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*Research Article*

## **Polygynous marriage and child health in sub-Saharan Africa: What is the evidence for harm?**

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## **Polygynous marriage and child health in sub-Saharan Africa: What is the evidence for harm?**

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### **Abstract**

#### **BACKGROUND**

Researchers from a variety of disciplines have presented data indicating that polygynous marriage is damaging to child health. This work has been used to support the classification of polygyny as a ‘harmful cultural practice’ and to advocate for marital reform across sub-Saharan Africa.

#### **OBJECTIVE**

We present a critical review of studies of polygyny and child health, highlighting issues of context and variation. We also consider methodological limitations of the existing literature.

#### **METHODS**

We describe key features of African polygyny, variation in its form, and the pathways through which polygyny has been hypothesized to influence child health. We then review the available empirical evidence, focusing on cross-national studies utilizing the Demographic and Health Surveys and relatively small-scale studies based on more specific socioecological settings (e.g., among particular ethnic groups).

#### **CONCLUSIONS**

We conclude that (i) heterogeneity in the impact of polygyny on child health should be anticipated a priori given substantial variety in its form, locally available alternatives, and the wider context of the practice; (ii) available evidence suggests that polygyny is most frequently associated with poor child health, but there are also instances where polygyny appears inconsequential or even beneficial to children; and (iii) methodological shortcomings are rife across the literature, severely undermining our ability to make causal inferences from observed relationships between polygyny and child health.

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## **CONTRIBUTION**

Theoretical and empirical considerations imply that a singular health consequence of polygyny does not apply across all ecological and cultural settings. We encourage a more nuanced stance on polygyny in future academic and policy discourse.

## **1. Introduction**

There is now a significant body of research, spanning the social and health sciences, on the relationship between polygynous marriage (hereafter polygyny) and child health in sub-Saharan Africa (hereafter Africa). Negative associations between polygyny and child health, along with related measures of wellbeing, have been used to advocate for the prohibition of polygyny across Africa (e.g., Adedini and Odimegwu 2017; Tertilt 2005). Such findings have also been interpreted as superficially supportive of the notion that polygyny can be classified as a ‘harmful cultural practice’ (or ‘harmful traditional practice’), a term adopted by the international development sector to refer to non-Western cultural practices deemed inherently harmful to women and children (Lawson et al. 2015). For example, adopting this terminology, the United Nations Convention on the Elimination of All Forms of Discrimination Against Women states that “polygynous marriage contravenes a woman’s right to equality with men, and can have such serious emotional and financial consequences for her and her dependents that such marriages ought to be discouraged and prohibited” (Gaffney-Rhys 2012: 53). Similar, albeit more ambiguous statements have also been adopted by the African Union via the African Charter on Human and Peoples’ Rights, where it is stated that “monogamy is encouraged as the preferred form of marriage” (Jonas 2012: 144). Yet, despite growing advocacy internationally and within Africa, the notion of abolishing polygyny remains controversial, not least because African marriages, particularly in rural settings, are most often regulated via customary law, complicating enforcement of marital reform, and because prohibiting polygyny would contradict long-standing cultural norms (Jonas 2012; Gaffney-Rhys 2012; Mwambene 2017; Patel 2017).

But is it true that polygyny is inherently harmful to women and children? Addressing one aspect of this question, we present a review of the literature on polygyny and child health across Africa. Throughout, we highlight evidence that is both consistent with and contrary to the notion that polygyny is harmful. We focus particularly on issues of socioecological context and variation; issues which are often neglected in policy discourse and research papers that attempt to estimate a singular effect of polygyny on child health across or within populations. It is not our intention to imply that all past research lacks such nuance. Indeed, as we shall review, the question

of context dependency has been in the forefront in recent publications. Nor are we unique in highlighting important methodological limitations in existing research, which are routinely acknowledged to varying degrees across the published literature. Nevertheless, given the boom in papers on African polygyny and child health over the last decade, a critical appraisal is now timely. We also note that debates on the wellbeing implications of polygyny will not be solved by a narrow focus on child health alone. However, this is where most data is currently available and so most eligible for review and evaluation.

We begin by describing key features of African polygyny, emphasizing variation in polygynous experience. On the basis of this section, we conclude that heterogeneity in the impact of polygyny on child health should be anticipated a priori, given observed variety in its form, locally available alternatives, and the wider context of the practice. We then review the main pathways by which polygyny has been proposed to influence child health, noting that there are equally cogent arguments to anticipate negative or positive effects. Next, we review the empirical evidence, defining child health here to include both early mortality and anthropometric indicators of nutritional status. Reviewed papers are selected on the basis of Google Scholar searches for ‘polygyny’/‘polygamy’ and ‘child health/growth/mortality/wellbeing,’ citations of relevant papers therein, and our own familiarity with the literature. We do not include unpublished manuscripts or publications not available in English. Therefore, studies concerning francophone African countries, especially polygynous West African populations, are under-represented. First, we consider cross-national studies utilizing data from national Demographic and Health Surveys (DHS), tabulating the results of existing studies and highlighting findings which suggest context-dependency in the extent to which polygyny is associated with child health. Second, we consider evidence from relatively small-scale studies based on more specific socioecological settings (i.e., among particular ethnic groups, population sub-groups, or communities). These studies, primarily conducted by anthropologists, indicate variable associations between polygyny and child health. Finally, we consider, for large and small-scale studies alike, the extent to which methodological inadequacies undermine our ability to make the kind of confident assertions regarding the true causal effects of polygyny on wellbeing that are required to responsibly guide social and health policy.

## **2. Polygynous marriage in sub-Saharan Africa**

### **2.1 Prevalence and distribution**

Historically, polygyny was commonly permitted worldwide; over 80% of the 186 preindustrial societies included in the Standard Cross-Cultural Sample, a representative database of coded ethnographies spanning all major world regions, permitted polygynous marriage (Murdock and White 1969). Today, polygyny is most commonly practiced in Africa, particularly in West Africa, and, at least in terms of formal marriage arrangements, is most prevalent in rural areas (Timæus and Reynar 1998; Westoff 2003; Antoine 2006). The highest prevalence of polygyny can be found across the so-called ‘polygyny belt’ (Jacoby 1995), stretching from Senegal in West Africa across to Tanzania in East Africa. Where polygyny is permitted, it only ever corresponds to the marital situation of a minority of men. When the sex ratio is balanced, as is usually the case, a gap between early age at marriage for women and relatively late age at marriage for men typically generates a discrepancy between the number of women and the number of men in the marriage market (Lesthaeghe, Kaufmann, and Meekers 1989; Antoine 2006). This discrepancy, especially when combined with systematic remarriage after divorce and widowhood, also ensures that, even when polygyny is very common, the vast majority of men marry. Arthi and Fenske (2018), based on the most recent DHS surveys, estimate that across Africa one in four married women are in polygynous marriages, and about the same fraction of children under 14 years were born to polygynous mothers. Bove and Vallengia (2009), based on DHS data available at the time of publication, estimate that the percentage of married women aged 15–49 years in a polygynous marriage varies from a low of 11% in Zimbabwe, to a median of 27% in the Ivory Coast, to a high of 53% in Guinea. For married men, the percentage with multiple wives ranges from a low of 5% in Zimbabwe, to a median of 14% in Mozambique, to a high of 37% in Guinea.

