Pacific Population Journal. 2015;30(1):7–34.

131. Sallam SA., Mahfouz AA., Dabbous NI. Reproductive health of married adolescent women in squatter areas in Alexandria, Egypt. Eastern Mediterranean health journal = La revue de sante de la Mediterranee orientale = al-Majallah al-sihhiyah li-sharq al-mutawassit. 2001;7(6):935–42.

132. McClendon KA, McDougal L, Ayyaluru S, Belayneh Y, Sinha A, Silverman JG, et al. Intersections of girl child marriage and family planning beliefs and use: qualitative findings from Ethiopia and India. Culture, health & sexuality. 2018;20(7):799–814.

133. Ketema H., Erulkar A. Married Adolescents and

Family Planning in Rural Ethiopia: Understanding Barriers and Opportunities. African journal of reproductive health. 2018;22(4):26–34.

134. Rahman MM, Kabir M. Knowledge of adolescents on contraception and dynamics of its use. Health and Population: Perspectives and Issues. 2005;28(4):164–77.

135. Onagoruwa A., Wodon Q.Measuring the Impact of Child Marriage on Total Fertility: A study for fifteen countries. Journal of biosocial science. 2018;50(5):626–39.

136. Mulenga J, Mulenga MC, Bwalya BB, Ngongola-Reinke C. Too young to be a wife! analysis of the factors influencing child marriages and its influence on the preferred number of children among women in Zambia. African Population Studies [Internet]. 2018 Nov 1 [cited 2019 Nov 30];32(2). Available from: https://aps.journals.ac.za/pub/article/view/1210

137. Burke HM., Santo LD., Bernholc A., Akol A., Chen M. Correlates of Rapid Repeat Pregnancy Among Adolescents and Young Women in Uganda. International perspectives on sexual and reproductive health. 2018;44(1):11–8.

138. Patra S. Motherhood in childhood: addressing reproductive health hazards among adolescent married women in India. Reproductive health. 2016;13(1):52.

139. Kamal SM, Hassan CH. Child marriage and its association with adverse reproductive outcomes for women in Bangladesh. Asia-Pacific journal of public health / Asia-Pacific Academic Consortium for Public Health. 2015;27(2):NP1492–506.

140. Nasrullah M, Zakar R, Krämer A. Effect of child marriage on use of maternal health care services in Pakistan. Obstetrics and Gynecology. 2013;122(3):517–24.

141. Uddin J, Pulok MH, Johnson RB, Rana J, Baker E. Association between child marriage and institutional delivery care services use in Bangladesh: intersections between education and place of residence. Public Health. 2019;171:6–14.

142. Olamijuwon EO, Chisumpa VH, Akinyemi JO. Unveiling the realities of marrying too young: implications of child marriage on sexual and reproductive health of girls and infant survival in Sub-Sahara Africa. African Population Studies [Internet]. 2017 Sep 8 [cited 2019 Nov 30];31(1). Available from: https://aps.journals.ac.za/pub/article/view/1026

143. Chari AV, Heath R, Maertens A, Fatima F. The causal effect of maternal age at marriage on child wellbeing: Evidence from India. Journal of Development Economics. 2017;127:42–55.

144. Paul P, Chouhan P. Association between child marriage and utilization of maternal health care services in India: Evidence from a nationally representative cross-sectional survey. Midwifery. 2019;75((Chouhan P.) Department of Geography, University of Gour Banga, Malda, West Bengal, India):66–71.

145. de Groot R, Kuunyem MY, Palermo T. Child marriage and associated outcomes in northern Ghana: a cross-sectional study. BMC public health. 2018;18(1):285.

146. Godha D., Gage AJ., Hotchkiss DR., Cappa C. Predicting Maternal Health Care Use by Age at Marriage in Multiple Countries. The Journal of adolescent health : official publication of the Society for Adolescent Medicine. 2016;58(5):504–11.

147. Shahabuddin A., Nöstlinger C., Delvaux T., Sarker M., Delamou A., Bardají A., et al. Exploring Maternal Health Care-Seeking Behavior of Married Adolescent Girls in Bangladesh: A Social-Ecological Approach. PloS one. 2017;12(1):e0169109.

148. Singh PK, Singh L, Kumar C, Rai RK. Correlates of maternal healthcare service utilisation among adolescent women in Mali: Analysis of a nationally representative cross-sectional survey, 2006. Journal of Public Health (Germany). 2013;21(1):15–27.

149. Singh PK., Rai RK., Alagarajan M., Singh L. Determinants of maternity care services utilization among married adolescents in rural India. PloS one. 2012;7(2):e31666.

150. Klingberg-Allvin M., Binh N., Johansson A., Berggren V. One foot wet and one foot dry: transition into motherhood among married adolescent women in rural Vietnam. Journal of transcultural nursing : official journal of the Transcultural Nursing Society. 2008;19(4):338–46.

151. Barua A., Kurz K. Reproductive health-seeking by married adolescent girls in Maharashtra, India. Reproductive health matters. 2001;9(17):53–62.

152. Raj A., Boehmer U. Girl Child Marriage and Its Association With National Rates of HIV, Maternal Health, and Infant Mortality Across 97 Countries. Violence Against Women. 2013;19(4):536–51.

153. Clark S. Early marriage and HIV risks in sub-Saharan Africa. Studies in family planning. 2004;35(3):149–60.

154. Clark S, Bruce J, Dude A. Protecting young women from HIV/AIDS: the case against child and adolescent marriage. International family planning perspectives. 2006;32(2):79–88.

155. Bongaarts J. Late marriage and the HIV epidemic in sub-Saharan Africa. Popul Stud (Camb). 2007 Mar;61(1):73–83.

156. Kidman R. Child marriage and intimate partner violence: a comparative study of 34 countries. International Journal of Epidemiology. 2016 Oct 12;dyw225.

157. African Union. Ending Child Marriage and Stopping the Spread of HIV. Opportunities and challenges for action [Internet]. 2016 [cited 2019 Nov 30]. Available from: https://au.int/en/documents/20161222-0

158. Abhijeet Singh. Teenage Marriage, Fertility, and Well-being: Panel Evidence from India [Internet]. www.younglives.org.uk. 2016 [cited 2019 Nov 26]. Available from: https://www.younglives.org.uk/content/teenage-marriage-fertility-and-well-being-panel-evidence-india

159. Shaud S, Asad S. Marital adjustment, convergent communication patterns, and psychological distress in women with early and late marriage. Current Psychology: A Journal for Diverse Perspectives on Diverse Psychological Issues [Internet]. 2018.

160. Wondie Y, Zemene W, Reschke K, Schröder H. Early marriage, rape, child prostitution, and related factors determining the psychosocial effects severity of child sexual abuse in Ethiopia. Journal of child sexual abuse. 2011;20(3):305–21.

161. Soylu N, Ayaz M, Yüksel T. Early-married and sexually abused girls differ in their psychiatric outcomes. Child abuse & neglect. 2014;38(9):1552–9.

162. Gage AJ. Association of child marriage with suicidal thoughts and attempts among adolescent girls in ethiopia. Journal of Adolescent Health. 2013;52(5):654–6.

163. Al-Kloub MI, Al-Zein HJ, Abdalrahim MS, Abed MA. Young women's experience of adolescent marriage and motherhood in Jordan. Culture, health & sexuality. 2019;21(4):462–77.

164. Taylor AY., Murphy-Graham E., Van Horn J., Vaitla B., Del Valle Á., Cislaghi B. Child Marriages and Unions in Latin America: Understanding the Roles of Agency and Social Norms. The Journal of adolescent health : official publication of the Society for Adolescent Medicine. 2019;64(4S):S45–51.

165. Forward and Children's Dignity Forum. Voices of child brides and child mothers in Tanzania. 2010. Available from: https://www.girlsnotbrides.org/resource-centre/voices-of-childbrides-and-child-mothers-in-tanzania/

166. Abdullah S, Qureshi H, Quayes S. The adverse effect of child marriage on women's economic well being in Bangladesh – can microfinance help? The Journal of Developing Areas. 2015 Aug 29;49(4):109–25.

167. Erfina E., Widyawati W., McKenna L., Reisenhofer S., Ismail D. Exploring Indonesian adolescent women's healthcare needs as they transition to motherhood: A qualitative study. Women and birth : journal of the Australian College of Midwives. 2019.