Classic anthropological and economic studies of the global distribution of polygyny have concluded that polygyny is more prevalent in patrilineal than matrilineal societies, where women’s contribution to subsistence is relatively high, and where bridewealth is practiced as opposed to dowry (Boserup 1970; Goody 1973; Jacoby 1995; Lesthaeghe, Kaufmann, and Meekers 1989). However, the extent to which such macro trends map onto contemporary variation between and within African nations and regions is less well understood, especially in the context of shifting livelihoods, urbanization, and cultural change. Generally speaking, populations following traditional African belief systems, i.e., animism, tend to be most polygynous, followed by Muslim populations which sanction polygyny, and then Christian populations, which more often oppose polygyny (Timæus and Reynar 1998). In many African nations the prevalence

of polygyny has declined over the last century, a trend most pronounced in countries with a history of Christian missionary influence (Fenske 2015). It is difficult to untangle the impact of Christianity from its association with schooling and related aspects of economic development, which may also favor a decline in polygyny (Fenske 2015). Furthermore, while the Christian church has long been hostile to polygyny in Africa in some contexts (e.g., Ekechi 1976; Hunt 1991; Kudo 2017; Walker-Said 2015), Christianity and polygyny are readily combined in others. In one recent cross-national analysis of 26 African DHS, 56% of polygynously married mothers were recorded as Muslim and 34% as Christian (Wagner and Rieger 2014: 112).

## **2.2 Cross-cultural variation**

Polygyny is defined as the simultaneous marriage of one man to multiple wives. This simple umbrella definition covers a wide variety of forms of polygynous experience both across and within cultures. White's (1988) classic review of the anthropological literature on polygyny draws attention to three critical dimensions that characterize polygynous experience cross-culturally. First, polygyny varies in its frequency, i.e., the proportion of men and women typically polygynously married within any given cultural context. As we have already noted, the frequency of polygyny varies dramatically between African nations (Lesthaeghe, Kaufman, and Meekers 1989). Similarly, there is often substantial regional variation; for example, Smith-Greenaway and Trinitapoli (2014: 352) note that within Mali the percentage of married women aged 14–49 years in polygynous unions ranges regionally between 7% and 51%.

Second, there is cultural variation in the categories of men and women found in polygynous marriages. Evidence from numerous studies indicates that polygyny is limited to relatively wealthy men (e.g., in Uganda: Pollet and Nettle 2009; in Kenya: Borgerhoff Mulder 1990; Cronk 1991; in Tanzania: Lawson et al. 2015; in Ethiopia: Gibson and Mace 2007). However, the extent of socioeconomic differentiation between polygynous and monogamous men varies significantly, stemming partly from differences in livelihoods, which in turn dictates the nature of wealth inequalities (White 1988; Fortunato 2015; Kaplan, Hooper, and Gurven 2009). In populations where variation in material wealth is lacking (e.g., relatively egalitarian hunter-gatherers), physical or social capital may be more important in determining which men take multiple wives (e.g., in Congolese foragers: Chaudhary et al. 2015). Several studies have also presented evidence that polygyny is associated with stratification among women in competition for marriage placements, with, for example, relatively lower status women most likely to sort into polygynous marriages, particularly as second or later wives (e.g., in Ethiopia: Matz 2016; Gibson and Mace 2007, in Nigeria:

Arthi and Fenske 2018). In Ethiopia for example, Matz (2016) reports that first wives have wealthier family backgrounds than later wives, while Gibson and Mace (2007) suggest that stratification is indicated by differences in the bridewealth transfers exchanged at entrance to initially monogamous vs. polygynous marriages, with higher bridewealth for first wives compared to second or later wives.

Socioeconomic differentiation between monogamous and polygynous individuals is not always apparent. This is perhaps particularly true in contexts of frequent marital dissolution and remarriage and/or when aggregating data across regions, especially when greater material wealth is also associated with higher education and cultural influences that may discourage polygyny. Assessing nation-wide trends in DHS data from Ghana, Kenya, Senegal, Uganda, and Zambia, Timæus and Reynar (1998: 145), for example, conclude that while polygyny is more common in rural as opposed to urban areas, an “individual’s experience of polygyny tends to reflect their luck in the marriage market rather than their socioeconomic characteristics.” Antoine and Nanitelamio (1996) report a similar lack of socioeconomic differences between monogamous and polygynous individuals in urban Senegal. While the types of individuals that are most likely to experience polygyny may vary, and the patterns are not always well understood, the relevant implication for this review is that any degree of non-random selection into polygyny undermines our ability to infer causality in correlational studies of polygyny and child health (see also discussion in: Arthi and Fenske 2018; Gibson and Mace 2007; Matz 2016).

Third, there is variation in the means by which multiple wives are recruited and how they are distributed residentially. Norms regarding geographic proximity between co-wives vary between cultural settings (White 1988; Coast et al. 2011). In societies that practice sororal polygyny, for example, co-wives are more typically sisters or close relatives and share the same residence. In societies that practice non-sororal polygyny, co-wives are usually not close relatives and live in distinct dwellings and semi-independently from their cowives. Nonsororal polygyny is much more common although not universal across Africa (White 1988; e.g., see Gluckman (1950) for a description of sororal polygyny among the Zulu of South Africa). Variation is further introduced by religious and legal codes restricting the number of wives; the extent of levirate marriage as a source of cowives; the extent and type of wife ranking and/or differentiation among co-wives; the legal status and rights of secondary wives; the degree of formality of marriage; the opportunity for and accepted grounds for divorce; the extent of individual choice in marriage partners for both men and women; and the presence and type of marriage payments (White 1988).