168. Erulkar A. Early marriage, marital relations and intimate partner violence in Ethiopia. International Perspectives on Sexual and Reproductive Health. 2013;39(1):6–13.

169. Raj A. When the mother is a child: the impact of child marriage on the health and human rights of girls. Archives of disease in childhood. 2010;95(11):931–5.

170. John NA, Edmeades J, Murithi L, Barre I. Child marriage and relationship quality in Ethiopia. Culture, Health & Sexuality. 2019;21(8):853–66.

171. Santhya KG., Haberland N., Ram F., Sinha RK., Mohanty SK. Consent and coercion: examining unwanted sex among married young women in India. International family planning perspectives. 2007;33(3):124–32.

172. Ghosh S, Lahiri S, Datta N. Understanding Happiness and Psychological Wellbeing among Young Married Women in Rural India 1. Journal of Comparative Family Studies. 2017 Jan 1;48(1):113.

173. Tenkorang EY. Explaining the links between child marriage and intimate partner violence: Evidence from Ghana. Child Abuse and Neglect. 2019;89:48–57.

174. Maharjan B., Rishal P., Svanemyr J. Factors influencing the use of reproductive health care services among married adolescent girls in Dang District, Nepal: a qualitative study. BMC pregnancy and childbirth. 2019;19(1):152.

175. Santhya KG, Haberland N, Ram F, Sinha RK, Mohanty SK. Consent and coercion: examining unwanted sex among married young women in India. International family planning perspectives. 2007;33(3):124–32.

176. Hong Le MT, Tran TD, Nguyen HT, Fisher J. Early Marriage and Intimate Partner Violence Among Adolescents and Young Adults in Viet Nam. Journal of Interpersonal Violence. 2014;29(5):889–910.

177. Khalife N, Human Rights Watch (HRW). "How come you allow little girls to get married?": child marriage in Yemen. New York: Human Rights Watch; 2011. Available from: https://www.hrw.org/sites/default/files/reports/yemen1211ForUpload_0.pdf

178. Nasrullah M, Zakar R, Zakar MZ. Child marriage and its associations with controlling behaviors and spousal violence against adolescent and young women in Pakistan. Journal of Adolescent Health. 2014;55(6):804–9.

179. Hossain MG, Mahumud RA, Saw A. Prevalence of Child Marriage Among Bangladeshi Women and Trend of Change Over Time. Journal of Biosocial Science. 2016 Aug;48(04):530–8.

180. Rahman M., Hoque M.A., Mostofa M.G., Makinoda S. Association between adolescent marriage and intimate partner violence: a study of young adult women in Bangladesh. Asia-Pacific journal of public health / Asia-Pacific Academic Consortium for Public Health. 2014;26(2):160–8.

181. Raj A., Saggurti N., Lawrence D., Balaiah D., Silverman JG. Association between adolescent marriage and marital violence among young adult women in India. International journal of gynaecology and obstetrics: the official organ of the International Federation of Gynaecology and Obstetrics. 2010;110(1):35–9.

182. Kidman R. Child marriage and intimate partner violence: A comparative study of 34 countries. International Journal of Epidemiology. 2017;46(2):662–75.

183. Speizer IS, Pearson E. Association between early marriage and intimate partner violence in India: a focus on youth from Bihar and Rajasthan. Journal of interpersonal violence. 2011;26(10):1963–81.

184. Yount KM, Crandall A, Cheong YF, Osypuk TL, Bates LM, Naved RT, et al. Child Marriage and Intimate Partner Violence in Rural Bangladesh: A Longitudinal Multilevel Analysis. Demography. 2016;53(6):1821–52.

185. Hamid S, Johansson E, Rubenson B. "Who am I? Where am I?" Experiences of married young women in a slum in Islamabad, Pakistan. BMC public health. 2009;9:265.

186. Saja Michael, Susan Bartels, Sophie Roupetz. Caught in contradiction: making sense of child marriage among Syrian refugees in Lebanon [Internet]. 2018 [cited 2019 Nov 26]. Available from: https://www.abaadmena.org/documents/ebook.1532340307.pdf

187. Landis D, Falb K, Michelis I, Bakomere T, Stark L. Violence, Well-Being and Level of Participation in Formal Education among Adolescent Girls in Eastern Democratic Republic of the Congo: The Role of Child Marriage. Studies in Social Justice. 2018 Dec 29;12(2):273–90.

188. Clark C.J., Spencer R.A., Khalaf I.A., Gilbert L., El-Bassel N., Silverman J.G., et al. The influence of family violence and child marriage on unmet need for family planning in Jordan. Journal of Family Planning and Reproductive Health Care. 2017;43(2):105–12.

189. Jain S, Kurz K. New insights on preventing child marriage: A global analysis of factors and programs. International Center for Research on Women (ICRW); 2007. Available from: https://www.icrw.org/publications/new-insights-on-preventing-child-marriage/

190. Tilson D, Larsen U. Divorce in Ethiopia: the impact of early marriage and childlessness. Journal of biosocial science. 2000;32(3):355–72.

191. Zaba B., Isingo R., Wringe A., Marston M., Slaymaker E., Urassa M. Influence of timing of sexual debut and first marriage on sexual behaviour in later life: Findings from four survey rounds in the Kisesa cohort in northern Tanzania. Sexually Transmitted Infections. 2009;85(SUPPL. 1):i20–6.

192. Durğut S, Kısa S. Predictors of marital adjustment among child brides. Archives of psychiatric nursing. 2018;32(5):670–6.

193. Hajihasani M, Sim T. Marital satisfaction among girls with early marriage in iran: Emotional intelligence and religious orientation. International Journal of Adolescence and Youth [Internet]. 2018.

194. Knox SE. How they see it: young women's views on early marriage in a post-conflict setting. Reproductive Health Matters. 2017 Oct 27;25(sup1):96–106.

195. Schaffnit SB., Hassan A., Urassa M., Lawson DW. Parent-offspring conflict unlikely to explain "child marriage" in northwestern Tanzania. Nature human behaviour. 2019;3(4):346–53.

196. Sekine K, Hodgkin ME. Effect of child marriage on girls' school dropout in Nepal: Analysis of data from the Multiple Indicator Cluster Survey 2014. PLoS ONE [Internet]. 2017;12(7). Available from: http://www.embase.com/search/results?subaction=viewrecord&from=export&id=L617398460

197. Wodon Q, Nguyen MC, Tsimpo C. Child Marriage, Education, and Agency in Uganda. Feminist Economics. 2016 Jan 2;22(1):54–79.

198. Lloyd CB, Mensch BS. Marriage and childbirth as factors in dropping out from school: an analysis of DHS data from sub-Saharan Africa. Population studies. 2008;62(1):1–13.

199. Carina Omoeva Rachel Hatch Benjamin Sylla. Teenage, Married, and Out of School: Effects of early marriage and childbirth on school dropout [Internet]. [cited 2019 Nov 26]. Available from: https://www.epdc.org/education-data-research/teenage-married-and-out-school-effects-early-marriage-and-childbirth-school-dropout

200. Sandrine A. Koissy-Kpein. Gender-based violence and gender bias in schooling decision [Internet]. UNU-WIDER. 2016 [cited 2019 Nov 26]. Available from: https://www.wider.unu.edu/publication/gender-based-violence-and-gender-bias-schooling-decision

201. Regina Gemignani, Quentin Wodon. Gender Roles and Girls' Education in Burkina Faso: A Tale of Heterogeneity between Rural Communities [Internet]. 2017 [cited 2019 Nov 26]. Available from: https://www.arpejournal.com/archived-issues/volume-11-number-2-october-2017/

202. Sakellariou C. Early Marriage and Education Transitions of Female Youth: The Case of Indonesia [Internet]. Nanyang Technological University, School of Social Sciences, Economic Growth Centre; 2013 Apr [cited 2019 Nov 26]. (Economic Growth Centre Working Paper Series). Report No.: 1304. Available from: https://ideas.repec.org/p/nan/wpaper/1304.html

203. Beguy D., Ndugwa R., Kabiru CW. Entry into motherhood among adolescent girls in two informal settlements in Nairobi, Kenya. Journal of biosocial science. 2013;45(6):721–42.