### **2.3 Intracultural variation**

It is also important to consider that variation in polygynous experience is anticipated within any given society. Most obviously, circumstances will differ for a woman who enters an initially monogamous marriage with a period of exclusivity before sharing her husband with another woman, compared to a later co-wife who enters a marriage with a co-wife already in place. We may also expect differences for women married into a polygynous household as the product of courtship, i.e., ‘love marriage,’ and cases where marriage is arranged or forced, including cases of widow inheritance or levirate marriage. The implications for childcare and wellbeing of choosing one’s own marriage partner are not immediately obvious. On the one hand, where a woman’s choice of partner is restricted, it logically follows that the marriage and associated living arrangements will be less likely to serve her best interests, with potential consequences for childcare and wellbeing. Supporting this notion, measures of female autonomy are generally positively associated with child health outcomes (Carlson, Kordas, and Murray-Kolb 2015). On the other hand, while there is clear scope for parent-offspring conflict in the selection of an ideal marriage partner (Trivers 1974), parents might also have their daughters’ interests at heart when arranging marriages.

### **2.4 The importance of context**

A full systematic review of how these dimensions of polygynous experience map on to the African continent, and of the driving forces behind this variation, is beyond the scope of this review. But our point should now be clear: polygyny is not a uniform cultural practice and polygynous experience varies dramatically across Africa, between and within cultures. As such, it makes little sense to anticipate that polygyny has a singular consequence for child health (or any other aspect of wellbeing) across time and space. Moreover, the idea of isolating an ‘effect of polygyny’ that can be meaningfully compared and contrasted across Africa is problematic because the locally available reference point of non-polygyny will also vary by context and by individual in line with cultural norms and the wider position of women in society. For example, the alternative to polygyny could range between the alternatives of an arranged or courtship monogamous marriage, relatively delayed monogamous marriage, or remaining unmarried altogether. Emphasizing this point, Ware (1979) argues that widespread acceptance of polygyny by many Nigerian women is driven not by the appeal of polygyny per se, but by a distaste for the alternative, “which in this cultural context is not faithful monogamy, but legal monogamy paralleled by a series of more or less open affairs” (Ware 1979: 189). Polygyny via widow inheritance or levirate marriage also

highlights the importance of locally available alternatives. Here, the relevant choice for many women will be between a polygynous marriage to a male relative of her deceased husband or remaining a single widow, which could place her wellbeing and that of her existing children at risk (Palmore 1987). Thus, it is not just important to define what is meant by polygyny across contexts, but also to consider variation in the restricted choice set of alternatives available to a woman within any given society and at a given time in her life.

### **3. Pathways of influence between polygyny and child health**

#### **3.1 Negative influences**

Perhaps the most common pathway by which polygyny is proposed to negatively influence child health is via resource dilution, with the assumption being that, all else being equal, polygyny leads to a greater number of adults and children to support on a limited family budget (Omariba and Boyle 2007; Desai 1992). This model proposes that per capita parental investments in children are lower in polygynous households, even if polygynous households are often wealthier than monogamous households overall. This mechanism is difficult to test by simply dividing family or household wealth by the number of dependents due to economies of scale in provisioning (i.e., raising two children is typically cheaper than double the cost of raising one child). Studies of differences between monogamous and polygynous families in the direct care of offspring are rare. Ugglá and Mace (2016), combining DHS data from 17 African nations, report that net of a number of socioeconomic and demographic controls, children of polygynous mothers are less likely to sleep under a bed net and less likely to achieve full immunization coverage (see also Gage 1997). However, they find no difference in the likelihood of children receiving medical treatment for fever or diarrhea. Arthi and Fenske (2018) report that polygyny is negatively associated with a range of indicators of early life care in a Nigerian DHS. However, they also report that “controlling for maternal education and the DHS wealth index is sufficient to make many of these correlations statistically insignificant, suggesting that the failure of polygamous mothers to invest in early-childhood medical care may reflect selection into polygamy more so than it reflects a polygamist-specific cultural practice” (Arthi and Fenske 2018: 124).

Others emphasize cowife conflict and rivalry in polygynous marriage and its downstream consequences for the health of both women and children (Strassman 1997; Bove and Valeggia 2009; Tabi, Doster, and Cheney 2010; Meekers and Franklin 1995). Strassmann (1997), for instance, suggests that although cowife competition may rarely

lead to deliberate attempts to harm each other's children, it is a source of stress, which is an important risk factor in child illness. Joffe (2016) points out that in several African languages the word co-wife is synonymous with jealousy: "in Luo, *nyieka*, means 'my partner in jealousy'; in Hausa, *kishiya* means simply 'jealousy'; in Setswana, the word for polygamy is *lefufa*, which means jealousy while the word for co-wife is *mogadikane*, derived from the verb meaning 'to rival, annoy or cause a pain in the stomach'" (Joffe 2016: 342). Ethnographic evidence is consistent with sharing a husband causing emotional distress in many contexts, although the situation is clearly culturally variable (Jankowiak, Sudakov, and Wilereker 2005; Meekers and Franklin 1995). It is also possible that cowife competition leads to relative inefficiency in resource production and consumption compared to hypothetically more harmonious monogamous unions, in turn reducing child health (discussed in Arthi and Fenske 2018).

Henrich, Boyd, and Richerson (2012) further hypothesize that normative polygyny has negative society-wide consequences for child wellbeing because, according to their reasoning, it (i) incentivizes strategies of reduced paternal care, with men preferring to divert their resources into accumulating additional wives rather than into raising existing offspring, and (ii) increases the propensity for social unrest driven by a larger pool of unmarried men. However, see Lawson et al. (2015) and Schacht, Rauch, and Borgerhoff Mulder (2014) for a discussion of evidence that runs contrary to idea that polygyny/an excess of unmarried men has group costs for wellbeing. It is also worth reemphasizing that the vast majority of men in polygynous societies do in fact eventually marry, albeit at relatively later ages, so the extent that polygyny excludes men from the marriage market is usually temporary and restricted to young men (see also Tertilt 2005).