204. Wodon Q, Male C, Nayihouba A, Onagoruwa A, Savadogo A, Yedan A, et al. Economic impacts of child marriage : global synthesis report. Ministerio De Educación [Internet]. 2017 Jun [cited 2020 Jan 20]; Available from: http://repositorio.minedu.gob.pe/handle/MINEDU/5588

205. Yount KM, Crandall A, Cheong YF. Women's Age at First Marriage and Long Term Economic Empowerment in Egypt. World development. 2018;102:124–34.

206. Assaad R, Krafft C, Selwaness I. The impact of early marriage on women's employment in the Middle East and North Africa. GLO Discussion Paper; 2017.

207. Shawky S, Milaat W. Cumulative impact of early maternal marital age during the childbearing period. Paediatric and perinatal epidemiology. 2001;15(1):27–33.

208. Mostafa Kamal SM. Decline in child marriage and changes in its effect on reproductive outcomes in Bangladesh. Journal of Health, Population and Nutrition. 2012;30(3):317–30.

209. Rahman ML, Kile ML, Rodrigues EG, Valeri L, Raj A, Mazumdar M, et al. Prenatal arsenic exposure, child marriage, and pregnancy weight gain: Associations with preterm birth in Bangladesh. Environment International. 2018;112((Liang L.) Harvard T.H. Chan School of Public Health, Department of Biostatistics, Boston, MA, United States):23–32.

210. Banerjee B., Pandey G., Dutt D., Sengupta B., Mondal M., Deb S. Teenage pregnancy: a socially inflicted health hazard. Indian journal of community medicine : official publication of Indian Association of Preventive & Social Medicine. 2009;34(3):227–31.

211. Mustafa M, Zakar R, Zakar MZ, Chaudhry A, Nasrullah M. Under-Five Child Mortality and Morbidity Associated with Consanguineous Child Marriage in Pakistan: Retrospective Analysis using Pakistan Demographic and Health Surveys, 1990-91, 2006-07, 2012-13. Maternal and child health journal. 2017;21(5):1095–104.

212. Prakash R, Singh A, Pathak PK, Parasuraman S. Early marriage, poor reproductive health status

of mother and child well-being in India. Journal of Family Planning and Reproductive Health Care. 2011;37(3):136–45.

213. Delprato M, Akyeampong K. The Effect of Early Marriage Timing on Women's and Children's Health in Sub-Saharan Africa and Southwest Asia. Annals of Global Health. 2017;83(3–4):557–67.

214. Kamal SM. What is the association between maternal age and neonatal mortality? An analysis of the 2007 Bangladesh Demographic and Health Survey. Asia-Pacific journal of public health. 2015;27(2):NP1106-17.

215. Mathur S, Greene M, Malhotra A. Too Young to Wed: Education and Action Toward Ending Child Marriage. Washington, DC: International Center for Research on Women. 2003.

216. Efevbera Y, Bhabha J, Farmer PE, Fink G. Girl child marriage as a risk factor for early childhood development and stunting. Social Science and Medicine. 2017;185((Farmer P.E.).

217. Raj A., Saggurti N., Winter M., Labonte A., Decker MR., Balaiah D., et al. The effect of maternal child marriage on morbidity and mortality of children under 5 in India: cross sectional study of a nationally representative sample. BMJ (Clinical research ed). 2010;340:b4258.

218. Yu SH, Mason J, Crum J, Cappa C, Hotchkiss DR. Differential effects of young maternal age on child growth. Glob Health Action [Internet]. 2016 Nov 15 [cited 2020 Jan 20];9. Available from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5112350/

219. Delprato M, Akyeampong K, Dunne M. Intergenerational Education Effects of Early Marriage in Sub-Saharan Africa. World Development. 2017 Mar 1;91:173–92.

220. Amjad Rabi. Cost of Inaction: Child and adolescent marriage in Nepal [Internet]. UNICEF Nepal; 2014 Sep [cited 2018 Dec 21]. Report No.: WP/2014/001. Available from: https://resourcecentre.savethechildren.net/node/8840/pdf/unicef-nepal-cost-of-inaction_wpo1_2014.pdf

221. Wodon Q. Education budget savings from ending child marriage and early childbirths: the case of Niger. Applied Economics Letters. 2018 Jun 7;25(10):649-52.

222. Pande R. Knot ready: Lessons from India on delaying marriage for girls. International Center for Research on Women (ICRW); 2008.

223. Population Council. Building evidence on effective programs to delay marriage and support married girls in Africa. 2014. Available from: https://www.popcouncil.org/uploads/pdfs/2014PGY_EvidenceBaseDelayedMarriage_Africa.pdf

224. Sharma JB, Dwivedi A, Gupta P, Borah RC, Arora S, Mittra A, et al. Early and child marriage in India. A landscape analysis. [Internet]. undefined. 2015 [cited 2020 Jun 3]. Available from: /paper/Early-and-child-marriage-in-India.-A-landscape-Sharma-Dwivedi/65e92de2e443599e552d5bf2cac267588e60847e

225. Jones N, Tefera B, Presler-Marshall E, Emirie G, Berhanu K, Gebre B, et al. What works to tackle child marriage in Ethiopia: a review of good practice [Internet]. ODI. 2016 [cited 2020 Jan 13]. Available from: https://www.odi.org/publications/10453-what-works-tackle-child-marriage-ethiopia-review-good-practice

226. Chandra-Mouli V, Plesons M, Barua A, Sreenath P, Mehra S. How can collective action between government sectors to prevent child marriage be operationalized? Evidence from a post-hoc evaluation of an intervention in Jamui, Bihar and Sawai Madhopur, Rajasthan in India. Reproductive Health [Internet]. 2018;15(1). Available from: http://www.embase.com/search/results?subaction=viewrecord&from=export&id=L622745393

227. Mathur S, Mehta M, Malhotra A. Youth reproductive health in Nepal: Is participation the answer?. International Center for Research on Women; 2004. Available from: https://www.icrw.org/wp-content/uploads/2016/10/Youth-Reproductive-Health-in-Nepal-Is-Participation-the-Answer.pdf

228. Diop NJ, Moreau A, Benga H. Evaluation of the Long-term Impact of the TOSTAN Programme on the Abandonment of FGM/C and Early Marriage: Results from a qualitative study in Senegal. 2008; Available from: https://knowledgecommons.popcouncil.org/departments_sbsr-rh/138/

229. Malhotra A, Warner A, McGonagle A, Lee-Rife S. Solutions to End Child Marriage | What the Evidence Shows [Internet]. International Center for Research on Women; 2011. Available from: https://www.icrw.org/wp-content/uploads/2016/10/Solutions-to-End-Child-Marriage.pdf

230. Lee-Rife S, Malhotra A, Warner A, Glinski AM. What Works to Prevent Child Marriage: A Review of the Evidence. Studies in Family Planning. 2012;43(4):287–303.

231. Parsons J, McCleary-Sills J. Preventing Child Marriage: Lessons from World Bank Group Gender Impact Evaluations. :9. Available from: https://olc.worldbank.org/content/preventing-child-marriage-lessons-world-bank-group-gender-impact-evaluations

232. Kalamar A.M., Lee-Rife S., Hindin M.J. Interventions to Prevent Child Marriage Among Young People in Low- and Middle-Income Countries: A Systematic Review of the Published and Gray Literature. Journal of Adolescent Health. 2016;59(3):S16–21.

233. Chae S, Ngo T. The global state of evidence on interventions to prevent child marriage. 2017; Available from: https://www.girlsnotbrides.org/wp-content/uploads/2017/11/2017PGY_GIRLCenterResearchBrief_01.pdf

234. Yount KM., Krause KH., Miedema SS. Preventing gender-based violence victimization in adolescent girls in lower-income countries: Systematic review of reviews. Social science & medicine (1982). 2017;192:1–13.

235. Sarkar A., Chandra-Mouli V., Jain K., Behera J., Mishra SK., Mehra S. Community based reproductive health interventions for young married couples in resource-constrained settings: a systematic review. BMC public health. 2015;15:1037.

236. Heath R, Mobarak AM. Manufacturing growth and the lives of Bangladeshi women. Journal of Development Economics. 2015;115:1–15.