While rarely considered in the papers reviewed here, the actions of external agencies have at times disadvantaged polygynous families. For example, Bove and Valeggia (2009) highlight an initiative in Botswana where HIV+ men were offered free antiretroviral treatment in addition to medication for one spouse only. In this case a well-intentioned health initiative may have actually created relative disadvantages for polygynous families, simply because they failed to fit the Western norm of monogamy. Other cases are more intentional. Colonial forces throughout Africa adopted various anti-polygyny measures including differential taxation and active separation of polygynous family units (Ekechi 1976; Hunt 1991; Walker-Said 2015). While such policies do not characterize contemporary Africa, their legacies may be long lasting. Polygynous men often have relatively high social status within rural communities with shared norms (see Section 2), but at larger levels of aggregation among modern elites, polygyny may be stigmatized as a primitive or uncivilized cultural practice.

### 3.2 Positive influences

Opposing the view that polygyny is costly because it leads to resource dilution, it has been argued that polygyny may be beneficial to women and children, or at least non-costly, when it enables access to greater or equal reserves of male-owned wealth than can be accessed via monogamy (Becker 1981; Borgerhoff Mulder 1990; Lawson et al. 2015). Consistent with this perspective, polygynous households are often wealthier than monogamous households (at least when comparisons are made within communities rather than across heterogeneous regional or national units, see Section 2). However, this may also be partially explained by the additive economic activities of multiple wives and their children (Boserup 1970; Jacoby 1995). We suspect that this potential positive influence of polygyny on the childrearing environment is somewhat underestimated in the present literature because many studies aim to isolate a singular effect of polygyny while keeping all else equal via multivariate analysis. However, adjusting for differences in wealth between monogamous and polygynous families sets up a false contrast if women (or their parents) are choosing polygyny in order to secure access to a wealthier marriage partner and hence a superior rearing environment for their children.

A second major potential pathway of influence is via polygyny's impact on birth spacing. It has been hypothesized that polygyny is beneficial to child health because it extends birth intervals among co-wives and leads to relatively low fertility per woman (Amankwaa 1996). Multiple factors can lead to lengthened birth intervals and fertility reduction for polygynous women, including a division of sexual activity, particularly during the post-partum period (Awusabo-Asare and Anarfi 1997; Ware 1979), and/or subfecundity of older polygynous men. Whatever the case, both low fertility and longer birth spacing are well-known determinants of improved child survival and health outcomes (Lawson, Alvergne, and Gibson 2012; Lawson and Borgerhoff Mulder 2016). However, evidence that polygyny is associated with lower fertility and/or lengthened birth intervals is very mixed (Omariba and Boyle 2007; Borgerhoff Mulder 1992; see also Winking et al. 2013). Indeed, several studies suggest polygyny is associated with shorter birth intervals (e.g., Lambert and Rossi 2016; Lardoux and Van de Walle 2003).

A third mechanism that could lead to a positive association between polygyny and child health is social cooperation between co-wives, including cooperative childcare arrangements and the provision of social and emotional support (Issac and Fienberg 1982; Ware 1979), along with improved economic efficiency (discussed in Arthi and Fenske 2018). The idea of co-wife cooperation has been used to argue in defense of polygyny (Madhavan 2002). A general and somewhat supported expectation is that shared interests driven by close relatedness and residential proximity leads to greater co-wife cooperation in cases of sororal polygyny (Jankowiak, Sudakov, and Wilereker 2005). However, in cases of nonsororal polygyny, which is much more common across

Africa, available ethnographic evidence indicates that co-wife relationships are more often a source of emotional stress (Jankowiak, Sudakov, and Wilereker 2005). Yet the situation is variable and more investigation into the multiple dimensions of co-wife relationships is required. Borgerhoff Mulder (1992), for example, reports that views of polygynous marriage were predominantly positive in a rural Kenyan sample of Kipsigis women, particularly if the woman came from a relatively wealthy household. However, no differences in leisure or work time were detected in a preliminary analysis of women's activity budgets by marital status.

Finally, as we have noted, entering a polygynous union as a young unmarried woman is a very different experience compared to polygyny via remarriage as a widow or divorced woman. In the case of levirate marriage or widow inheritance, polygyny has been argued to benefit women and their dependents by providing superior resource provisioning and social standing relative to remaining unmarried widows (Palmore 1987). By marrying a close relative of her deceased husband, a woman ensures that her offspring still have the opportunity to inherit her husband's land and guarantees that her children are cared for by a stepfather who is also their biological relative, rather than an unrelated male who may not have their interests at heart. Thus, rather than an obligation of a woman to remarry a relative of her deceased spouse, widow inheritance can be viewed as a widow's right to demand that her late husband's extended family provide her economic support as part of her initial marriage contract (Palmore 1987).

## **4. Review of the evidence**

### **4.1 Large-scale studies of polygyny and child health**

Table 1 summarizes the results of recent cross-national studies on polygyny and child health in Africa using the DHS. At face value these studies indicate consistency in the purported negative impacts of polygyny on child health across Africa. However, they also provide clear indications of context-dependency. Omariba and Boyle (2007) report that the estimated effect of polygyny on child mortality is negative everywhere but varies substantially between countries. They note that this variation is largely statistically accounted for by variation in national Gross Domestic Product, implying that socioeconomic development may reduce the mortality burden associated with polygyny. Adedini and Odimegwu (2017) also report evidence that child survival is lowest among poorly educated polygynous women (although interactions between polygyny and alternative markers of socioeconomic advantage are mixed). Wagner and Rieger (2014) report significant heterogeneity in the relationship between polygyny and child nutritional status at the national level. Indeed, despite very large sample sizes,

confidence intervals for the estimated effect of polygyny on child height-for-age cross zero for 15 of the 26 countries included in their analysis (Wagner and Rieger 2014: 121). This suggests, contrary to Wagner’s and Rieger’s overall conclusion, that polygyny is not a robust predictor of poor child nutritional status across Africa (see also the discussion in Lawson et al. 2016).

**Table 1: Relationship between polygynous marriage and child health outcomes in Africa: Large-scale DHS studies**

Countries included	Child health outcome		Smallest level of spatial clustering considered	Notes	References
	Growth	Survival			
Kenya, Niger, Zimbabwe, Nigeria	n.a.	↓	Primary sampling unit	Mixed interactions with socioeconomic and neighborhood contexts lead the authors to conclude that “better-off contexts only slightly reduced the negative effects of polygyny on child survival” (p.15).	Adedini and Odimegwu 2017
Benin, Burkina Faso, Cameroon, Chad, Democratic Republic Congo, Republic of Congo, Ethiopia, Gabon, Ghana, Guinea, Kenya, Liberia, Malawi, Mali, Mozambique, Namibia, Niger, Nigeria, Rwanda, Senegal, Sierra Leone, Swaziland, Tanzania, Uganda, Zambia, Zimbabwe	↓/–	n.a.	Primary sampling unit	Polygyny is generally associated with low child height-for-age and weight-for-height. However, the magnitude and statistical significance of these effects varies between countries. For a minority of countries, polygyny is positively but not significantly correlated with child height-for-age and weight-for-height.	Wagner and Rieger 2014
Benin, Burkina Faso, Burundi, Cameroon, Chad, Congo (Brazzaville), Democratic Republic of Congo, Ethiopia, Gabon, Ghana, Guinea, Kenya, Liberia, Madagascar, Malawi, Mali, Mozambique, Namibia, Niger, Nigeria, Rwanda, São Tomé and Príncipe, Senegal, Sierra Leone, Swaziland, Tanzania, Uganda, Zambia, Zimbabwe	n.a.	↓	Region	Polygyny has a greater negative relationship with survival in sub-national regions where polygyny is most common.	Smith-Greenaway and Trinitapoli 2014
Benin, Burkina Faso, Cameroon, Chad, Côte d'Ivoire, Eritrea, Ghana, Kenya, Madagascar, Malawi, Mali, Mozambique, Namibia, Niger, Nigeria, Rwanda, Senegal, Tanzania, Togo, Uganda, Zambia, Zimbabwe	n.a.	↓	Country	Polygyny is associated with reduced odds of survival to age 5; however the magnitude of this relationship varies between countries.	Omariba and Boyle 2007
Benin, Burkina Faso, Ghana, Mali, Niger, Togo	n.a.	↓	None. Data merged across countries.	Interaction effects between polygyny and country considered. All non-significant.	Amey 2002

Notes: – : no relationship, ↓: negative relationship, /: direction of relationship varies by subgroup (see Notes column for details); n.a.: not applicable, i.e., study did not explore this outcome.

There are also a number of cases where analyses of specific national DHS (not tabulated in Table 1) conclude that either a positive relationship or no association exists between polygyny and child health. These studies further suggest that polygyny is not universally harmful to children. Amankwaa, Eberstein, and Schmertmann (2001) report that in a Ghanaian DHS, polygyny is associated with relatively high neonatal survival in rural areas. Ukwuani, Cornwell, and Suchindran (2002) report that in a Nigerian DHS, polygyny is positively associated with child survival during the post-neonatal period (1–11 months), although not during childhood (12–59 months). In a Kenyan DHS, Gage (1997) reports no difference in anthropometric measures of nutritional status between children of polygynous and monogamously married women. Finally, Desai (1992) reports no relationship between polygyny and children's height-for-age in three separate multivariate regression models using DHS data from Ghana, Mali, and Senegal.

Smith-Greenaway and Trinitapoli (2014) also present evidence for context-dependency in the relationship between polygyny and infant mortality. In their analysis of 29 African DHS, polygyny is associated with especially poor survival in the regions where polygyny itself is most common. The authors argue this is because high polygyny prevalence serves as a general proxy for norms of low gender equality, so that polygynous wives living in relatively monogamous settings are treated better than those in predominantly polygynous settings. This account is speculative in the absence of further supporting data on gender norms and associated variance in polygynous experience across regions.

DHS analyses have also indicated that wife rank may modify the relationship between polygyny and child health. However, findings are not consistent and methodological issues prevent clear interpretation. Wife-rank data in the DHS suffers from data quality issues. For example, an analysis of wife-rank data in five African DHS finds a deficit of 7% and 18% of first wives in Uganda and Kenya respectively (Timæus and Reynar 1998). These inconsistencies may be due to some unmarried women ('girlfriends') reporting that they were junior wives and/or because some first wives erroneously reported being monogamously married. Wagner and Rieger (2014) report that nutritional status is superior for children of first wives compared to those of second or later wives. It is unclear from their analysis if this effect remains significant after monogamous women are excluded from the model. Omariba and Boyle (2007) report that wife-rank data is missing for one in five polygynous women in their study of child survival in 22 African DHS. Analyzing available data, they report no association between wife rank and child survival (Omariba and Boyle 2007).

## **4.2 Small-scale studies of polygyny and child health**

Table 2 summarizes the results of studies carried out within a specific cultural context or relatively small regional contexts. Studies from East Africa (Tanzania, Uganda, Kenya, Ethiopia), West Africa (Gambia, Ghana, Sierra Leone, Mali, Burkina Faso, Nigeria), Central Africa (Chad), and Southern Africa (Zambia) are included. Several of these ‘small-scale’ studies suggest detrimental impacts of polygyny on child health, in that children of polygynously married women are at an apparent health disadvantage compared to children of monogamously married women (Begin, Frongillo, and Delisle 1998; Leroy, Razak, and Habicht 2008; Meij et al. 2009; Strassmann 1997). However, in the majority of studies the authors conclude that statistically significant negative relationships between polygyny and child health are restricted to certain children or contexts (Borgerhoff Mulder 1997, 2007; Brahmhatt et al. 2002; Gibson and Mace 2007; Gillett-Netting and Perry 2005; Diallo et al. 2012; Sellen, Borgerhoff Mulder, and Sieff 2000; Sellen 1999; Strassmann 2011), and some studies report no overall statistically significant association between polygyny and child health (Arthi and Fenske 2018; Issac and Fienberg 1982; Sear et al. 2002). One recent and relatively large sample study (although still carried out within a specific socioecological context) finds a positive association between polygyny and child health in Tanzania in two out of the three ethnic groups considered, and no relationship between polygyny and child health for the remaining group (Lawson et al. 2015).

In terms of context-dependency, a number of factors have been identified. Gillett-Netting and Perry (2005) report that among the Tonga of Zambia polygyny is negatively associated with nutritional status for boys but not girls. They suggest that girls may be buffered from the negative impacts of polygyny in this matrilineal setting due to preferential treatment of female children. Arthi and Fenske (2018), on the other hand, report that polygyny is more strongly associated with female than with male mortality among the Igbo of Nigeria, which they interpret as indicative of preferential treatment of sons. Others report that relationships vary by wealth of the household under study (Borgerhoff Mulder 1997, 2007; Sellen, Borgerhoff Mulder, and Sieff 2000; Sellen 1999; Strassmann 2011). Results are not uniform across studies, but the absence of a relationship between polygyny and child health in the wealthiest households or a stronger negative relationship among the poorest households is the most common pattern. For instance, Borgerhoff Mulder (1997, 2007) find that among the Kenyan Kipsigis polygyny is negatively associated with child survival only in the poorest households, echoing findings that women in this population are more likely to hold negative views of polygyny if they come from poorer households (Borgerhoff Mulder 1992). Strassmann (2011) observes negative associations between polygyny and child health in the Dogon of Mali in all but one “exceptionally large and wealthy village” (Strassman 2011: 897).