237. Jensen R. Do labor market opportunities affect young women's work and family decisions? Experimental evidence from India. The Quarterly Journal of Economics. 2012;127(2):753–92.

238. Baird S, McIntosh C, Özler B. Cash or condition? Evidence from a cash transfer experiment. The Quarterly journal of economics. 2011;126(4):1709–53.

239. Baird S, McIntosh C, Özler B. When the money runs out: do cash transfers have sustained effects on human capital accumulation? The World Bank; 2016. Available from: https://openknowledge.worldbank.org/handle/10986/25705

240. Duflo E, Dupas P, Kremer M. Education, HIV, and Early Fertility: Experimental Evidence from Kenya. Am Econ Rev. 2015 Sep;105(9):2757–97.

241. Alam A, Baez JE, Del Carpio XV. Does cash for school influence young women's behavior in the longer term? Evidence from Pakistan. The World Bank; 2011. Available from: https://elibrary.worldbank.org/doi/abs/10.1596/1813-9450-5669

242. Hahn Y, Islam A, Nuzhat K, Smyth R, Yang H-S. Education, marriage, and fertility: Long-term evidence from a female stipend program in Bangladesh. Economic Development and Cultural Change. 2018;66(2):383–415.

Additional references not explicitly cited in-text

243. Amin S, Saha JS, Ahmed JA. Skills-Building Programs to Reduce Child Marriage in Bangladesh: A Randomized Controlled Trial. Journal of Adolescent Health. 2018;63(3):293–300.

244. Adu Boahen E, Yamauchi C. The effect of female education on adolescent fertility and early marriage: Evidence from free compulsory universal basic education in Ghana. Journal of African Economies. 2018;27(2):227–48.

245. Agege EA, Nwose EU, Odjimogho S. Parental perception of girl-child early marriage amongst the Urhobos in Nigeria. International Journal of Community Medicine and Public Health. 2018;5(8):3189–90.

246. Hamed A., Yousef F. Prevalence, health and social hazards, and attitude toward early marriage in ever-married women, Sohag, Upper Egypt. The Journal of the Egyptian Public Health Association. 2017;92(4):228–34.

247. Alayande A., Bello-Garko B., Abubakar Z., Kagara H., Nuhu I.A. Medical perspective of childhood marriage in Nigeria: Body of evidence from 2013 Nigeria demographic and health survey. Current Women's Health Reviews. 2019;15(3):188–95.

248. Amnesty International. Coerced and Denied: Forced Marriages and Barriers to Contraception in Burkina Faso [Internet]. 2016. Available from: www.amnesty.org/en/documents/afr60/3851/2016/en/

249. Angrist J, Bettinger E, Bloom E, King E, Kremer M. Vouchers for private schooling in Colombia: Evidence from a randomized natural experiment. American economic review. 2002;92(5):1535–58.

250. Avogo WA, Somefun OD. Early marriage, cohabitation, and childbearing in West Africa. Journal of Environmental and Public Health [Internet]. 2019;2019. Available from: http://www.embase.com/search/results?subaction=viewrecord&from=export&id=L628279914

251. Baird S, Chirwa E, McIntosh C, Özler B. The short-term impacts of a schooling conditional cash transfer program on the sexual behavior of young women. Health Economics. 2010;19(SUPPL. 1):55–68.

252. Bandiera O, Buehren N, Burgess R, Goldstein M, Gulesci S, Rasul I, et al. Women's empowerment in action: evidence from a randomized control trial in Africa. World Bank; 2018. Available from: https://openknowledge.worldbank.org/handle/10986/28282?locale-attribute=es

253. Barber JS. Community social context and individualistic attitudes toward marriage. Social Psychology Quarterly. 2004;67(3):236–56.

254. Beattie TS, Bhattacharjee P, Isac S, Davey C, Javalkar P, Nair S, et al. Supporting adolescent girls to stay in school, reduce child marriage and reduce entry into sex work as HIV risk prevention in north Karnataka, India: protocol for a cluster randomised controlled trial. BMC public health. 2015;15.

255. Berhane Y, Worku A, Tewahido D, Fasil N, Gulema H, Tadesse AW, et al. Adolescent Girls' Agency Significantly Correlates With Favorable Social Norms in Ethiopia—Implications for Improving Sexual and Reproductive Health of Young Adolescents. 2019;64(4):S52-S59.

256. Biswas RK, Khan JR, Kabir E. Trend of child marriage in Bangladesh: A reflection on significant socioeconomic factors. Children & Youth Services Review. 2019;104:104382–104382.

257. Brahmapurkar KP. Gender equality in India hit by illiteracy, child marriages and violence: a hurdle for sustainable development. The Pan African medical journal. 2017;28:178.

258. Brooks MI, Johns NE, Quinn AK, Boyce SC, Fatouma IA, Oumarou AO, et al. Can community health workers increase modern contraceptive use among young married women? A cross-sectional study in rural Niger. Reproductive health. 2019;16(1):38.

259. Callaghan JEM, Gambo Y, Fellin LC. Hearing the silences: Adult Nigerian women's accounts of 'early marriages.' Feminism & Psychology. 2015;25(4):506–27.

260. Castilla C. Political role models, child marriage, and women's autonomy over marriage in India. WIDER Working Paper; 2017.

261. Levitt-Dayal M, Motihar R, Kanani S, Mishra A. Adolescent girls in India choose a better future: an impact assessment of an educational programme. In 2003.

262. Cherri Z, Cuesta JG, Rodriguez-Llanes JM, Guha-Sapir D. Early marriage and barriers to contraception among syrian refugee women in lebanon: A qualitative study. International Journal of Environmental Research and Public Health [Internet]. 2017;14(8). Available from: http://www.embase.com/search/results?subaction=viewrecord&from=export&id=L617499303

263. Crandall A., VanderEnde K., Cheong YF., Dodell S., Yount KM. Women's age at first marriage and postmarital agency in Egypt. Social science research. 2016;57:148–60.

264. Čvorović J. Self-Rated Health and Teenage Pregnancies in Roma Women: Increasing height is associated with better health outcomes. Journal of biosocial science. 2019;51(3):444–56.

265. Dake F, Natali L, Angeles G, de Hoop J, Handa S, Peterman A. Cash Transfers, Early Marriage, and Fertility in Malawi and Zambia. Studies in family planning. 2018;49(4):295–317.

266. Ee D, Nanda R. The effect of reproductive health communication interventions on age at marriage and first birth in rural Bihar India: a retrospective study. [Internet]. 2012 [cited 2020 Jun 3]. Available from: /paper/The-effect-of-reproductive-health-communication-on-Ee-Nanda/e20d98035b6147982852d6da366b340ff339386f

267. Doyle AM., Mavedzenge SN., Plummer ML., Ross DA. The sexual behaviour of adolescents in sub-Saharan Africa: patterns and trends from national surveys. Tropical medicine & international health : TM & IH. 2012;17(7):796–807.

268. Duran S., Tepehan Eraslan S. Socio-demographic Correlates of Child Marriages: A Study from Turkey. Community mental health journal. 2019.

269. Dutta I. Outcome of teenage pregnancy in rural India with particular reference to obstetrical risk factors and perinatal outcome. International Journal of Gynecology and Obstetrics. 2015;131((Dutta I.) IQ City Medical College, Durgapur, India):E180–1.

270. Edmeades J, Hayes R, Verma R, Srinivasan P, Kanesathasan A, Saggers M, et al. Improving the lives of married, adolescent girls in Amhara, Ethiopia. 2014; Available from: https://www.icrw.org/publications/improving-the-lives-of-married-adolescent-girls-in-amhara-ethiopia/

271. Edmeades J, Lantos H, Mekuria F. Worth the effort? Combining sexual and reproductive health and economic empowerment programming for married adolescent girls in Amhara, Ethiopia. Vulnerable Children & Youth Studies. 2016;11(4):339–51.