**Table 2: Relationship between polygynous marriage and child health outcomes in Africa: Small-scale studies**

Population	Child health outcome		Notes	References
	Growth	Survival		
Igbo of Nigeria	n.a.	↓/–	An analysis of a historical dataset (from 1911) indicates a negative but non-significant relationship between polygyny and child survival. When stratified by gender, associations are strongest with female mortality. A negative relationship between polygyny and child survival is reported in a parallel DHS analysis limited to the Igbo ethnic group.	Arthi and Fenske 2018
56 villages in northern Tanzania (primarily Maasai, Meru, Sukuma and Rangi ethnic groups)	–/↑	n.a.	No relationship with height-for-age, but children in male-headed polygynous households were heavier for their height compared to children in monogamously headed households in 2/3 ethnic groups.	Lawson et al. 2015
Banfora district, Burkina Faso.	n.a.	↓/–	Negative relationship with survival for 0–6 and 0–12 months. For survival between 1–12 months, negative but not significant.	Diallo et al. 2012
	–	↓		Strassmann 1997
Dogon of Mali	↓/–	↓/–	Growth: children of monogamously married women do better than children of 1 <sup>st</sup> order polygynously married wives. Children of 2 <sup>nd</sup> , 3 <sup>rd</sup> , and 4 <sup>th</sup> order wives are intermediate between 1 <sup>st</sup> order and monogamously married women. Survival: Polygyny in 'work-eat group' associated with lower child survival in 8/9 villages.	Strassmann 2011
Bimoba and Kusasi of Ghana	n.a.	↓		Meij et al. 2009
Arsi Oromo of Ethiopia	↓/–	↓/–	Children of 1 <sup>st</sup> order polygynous married wives do not differ from children of monogamously married wives, but children of 2 <sup>nd</sup> or 3 <sup>rd</sup> order wives do poorly compared to children of monogamously married wives.	Gibson and Mace 2007; Uggla et al. 2018
Kipsigis of Kenya	n.a.	↓/–	Indication that negative effects on survival are limited to poor households.	Borgerhoff Mulder 1997, 2007
Tonga of Zambia	↓/–	n.a.	Negative relationship to stunting for boys, but not girls.	Gillett-Netting and Perry 2005
Sukuma of Tanzania	↓	n.a.		Hadley 2005
West Kiang district (4 villages), Gambia	n.a.	–		Sear et al. 2002
Rakai district of Uganda	↓/–	n.a.	Negative relationship in aggregated sample and HIV+, but not in HIV– mothers.	Brahmbhatt et al. 2001
	↓/–	n.a.	Children of monogamously married wives do better than children of 1 <sup>st</sup> and 2 <sup>nd</sup> order polygynously married wives. Interactions with wealth suggested.	Sellen 1999
Datoga of Tanzania	↓/–	↓/–	Growth and Survival: Children of monogamously married wives do better than children of 1 <sup>st</sup> order polygynously married wives. Interactions with wealth suggested.	Sellen et al. 2000
Chad (rural)	↓	n.a.		Begin, Frongillo, and Delisle 1998
Mende of Sierra Leone	n.a.	–		Issac and Fienberg 1982

Notes: \* This table only includes studies carried out within specific communities/cultural contexts (i.e., large-scale DHS analyses not included). Key: –: no relationship, ↓: negative relationship, ↑: positive relationship, /: direction of relationship varies by subgroup (see Notes column for details); n.a.: not applicable, i.e., study did not explore this outcome.

Several studies point to the importance of wife rank. In rural Ethiopia, Gibson and Mace (2007) find that first wives are in better physical health and have more surviving offspring than monogamously married women and that relatively poor child health is only associated with polygyny for second or later co-wives (see also Ugglá et al. 2018). Superior health status of children of early wives has also been suggested in Tanzania (Lawson et al. 2015; Sellen 1999). This may be due to the costs of family resource competition, with first wives benefiting from exclusivity before sharing a husband and from subsequent seniority over later wives in household decision-making and resource allocation. Alternatively, women of good health/social standing may be less likely to enter polygynous marriages as later wives, leading to downstream health disparities for children of first vs. later co-wives. In this case, differences in child outcomes cannot be seen as a consequence of polygyny but rather of the non-random selection of certain women in polygynous marriages as later co-wives (Gibson and Mace 2007, see also Matz 2016). Strassmann (2011), on the other hand, presents a different pattern of results by wife-order among the Dogon of Mali, whereby children of second, third, or fourth wives have intermediate nutritional status compared to children of first wives who do relatively poorly, and children of sole monogamous wives who are in relatively good health (Strassmann 2011: 10897). This finding indicates that in this cultural context later-order wives and their children may be relatively advantaged compared to first wives and their children. Hypothetically, one factor that could account such a pattern of results is the role of mate choice in marriage partners. If the spouse's parents select the first wife while the selection of later wives is more in line with individual preferences, a husband may allocate more resources to preferred later wives.

## **5. Methodological limitations of the current literature**

### **5.1 Ecological confounding in large-scale studies**

The DHS are often regarded as the 'gold standard' for substantiating demographic correlates of child health in Africa (David and Haberlen 2005). DHS are nationally representative, provide large samples, and follow a shared protocol that enables comparative study. However, the DHS are most appropriate for cataloguing demographic parameters and descriptive statistics at various levels of aggregation, rather than for sophisticated multivariate analyses of the causal determinants of health. A particular concern is that by only sampling a few valid households from any particular community (often less than 20) and compiling data across large heterogeneous sampling units, analyses are inherently vulnerable to confounding between ecological and individual determinants of health. This concern is acute with

respect to analyses of polygyny because the practice is often most common in marginalized locations and ethnic groups that have benefited relatively little from socioeconomic development. As such, apparent negative effects of polygyny in DHS studies may be an artifact of confounding between marriage system and related socioecological determinants of child health (Lawson et al. 2015; Smith-Greenaway and Trinitapoli 2014; Arthi and Fenkse 2018).

This issue of ecological confounding is illustrated by a unique study of polygyny across an ethnically diverse sample of 56 rural Tanzanian villages (Lawson et al. 2015). Polygyny is predictive of poor child health when data were aggregated across all villages. However, when making comparisons within villages, male-headed polygynous households (most often containing first wives and their children) have better child outcomes than monogamous households in two out of three ethnic groups considered. This pattern of results appears to be driven by the greater wealth of male-headed polygynous households, who own more cattle and more land than monogamous households. Furthermore, at the village-level the negative association between polygyny prevalence and child health is fully accounted for by underlying contextual differences between villages. Specifically, polygyny is most common among Maasai villages that are relatively ecologically vulnerable (e.g., low rainfall) and socioeconomically marginalized (low service provision, low education, livelihood distinctions) compared to neighboring villages dominated by other ethnic groups (Lawson et al. 2014). This study suggests that large-scale studies of polygyny and child health utilizing the DHS or similar resources that aggregate data across heterogeneous regional/cultural units may report negative relationships between polygyny and child health which are not causal, but rather are indicative of the tendency of polygyny to be most common in socioeconomically and culturally marginalized population sub-groups (Lawson et al. 2015).

Recent DHS studies of polygyny and child health have attempted to deal with this problem in various ways. One strategy has been to include random effects in regression analyses to adjust for hierarchical clustering at the national level, effectively comparing monogamous and polygynous families within countries (Omariba and Boyle 2007). A second strategy is to incorporate regional-level random effects (Smith-Greenaway and Trinitapoli 2014). Yet given the immense socioeconomic, demographic, and cultural heterogeneity of Africa, both national and subnational clusters are likely to only crudely map spatial covariance in marriage systems and health. Even regional units still aggregate data across much structured diversity in both health and cultural practices (e.g., see Lawson et al. 2014 for an example where adjacent villages vary dramatically in rural Tanzania). A final strategy, favored by Wagner and Rieger (2014), is to incorporate random effects at the level of primary sampling units (PSUs). However, PSUs are usually based on census enumeration areas, which do not necessarily

correspond with specific villages or cohesive communities (including, for example, adjacent villages or sub-villages and urban zones within towns and cities) and so are not ideal for contextual analysis (Smith-Greenaway and Trinitapoli 2014: 347; Adedini and Odimegwu 2017: 16).

## **5.2 Failure to distinguish causality from selection**

With a few notable exceptions (Hadley 2005; Strassmann 1997, 2011), most studies reviewed here, both large and small-scale, rely on cross-sectional data. However, a meaningful understanding of the consequences of polygyny can only be formed by first appreciating why, even in highly polygynous populations, not all women end up in polygynous marriages. Given the paucity of studies that have attempted to address this issue, particularly via longitudinal data, it remains possible that in many cases the selection of women of relatively poor health or social standing into polygynous marriages may be responsible for reported negative relationships between polygyny and child health (see discussion in Arthi and Fenske 2018; Gibson and Mace 2007; Matz 2016). For example, supporting this conclusion after finding evidence of selection effects among the Igbo of Nigeria, Arthi and Fenske (2018: 128) conclude: “a key implication of our results is that although membership in polygynous households may be an easy way to identify at-risk children, polygamy as a marital institution is unlikely to cause child morality.”

## **5.3 Generalizability and comparability of findings**

Sample sizes in many anthropological studies are generally small (often  $n < 100$ ), limiting statistical power to detect true effects in the study population. Furthermore, study sites are rarely regionally or nationally representative, making generalizable conclusions difficult. We also cannot directly contrast results across small-scale studies to compare specific cultural and ecological contexts because of idiosyncratic variation in statistical methodology and study design (e.g., differences in sampling, definition, and use of independent and dependent variables, inclusion of controls for potential confounders). This issue is also applicable to large-scale studies to some extent, but since DHS rely on comparable survey definitions and protocol, these issues are perhaps not as pertinent (but see Coast et al. 2011 for a discussion of differences in the definition of polygyny across DHS surveys).

## 5.4 Measuring polygyny

A final concern is the measurement and definition of polygyny in both large- and small-scale analyses. Indeed, the classification of marital status in African societies is notoriously difficult, with African marriage best described as a process rather than an event, with partners and their families working towards stable conjugal relationships over a period of months or even years (Bledsoe 1990; Meekers 1992; Antoine 2006). Across the studies reviewed in this paper, polygyny has been variably measured as marital status of the parent, of the household head, or of the 'work-eat group.' Data on wife rank is often particularly unreliable (Timæus and Reynar 1998). Cross-sectional data also fails to allow for the possibility that marital status changes so that children may be recorded as belonging to a monogamous household at one time and to a polygynous household at another (or vice-versa). This sets up false contrasts between monogamous and polygynous households, since it remains possible that current marital status may not match marital status during child development. Furthermore, the common use of the household as the unit of analysis is especially concerning for studies of polygyny and child health because in circumstances where polygynous wives reside separately this cleaves polygynous families into distinct survey units. Ultimately, this prevents direct comparison of children of first and later wives sharing the same husband and introduces considerable margins of error when measuring the wealth of individual wives. The use of rigid household definitions is coming under increasing criticism for obscuring the measurement of complex demographic phenomena (e.g., Randall, Coast, and Leone 2011). Experimentation with alternative survey methodologies that more accurately cater to the varying realities of polygynous experience is needed (Coast et al. 2011).

## 6. Discussion

A review of both large-scale and small-scale studies to date indicates that the impact of polygyny on child health is context-dependent and not always negative. Factors such as wife rank, household wealth, ethnicity, child's sex, and economic and sociocultural context have all been indicated as modifying the relationship between polygyny and child health, often in different directions depending on the study. The available evidence of context-dependency is also likely an underestimate. Relatively few studies reviewed here set out to test for effect heterogeneity, instead focusing on documenting a single population-wide effect of polygyny. Variation in the estimated health consequences of polygyny is not surprising. Economic and anthropological theories of human marriage practices do not anticipate universal relationships between polygyny

and wellbeing, but see cultural diversity in marriage practices as stemming in large part from context-dependency in the pay-offs from alternative behavioral strategies (Fortunato 2015; Lawson and Uggla 2014). Moreover, as we have outlined, polygyny itself is a highly variable cultural practice. Anthropologists have long emphasized cultural variation in polygyny in terms of factors such as the dynamics of spousal recruitment, resource sharing, extra-marital sex, divorce, and spousal number and residence (Madhavan 2002; White 1988). Even within cultures, polygynous marriage exists in alternative forms (senior vs. junior wife, arranged vs. courtship marriage, etc.). These points have often been overlooked in the population health policy and human rights literature in particular, where polygyny is often portrayed as a uniform and inherently harmful cultural practice. Issues of context and variation need to take center stage if we are to reach a full understanding of polygyny and its health implications.