272. Eugenie Reidy. Family assets: understanding and addressing child marriage in Turkana [Internet]. UNICEF Kenya; 2016 [cited 2020 Jun 3]. Available from: https://www.girlsnotbrides.org/resource-centre/family-assets-understanding-and-addressing-child-carriage-in-turkana/

273. Falb, K.L., Tanner, S., Ward, L., Erksine, D., Noble, E., Assazenew, A., Bakomere, T., Graybill, E., Lowry, C., Mallinga, P. and Neiman, A., 2016. Creating opportunities through mentorship, parental involvement, and safe spaces (COMPASS) program: multi-country study protocol to protect girls from violence in humanitarian settings. BMC public health, 16(1), pp.1-10.

274. Gage AJ. Child marriage prevention in Amhara Region, Ethiopia: Association of communication exposure and social influence with parents/guardians' knowledge and attitudes. Social Science and Medicine. 2013;97:124–33.

275. Ghrayeb FAW, Mohamed Rusli A, Mohd Ismail I, Ghrayeb NF, Rifai AA. Prevalence of early marriage among women in rural palestinian community: A cross-sectional study. International Medical Journal. 2015;22(4):291–4.

276. Gökçe B., Ozşahin A., Zencir M. Determinants of adolescent pregnancy in an urban area in Turkey: a population-based case-control study. Journal of biosocial science. 2007;39(2):301–11.

277. Goli S., Rammohan A., Singh D. The Effect of Early Marriages and Early Childbearing on Women's Nutritional Status in India. Maternal and child health journal. 2015;19(8):1864–80.

278. Hagues RJ., Bae D., Wickrama KK. Mediational pathways connecting secondary education and age at marriage to maternal mortality: A comparison between developing and developed countries. Women & health. 2017;57(2):189–207.

279. Barr H, Shrestha E, Thapa T, Human Rights Watch (HRW). "Our time to sing and play": child marriage in Nepal. New York: Human Rights Watch; 2016. Available from: https://www.hrw.org/sites/default/files/report_pdf/nepal0816_web.pdf

280. United Nations Children's Fund. A Profile of Child Marriage in the Middle East and North Africa [Internet]. 2018 [cited 2020 Feb 7]. Available from: https://www.unicef.org/mena/reports/profile-child-marriage

281. Iossifov I, Wassie A. "Most Girls In My Village Are Married Before 18." Report On Obstacles To Education For Girls In North Shewa, Amhara,

Ethiopia. International Child Development Initiatives; 2016. Available from: https://beta.girlsnotbrides.org/learning-resources/resource-centre/child-marriage-education-north-shewa-ethiopia/

282. Schlecht. A Girl No More: The Changing Norms of Child Marriage in Conflict [Internet]. Women's Refugee Commission; 2016 Mar. Available from: https://reliefweb.int/sites/reliefweb.int/files/resources/Changing-Norms-of-Child-Marriage-in-Conflict.pdf

283. Plan International. Adolescent Girls in Crisis: Voices from South Sudan - South Sudan [Internet]. 2018 [cited 2020 Jun 3]. Available from: https://reliefweb.int/report/south-sudan/adolescent-girls-crisis-voices-south-sudan

284. Plan International. Child marriage in Bangladesh | Plan International [Internet]. 2013 [cited 2020 Jun 3]. Available from: https://plan-international.org/publications/child-marriage-in-bangladesh

285. Gottschalk N. Giving Out Their Daughters for Their Survival: Refugee Self-reliance, "vulnerability," and the Paradox of Early Marriage. Refugee Law Project; 2007. 78 p. Available from: https://landwise.resourceequity.org/records/2045-giving-out-their-daughters-for-their-survival-refugee-self-reliance-vulnerability

286. Sama resource group for women and health. Dataspeak: Early Marriage and Health [Internet]. 2015 [cited 2020 Jun 3]. Available from: https://aidsdatahub.org/dataspeak-early-marriage-and-health-sama-resource-group-women-and-health-2016

287. Save the children. Child marriage in North Gondar, Amhara, Ethiopia. A baseline study [Internet]. 2011 [cited 2020 Jun 3]. Available from: https://www.girlsnotbrides.org/resource-centre/child-marriage-in-north-gondar-zone-of-amhara-regional-state-ethiopia-a-baseline-study-conducted-in-six-woredas-of-north-gondar-zone/

288. Shawky S, Milaat W. Early teenage marriage and subsequent pregnancy outcome. Eastern Mediterranean health journal = La revue de santé de la Méditerranée orientale = al-Majallah al-ihhīyah li-sharq al-mutawassi. 2000;6(1):46–54.

289. Asian-pacific resource and research centre for women (ARROW), Sisters in Islam (SIS). Child marriage in Malaysia: its relationship with religion, culture and patriarchy [Internet]. 2018 [cited 2020 Jun 3]. Available from: https://www.girlsnotbrides.org/resource-centre/child-marriage-in-malaysia-its-relationship-with-religion-culture-and-patriarchy/

290. Şimşek Z., Yentur Doni N., Gül Hilali N., Yildirimkaya G. A community-based survey on Syrian refugee women's health and its predictors in Şanliurfa, Turkey. Women & health. 2018;58(6):617–31.

291. Soliman HH, Alsharqawi NI, Younis MA. Is Tourism Marriage of Young Girls in Egypt a Form of Child Sexual Abuse? A Family Exploitation Perspective. Journal of child sexual abuse. 2018;27(2):122–40.

292. Sultana A, Hossain A, Jahan S, Hanifi S, Hoque S, Bhuiya A. Female Child Marriage and its Socio-demographic Correlates in a Rural Area of Bangladesh. :8.

293. Suwal A. Obstetric and perinatal outcome of teenage pregnancy. Journal of Nepal Health Research Council. 2012;10(1):52–6.

294. Sychareun V., Vongxay V., Houaboun S., Thammavongsa V., Phummavongsa P., Chaleunvong K., et al. Determinants of adolescent pregnancy and access to reproductive and sexual health services for married and unmarried adolescents in rural Lao PDR: a qualitative study. BMC pregnancy and childbirth. 2018;18(1):219.

295. Kakal T, Kok M, Kwaak AVD. YES I DO Alliance baseline study [Internet]. 2016 [cited 2020 Jun 3]. Available from: https://www.girlsnotbrides.org/resource-centre/choice-baseline-study/

296. UN Women. Study on the Needs and Priorities of Ethnic Minority Women in the Kvemo Kartli Region [Internet]. 2014 [cited 2020 Jun 3]. Available from: https://georgia.unwomen.org/en/digital-library/publications/2014/01/study-on-the-needs-and-priorities-of-ethnic-minority-women

297. UNFPA. Child marriage in Kurdistan region - Iraq [Internet]. 2016 [cited 2020 Jun 3]. Available from: https://www.girlsnotbrides.org/resource-centre/child-marriage-kurdistan-region-iraq/

298. UNICEF. Summary of a Baseline Study to Estimate the Number of Child Marriages in South Asia 2014-2017, UNICEF, 2016. Available from: https://www.unicef.org/rosa/media/1991/file

299. Kumar S. Measuring Child Marriage from Census and Large Scale Data Systems in India. Demography India. 2016

300. Amoo EO. Trends and determinants of female age at first marriage in Sub-Sharan Africa (1990-2014) What has changed?. African Population Studies. 2017;31(1):3573-85.

301. Erulkar A, Medhin G, Weissman E. The impact and cost of child marriage prevention in rural Tanzania. Available from: https://knowledgecommons.popcouncil.org/departments_sbsr-pgy/536/

302. Erulkar A, Medhin G, Weissman E. The impact and cost of child marriage prevention in rural Burkina Faso. Available from https://knowledgecommons.popcouncil.org/departments_sbsr-pgy/534/

303. Erulkar A, Medhin G, Weissman E. The impact and cost of child marriage prevention in rural Ethiopia. Available from: https://knowledgecommons.popcouncil.org/departments_sbsr-pgy/535/

304. Erulkar AS, Muthengi E. Evaluation of Berhane Hewan: a program to delay child marriage in rural Ethiopia. International perspectives on sexual and reproductive health. 2009 Mar 1:6-14.

305. Muthengi E, Gitau T, Austrian K. Is working risky or protective for married adolescent girls in urban slums in Kenya? Understanding the association between working status, Savings and Intimate-Partner Violence. PloS one. 2016;11(5).

306. Falb KL, Annan J, Kpebo D, Cole H, Willie T, Xuan Z, Raj A, Gupta J. Differential impacts of an intimate partner violence prevention program based on child marriage status in rural Côte d'Ivoire. Journal of Adolescent Health. 2015 Nov

1;57(5):553-8.

307. Guha M. 'Safe spaces' and 'bad'girls:'child marriage victims''experiences from a shelter in Eastern India. Gender, Place & Culture. 2019 Jan 2;26(1):128-44.

308. Gulemetova M. Evaluating the impact of conditional cash transfer programs on adolescent decisions about marriage and fertility: the case of Oportunidades. Available from: https://repository.upenn.edu/dissertations/AAI3363363/

309. Güler Ö, Küçüker H. Early marriages among adolesencent girls in Afyonkarahisar, Turkey. European Journal of General Medicine. 2010 Jan 1;7(4):365-71.

310. Hallfors DD, Cho H, Rusakaniko S, Mapfumo J, Iritani B, Zhang L, Luseno W, Miller T. The impact of school subsidies on HIV-related outcomes among adolescent female orphans. Journal of Adolescent Health. 2015 Jan 1;56(1):79-84.

311. Hamid S, Stephenson R, Rubenson B. Marriage decision making, spousal communication, and reproductive health among married youth in Pakistan. Global health action. 2011 Dec 1;4(1):5079.

312. Handa S, Peterman A, Huang C, Halpern C, Pettifor A, Thirumurthy H. Impact of the Kenya Cash Transfer for Orphans and Vulnerable Children on early pregnancy and marriage of adolescent girls. Social Science & Medicine. 2015 Sep 1;141:36-45.

313. Gordon E, Jay HV. Adolescent Girls in Crisis: Voices From the Lake Chad Basin. Available from: https://plan-international.org/publications/adolescent-girls-crisis-lake-chad-basin

314. Hertrich V. Trends in age at marriage and the onset of fertility transition in sub-Saharan Africa. Population and Development Review. 2017 Jan 1;43:112-37.

315. Hewett PC, Austrian K, Soler-Hampejsek E, Behrman JR, Bozzani F, Jackson-Hachonda NA. Cluster randomized evaluation of Adolescent Girls Empowerment Programme (AGEP): study protocol. BMC public health. 2017 Dec 1;17(1):386.

316. Bader L, Coursen-Neff Z, Hassan T. No place for children: Child recruitment, forced marriage, and attacks on schools in Somalia. Human Rights Watch; 2012. Available from: https://www.hrw.org/sites/default/files/reports/somalia0212ForUpload_0.pdf

317. Mathur S, Greene M, Malhotra A. Too young to wed: The lives, rights, and health of young married girls, Washington: International Centre on Research on women, 2003.

318. UNICEF. Delaying marriage for girls in India: A formative research to design interventions for changing norms. New Delhi: International Center for Research on Women Report to UNICEF. 2011.

319. International Planned Parenthood Federation. Ending child marriage: A guide for global policy action. IPPF; 2007.

320. Tamunoimama J. A discourse on the developmental effects of child marriage. African Journal of Social Sciences Volume 2 Number 3,135. 2012;144.

321. Morgan, J. Family honour and shattered dreams: Girl brides in Mali, Niger and Senegal Dakar: Plan WARO. 2016

322. Boyden J, Pankhurst A, Tafere Y. Harmful traditional practices and child protection: contested understandings and practices of female child marriage and circumcision in Ethiopia. Young Lives; 2013 Jan 1.

323. Kamal A, Naqvi I, Shaikh MA. Opinions on age of marriage—perspective from university students in Islamabad and Rawalpindi. J Pak Med Assoc. 2015 Mar 1;65:312-4.

324. Kanesathasan A, Cardinal LJ, Pearson E, Gupta SD, Mukherjee S, Malhotra A. Catalyzing change: Improving youth sexual and reproductive health through DISHA, an integrated program in India. Washington DC: International Center for Research on Women. 2008. Available from: https://www.icrw.org/wp-content/uploads/2016/10/Catalyzing-Change-Improving-Youth-Sexual-and-Reproductive-Health-Through-disha-an-Integrated-Program-in-India-DISHA-Report.pdf

325. Karim N, Greene M, Picard M. The cultural context of child marriage in Nepal and Bangladesh: findings from CARE's tipping point project community participatory analysis: research report. Geneva: CARE. 2016. Available from: https://beta.girlsnotbrides.org/learning-resources/resource-centre/care-tipping-point-project-nepal-bangladesh/

326. Cloward K. False commitments: local misrepresentation and the international norms against female genital mutilation and early marriage. International Organization. 2014;68(3):495-526.

327. Grace K, Sweeney S. Pathways to marriage and cohabitation in Central America. Demographic Research. 2014 Jan 1;30:187-226.

328. Hodgkinson K, Koster W, Miedema E. Understanding and addressing child marriage: A scoping study of available academic and programmatic literature for the HER CHOICE Alliance. Available from: scoping study of available academic and programmatic literature for the HER CHOICE Alliance

329. Malatyalı MK, Kaynak BD, Hasta D. A social dominance theory perspective on attitudes toward girl child marriages in turkey: The legitimizing role of ambivalent sexism. Sex Roles. 2017 Nov 1;77(9-10):687-96.

330. Ahmed KJ, Haq SM, Bartiaux F. The nexus between extreme weather events, sexual violence, and early marriage: a study of vulnerable populations in Bangladesh. Population and Environment. 2019 Mar 15;40(3):303-24.

331. Carlson K, Mazurana D. Forced marriage within the Lord's Resistance Army. Uganda, Tufts University Feinstein International Center. 2008 May. Available from: https://fic.tufts.edu/publication-item/forced-marriage-with-the-lords-resistance-army-uganda/

332. Yizengaw SS, Kibret BT, Gebiresilus AG, Sewasew DT. Marital adjustment among early, age-appropriate arranged and love matched marriage, motta, north west ethiopia. Innovare Journal of Social Sciences. 2014;2(4):65-73.

333. Koski A, Strumpf EC, Kaufman JS, Frank J, Heymann J, Nandi A. The impact of eliminating primary school tuition fees on child marriage in sub-Saharan Africa: A quasi-experimental evaluation of policy changes in 8 countries. PloS one. 2018;13(5).

334. Lalthapersad-Pillay P. The interplay between good governance and improved gender and socio-economic outcomes in selected African countries. Africa Insight. 2018 Dec 1;48(3):59-72.

335. Le Roux E, Palm S. What lies beneath? Tackling the roots of religious resistance to ending child marriage. Girls Not Brides, Stellenbosch University. 2018 Oct. Available from: https://beta.girlsnotbrides.org/learning-resources/resource-centre/what-lies-beneath-tackling-the-roots-of-religious-resistance-to-ending-child-marriage-2/

336. Leeson PT, Suarez PA. Child brides. Journal of Economic Behavior & Organization. 2017 Dec 1;144:40-61.

337. Lowes S, Nunn N. Bride Price and the Well-being of Women. In: Anderson S, Beaman L, Platteau J-P Towards Gender Equity in Development. Oxford: Oxford University Press ; 2018. pp. 117-138.

338. Hanmer L, Elefante M. The role of identification in ending child marriage. World Bank; 2016 Jul. Available from: https://openknowledge.worldbank.org/handle/10986/25184

339. Irani M, Latifnejad Roudsari R. Reproductive and Sexual Health Consequences of Child Marriage: A Review of literature. Journal of Midwifery and Reproductive Health. 2019;7(1):1584-90.

340. Marphatia AA, Ambale GS, Reid AM. Women's marriage age matters for public health: a review of the broader health and social implications in South Asia. Frontiers in public health. 2017 Oct 18;5:269.

341. McDougal L, Jackson EC, McClendon KA, Belayneh Y, Sinha A, Raj A. Beyond the statistic: exploring the process of early marriage decision-making using qualitative findings from Ethiopia and India. BMC women's health. 2018 Dec;18(1):1-6.

342. Mehra D, Sarkar A, Sreenath P, Behera J, Mehra S. Effectiveness of a community based intervention to delay early marriage, early pregnancy and improve school retention among adolescents in India. BMC public health. 2018 Dec;18(1):732.

343. Mensch BS, Soler-Hampejsek E, Kelly CA, Hewett PC, Grant MJ. Challenges in measuring the sequencing of life events among adolescents in Malawi: A cautionary note. Demography. 2014 Feb 1;51(1):277-85.

344. Meyer L, Ascher-Walsh CJ, Norman R, Idrissa A, Herbert H, Kimso O, Wilkinson J. Commonalities among women who experienced vesicovaginal fistulae as a result of obstetric trauma in Niger: results from a survey given at the National Hospital Fistula Center, Niamey, Niger. American journal of obstetrics and gynecology. 2007 Jul 1;197(1):90-e1.

345. Mohammadi N, Montazeri S, Ardabili HE, Gharacheh M. Iranian pregnant teenage women tell the story of "fast development": A phenomenological study. Women and Birth. 2016 Aug 1;29(4):303-9.

346. Molotsky A. Income Shocks and Partnership Formation: Evidence from Malawi. Studies in family planning. 2019 Sep;50(3):219-42.

347. Montazeri S, Gharacheh M, Mohammadi N, Alaghband Rad J, Eftekhar Ardabili H. Determinants of early marriage from married girls' perspectives in Iranian setting: a qualitative study. Journal of environmental and public health. 2016;2016.

348. Mwambene L, Mwaodza O. Children's rights standards and child marriage in Malawi. Available from: http://repository.uwc.ac.za/xmlui/handle/10566/3494

349. Najati N, Gojazadeh M. Maternal and neonatal complications in mothers aged under 18 years. Patient Prefer Adherence. 2010 Jul 21;4:219-22. doi: 10.2147/ppa.s11232. PMID: 20694181; PMCID: PMC2915554.

350. Nandi A, Behrman JR, Kinra S, Laxminarayan R. Early-life nutrition is associated positively with schooling and labor market outcomes and negatively with marriage rates at age 20–25 years: evidence from the Andhra Pradesh Children and Parents Study (APCAPS) in India. The Journal of nutrition. 2018 Jan 1;148(1):140-6.

351. Nasrullah M, Zakar R, Zakar MZ, Abbas S, Safdar R, Shaukat M, Krämer A. Knowledge and attitude towards child marriage practice among women married as children-a qualitative study in urban slums of Lahore, Pakistan. BMC Public Health. 2014 Dec 1;14(1):1148.

352. Nasrullah M, Zakar R, Zakar MZ, Krämer A. Girl-child marriage and its association with morbidity and mortality of children under 5 years of age in a nationally-representative sample of Pakistan. The Journal of pediatrics. 2014 Mar 1;164(3):639-46.

353. Nasrullah M, Zakar R, Zakar MZ, Abbas S, Safdar R. Circumstances leading to intimate partner violence against women married as children: a qualitative study in Urban Slums of Lahore, Pakistan. BMC international health and human rights. 2015 Dec;15(1):23.

354. Nasrullah M, Muazzam S, Khosa F, Khan MM. Child marriage and women's attitude towards wife beating in a nationally representative sample of currently married adolescent and young women in Pakistan. International health. 2017 Jan 1;9(1):20-8.

355. Neal S, Stone N, Ingham R. The impact of armed conflict on adolescent transitions: a systematic review of quantitative research on age of sexual debut, first marriage and first birth in young women under the age of 20 years. BMC public health. 2016 Dec 1;16(1):225.

356. Neal SE, Hosegood V. How reliable are reports of early adolescent reproductive and sexual health events in demographic and health surveys?. International perspectives on sexual and reproductive health. 2015 Dec 1;41(4):210-7.

357. Nguyen MC, Wodon Q. Measuring child marriage. Economics Bulletin. 2012;32(1):398-411.

358. Buchmann N, Field E, Glennerster R, Nazneen S, Pimkina S, Sen I. Power vs money: Alternative

approaches to reducing child marriage in Bangladesh, a randomized control trial. Unpublished Manuscript. 2017 Apr 13.

359. Otoo-Oyortey N, Pobi S. Early marriage and poverty: exploring links and key policy issues. Gender & Development. 2003 Jul 1;11(2):42-51.

360. Palermo T, Peterman A. Are female orphans at risk for early marriage, early sexual debut, and teen pregnancy? Evidence from sub-Saharan Africa. Studies in family planning. 2009 Jun;40(2):101-12.

361. Pande R, Kurz K, Walia S, MacQuarrie K, Jain S, Eckman A, Jain A, Kambou SD, Bartel D, Crownover J. Improving the reproductive health of married and unmarried youth in India. Available from: https://www.icrw.org/publications/improving-the-reproductive-health-of-married-and-unmarried-youth-in-india/

362. Pande RP, Falle TY, Rathod S, Edmeades J, Krishnan S. 'If your husband calls, you have to go': understanding sexual agency among young married women in urban South India. Sexual health. 2011 Feb 14;8(1):102-9.

363. Pandey S. Persistent nature of child marriage among women even when it is illegal: The case of Nepal. Children and youth services review. 2017 Feb 1;73:242-7.

364. Pandya YP, Bhanderi DJ. An epidemiological study of child marriages in a rural community of Gujarat. Indian journal of community medicine: official publication of Indian Association of Preventive & Social Medicine. 2015 Oct;40(4):246.

365. Burket MK, Alauddin M. Raising the age of marriage for young girls in Bangladesh. Pathfinder International; 2006.

366. Selim M, Abdel-Tawab NG, El Sayed K, Elbadawy A, El Kalaawy H. The Ishraq Program for out-of-school girls: From pilot to scale-up. Available from: https://www.popcouncil.org/uploads/pdfs/2013PGY_IshraqFinalReport.pdf

367. Nanda P, Datta N, Das P, Lamba S, Kumar S, Rouhani S, Gautam A, Das M, Srinivasan P, Khan N, Verma R. Making change with cash? Impact of a conditional cash transfer program on age of marriage in India. Available from: https://www.icrw.org/publications/making-change-with-cash-impact-of-a-conditional-cash-transfer-program-on-age-of-marriage-in-india-2/

368. Rahman MM, Kabir M. Do adolescents support early marriage in Bangladesh? Evidence from study. Journal of the Nepal Medical Association. 2005 Jul 1;44(159).

369. Raj A, Ghule M, Battala M, Dasgupta A, Ritter J, Nair S, Saggurti N, Silverman JG, Balaiah D. Brief report: parent–adolescent child concordance in social norms related to gender equity in marriage–findings from rural India. Journal of adolescence. 2014 Oct 1;37(7):1181-4.

370. Raj A, Ghule M, Nair S, Saggurti N, Balaiah D, Silverman JG. Age at menarche, education, and child marriage among young wives in rural Maharashtra, India. International journal of gynaecology and obstetrics: the official organ of the International Federation of Gynaecology and Obstetrics. 2015 Oct;131(1):103.

371. Raj A, Gomez CS, Silverman JG. Multisectorial Afghan perspectives on girl child marriage: foundations for change do exist in Afghanistan. Violence against women. 2014 Dec;20(12):1489-505.

372. Raj A, Salazar M, Jackson EC, Wyss N, McClendon KA, Khanna A, Belayneh Y, McDougal L. Students and brides: a qualitative analysis of the relationship between girls' education and early marriage in Ethiopia and India. BMC public health. 2019 Dec;19(1):1-20.

373. Rasmussen B, Maharaj N, Sheehan P, Friedman HS. Evaluating the employment benefits of education and targeted interventions to reduce child marriage. Journal of Adolescent Health. 2019 Jul 1;65(1):S16-24.

374. Rumble L, Peterman A, Irdiana N, Triyana M, Minnick E. An empirical exploration of female child marriage determinants in Indonesia. BMC public health. 2018 Dec;18(1):407.

375. Sajan F, Fikree FF. Does early age at marriage influence gynaecological morbidities among Pakistani women?. Journal of biosocial science. 2002 Jul;34(3):407-17.

376. Amin S. "Implications of Trade Liberalization for Working Women's Marriage: Case Studies of Bangladesh, Egypt and Vietnam. Trading Women's Health and Rights. 2006 Sep 3:97-120.

377. Amin S, Ahmed J, Saha J, Hossain M, Haque E. Delaying child marriage through community-based skills-development programs for girls: Results from a randomized controlled study in rural Bangladesh. Available from: https://knowledgecommons.popcouncil.org/departments_sbsr-pgy/557/

378. Sandøy IF, Mudenda M, Zulu J, Munsaka E, Blystad A, Makasa MC, Mæstad O, Tungodden B, Jacobs C, Kampata L, Fylkesnes K. Effectiveness of a girls' empowerment programme on early childbearing, marriage and school dropout among adolescent girls in rural Zambia: study protocol for a cluster randomized trial. Trials. 2016 Dec 1;17(1):588.

379. Goonesekere S, Amarasuriya H. Emerging concerns and case studies on child marriage in Sri Lanka. Sri Lanka: UNICEF. 2013.

380. Sattarzadeh N, Farshbaf-Khalili A, Hatamian-Maleki T. An Evidence-Based Glance at Domestic Violence Phenomenon in Early Marriages: A Narrative Review. International Journal of Women's Health and Reproduction Sciences. 2019;7(3):246-54.

381. Schuler SR, Rottach E. Why does women's empowerment in one generation not lead to later marriage and childbearing in the next?: Qualitative findings from Bangladesh. Journal of Comparative Family Studies. 2011 Mar 1;42(2):253-65.

382. Seff I, Williams A, Hussain F, Landis D, Poulton C, Falb K, Stark L. Forced sex and early marriage: Understanding the linkages and norms in a humanitarian setting. Violence against women. 2020 Jun;26(8):787-802.

383. Sekiwunga R, Whyte SR. Poor parenting: teenagers' views on adolescent pregnancies in Eastern Uganda. African journal of reproductive health. 2009;13(4).

384. Seth R, Bose V, Qaiyum Y, Chandrashekhar R,

Kansal S, Taneja I, Seth T. Social Determinants of Child Marriage in Rural India. Ochsner Journal. 2018 Dec 21;18(4):390-4.

385. Sezgin AU, Punamäki RL. Impacts of early marriage and adolescent pregnancy on mental and somatic health: the role of partner violence. Archives of women's mental health. 2019 Apr 6:1-2.

386. Shadap A, Devi T, Sharma A, Sapkota A, Sharma Y, Basnett S, Sharma A, Thapa B, Bhutia K, Bhutia PD, Bhutia KD. Knowledge on Health Consequences of Early and Late Marriage among Students at Selected College, East Sikkim. Nitte University Journal of Health Science. 2018 Mar 1;8(1).

387. Shahabuddin AS, Nöstlinger C, Delvaux T, Sarker M, Bardají A, De Brouwere V, Broerse JE. What influences adolescent girls' decision-making regarding contraceptive methods use and childbearing? A qualitative exploratory study in Rangpur District, Bangladesh. PloS one. 2016;11(6).

388. Shahnaz R, Karim R. Providing microfinance and social space to empower adolescent girls: An evaluation of BRAC's ELA centres. Dhaka: BRAC Research & Evaluation Division; 2008 Jul. Available from: https://www.semanticscholar.org/paper/Providing-Microfinance-and-Social-Space-to-Empower-Shahnaz-Karim/1f167a7eedefe439df84cb73ef1c7d51ccae077d

389. Stark L, Asghar K, Seff I, Yu G, Gessesse TT, Ward L, Baysa AA, Neiman A, Falb KL. Preventing violence against refugee adolescent girls: findings from a cluster randomised controlled trial in Ethiopia. BMJ global health. 2018 Oct 1;3(5):e000825.

390. Stark L, Seff I, Asghar K, Roth D, Bakamore T, MacRae M, D'Andon CF, Falb KL. Building caregivers' emotional, parental and social support skills to prevent violence against adolescent girls: findings from a cluster randomised controlled trial in Democratic Republic of Congo. BMJ global health. 2018 Oct 1;3(5):e000824.

391. Steinhaus M, Hinson L, Rizzo AT, Gregowski A. Measuring social norms related to child marriage among adult decision-makers of young girls in Phalombe and Thyolo, Malawi. Journal of Adolescent Health. 2019 Apr 1;64(4):S37-44.

392. Steinhaus M, Gregowski A, Fenn NS, Petroni S, Das P, Nanda P, Srinivasan P, Khan N, Verma R, Giusti D, Theis J. She Cannot Just Sit Around Waiting to Turn Twenty. Available from: https://www.icrw.org/publications/she-cannot-just-sit-around-waiting-to-turn-twenty/

393. Streatfield PK, Kamal N, Ahsan KZ, Nahar Q. Early marriage in Bangladesh: Not as early as it appears. Asian Population Studies. 2015 Jan 2;11(1):94-110.

394. Dessy S, Diarra S, Pongou R. Underage Brides and Grooms' Education. 2017. Available from: https://mpra.ub.uni-muenchen.de/77526/

395. Tezcan S, Adalı T. Marriage characteristics and reproductive health of adolescents in Turkey: findings from Demographic and Health Surveys. The Turkish journal of pediatrics. 2012 May;54:273-82.

396. Uddin ME. Family socio-cultural values affecting early marriage between Muslim and Santal communities in rural Bangladesh. International Journal of Sociology and Social Policy. 2015 Apr 7.

397. Psaki SR. Addressing early marriage and adolescent pregnancy as a barrier to gender parity and equality in education. Background paper. UNESCO. 2015. Available from: https://unesdoc.unesco.org/ark:/48223/pf0000232451_eng

398. Amin S, Saha J, Billah M, Sultana N, Haque E, Kundu S. Accelerating action to end child marriage in Bangladesh. Available from: https://www.popcouncil.org/uploads/pdfs/2018PGY_BangladeshChildMarriageBaseline.pdf

399. UNICEF. Child marriage in Indonesia: Progress on pause. 2016;20. Available from: https://www.girlsnotbrides.org/wp-content/uploads/2016/11/UNICEF-Indonesia-Child-Marriage-Research-Brief-1.pdf

400. UNICEF. A profile of child marriage in Africa. New York: UNICEF. 2015. Available from: https://www.unicef.org/UNICEF-Child-Marriage-Brochure-low-Single(1).pdf

401. UNICEF. Achieving a future without child marriage: Focus on west and Central Africa. 2017. Source: https://data.unicef.org/wp-content/uploads/2017/10/Child-Marriage-WEB.pdf

402. Wodon, Quentin T.; Jesse, Cornelia; Belhaj, Nadia; Mayengo, Pancras Kafonogo; Yoshino, Yutaka; Mungunasi, Emmanuel A.. 2019. Tanzania Economic Update : The Power of Investing in Girls - Educating Girls and Ending Child Marriage in Tanzania (English). Tanzania economic update; no. 11. Washington, D.C. : World Bank Group. http://documents.worldbank.org/curated/en/930521548691306669/Tanzania-Economic-Update-The-Power-of-Investing-in-Girls-Educating-Girls-and-Ending-Child-Marriage-in-Tanzania

403. Yako EM. A comparative study of adoloscents' perceived stress and health outcomes among adolescent mothers and their infants in Lesotho. Curationis. 2007 Sep 28;30(1):15-25.

404. Roest J. Child marriage and early child-bearing in India: Risk factors and policy implications. Young Lives Policy Paper. 2016 Sep 1;10:12-34. Available from: https://www.younglives-india.org/sites/www.younglives-india.org/files/YL-PolicyPaper-10-Sep16.pdf

405. Bošnjak B, Acton T. Virginity and early marriage customs in relation to children's rights among Chergashe Roma from Serbia and Bosnia. The International Journal of Human Rights. 2013 Aug 1;17(5-6):646-67.

406. Roy S. Enacting/Disrupting the Will to Empower: Feminist Governance of "Child Marriage" in Eastern India. Signs: Journal of Women in Culture and Society. 2017 Jun 1;42(4):867-91.

407. Santhya KG. Early marriage and sexual and reproductive health vulnerabilities of young women: a synthesis of recent evidence from developing countries. Current opinion in obstetrics and gynecology. 2011 Oct 1;23(5):334-9.

408. Adebowale SA, Fagbamigbe FA, Okareh TO, Lawal GO. Survival analysis of timing of first marriage among women of reproductive age in Nigeria: regional differences. African journal of reproductive health. 2012;16(4):95-107.

EVOLUTION IN THE EVIDENCE BASE ON CHILD MARRIAGE

2000–2019

UNFPA-UNICEF
Global Programme to End Child Marriage

end child marriage
A voice. A chance. A future.