Given the problems identified with interpreting analyses of large-scale, heterogeneous sample studies of polygyny in particular, we strongly advocate that future research focus on studies of polygyny carried out within more specific and well-described cultural contexts, while retaining relatively large sample sizes where possible (see also Madhavan 2002). It is also clear that investment in longitudinal data is required to address issues of selection and causality. Indeed, many of the published studies reviewed in this paper are upfront about the severe limitations of cross-sectional data to settle debates about causality. Longitudinal mediation analyses would enable better tests of the various pathways by which polygyny may influence child health. In developed countries, sophisticated longitudinal datasets that simultaneously track changing family structure, measures of parental involvement, and child outcomes are increasingly available, enabling researchers to address issues of causal inference more effectively in parallel debates, such as in the consideration of the wellbeing consequences of father absence (McLanahan, Tach, and Schneider 2013). To match this sophistication, research funders must prioritize data collection of the same quality in studies of African family structures. Improved consideration of mediation could also bring clarity with regard to what factors should be held constant (i.e., controlled for) in statistical comparisons of monogamous and polygynous families. One especially persistent point of confusion in the literature is whether or not comparisons should be adjusted for differences in household wealth. Many studies make such adjustments; however, if women strategically marry wealthier men and polygynous men are often wealthier than monogamous men, then this effectively sets up a false comparison that may mask potential benefits of polygyny over monogamy.

A promising path forward for future research, addressing both the need for a focus on specific cultural settings and for large-sample and longitudinal data, is the use of Health and Demographic Surveillance System (HDSS) data (Sankoh and Byass 2012; Sankoh 2017). HDSS projects, of which there are now over 30 across Africa, fill an

important gap in high quality population-based data, collecting information from whole communities with a core focus on regular demographic monitoring supplemented by additional socioeconomic and health surveys. While these datasets have been used to explore associations between alternative dimensions of family structure (e.g., parental death and non-residence: Houle et al. 2015; Gaydosh 2017), to our knowledge they have not yet been used to explore the health consequences of polygyny. Future research also needs to move away from simply estimating correlations between polygyny and child health and to move towards a more principled investigation of the mediating pathways through which polygyny may influence health outcomes (Section 3). This will require commitment to examining how co-wife cooperation and/or conflict influences maternal wellbeing and parental investments in children, including the substitutability of such investments from fathers and other kin.

More effort must also be made to analytically isolate polygyny from other cultural norms known or purported to be risk factors for poor health. Policy-orientated literature in particular has often portrayed polygyny as harmful simply because it is broadly associated with factors such as early marriage, wide spousal age-gap, low female autonomy, and pro-natal attitudes. For a particularly striking example, see McDermott and Cowden (2015) who, on the basis of simple national-level correlations that statically adjust only for Gross Domestic Product, condemn polygyny as a root cause of sex trafficking, domestic violence, female genital cutting, low female education, and even international terrorism. They conclude that: “Data taken from virtually every country in the world clearly documents polygyny as a practice that constitutes a fundamental abuse of basic human rights and dignity” (McDermott and Cowden 2015: 1767). However, the only thing that is truly clear from their analyses is that polygyny is associated with a number of undesirable phenomena. Nothing in their analyses indicates that polygyny can be described as a root cause of poor wellbeing.

An alternative possibility is that polygyny is one of a suite of cultural traits that tends to exist in particular socioecological contexts where women’s empowerment is low, but that polygyny itself is not a major determinant of low female empowerment or poor maternal or child wellbeing (see also Arthi and Fenske 2018). In that case, prohibiting the practice is unlikely to substantially influence child health. This scenario redirects our attention to the broader socioecological determinants of low female status and empowerment shared across both polygynous and monogamous families in many African societies. Indeed, as argued in Ware’s (1997) study of Nigerian women’s views of marriage, in many contexts replacing polygynous with monogamous marriage may do little to guarantee sexual monogamy or to counteract a wider cultural climate where women’s socioeconomic and reproductive autonomy is heavily restricted.

## **7. Conclusion**

The available evidence on polygyny and child health in Africa reviewed in this paper does not support its characterization as a ‘harmful cultural practice’ universally and inherently harmful to children. We reach this conclusion because (i) observed diversity in polygynous experience, both between and within cultures, is inconsistent with the notion that African polygyny can be meaningfully reduced to a uniform cultural practice with a singular impact on child health; (ii) consistent with this observation, available data indicates that polygyny is not uniformly associated with poor child health, and there are notable instances where polygyny appears beneficial or inconsequential; and (iii) present sources of data are highly vulnerable to methodological shortcomings, so that conclusions regarding the causal impact of polygyny on child health cannot be made with a level of confidence sufficient to guide policy decisions. This is not to say that there is no reason to argue that polygyny may contribute to the burden of poor child health in Africa. On the contrary and as we have outlined, there are sound reasons to suspect that polygyny can have both negative and positive implications for children, depending on both contextual and individual factors. Nor do we deny, non-trivial methodological issues aside, that where significant relationships between polygyny and child health have been documented they have mostly been negative. Rather, it is our contention that adopting a definitive and generalized position on the purported harms of African polygyny is, at best, highly speculative in the face of the available evidence base and its methodological shortcomings.

We conclude with two final thoughts on current debates regarding the prohibition of polygyny in Africa and beyond (Gaffney-Rhys 2012; Joffe 2016; Jonas 2012; Mwambene 2017; Patel 2017). First, we recommend that researchers examining the wellbeing implications of polygyny think beyond recommendations for marital reform, which may have unforeseen negative consequences in some situations, particularly in contexts where marriage is fundamental to women’s social and economic capital. Indeed, if there are large differences in male wealth, and marriage presents the primary means for women to access resources, then prohibiting polygyny will logically be disadvantageous to some women and their children by restricting marital options (Lawson et al. 2015). Initiatives that tackle underlying issues of low female autonomy and resource control directly may be more effective interventions, especially in contexts where most marriages are customary and therefore difficult to regulate, and would ensure that when polygyny does occur it is more likely to be consistent with women’s and children’s interests (see also Tertilt 2006).

Second, it is notable that within the international development sector the strongest positions on the alleged harmful status of polygyny, such as the statement attributed to



the United Nations highlighted in the opening of this paper, predate much of the empirical literature on polygyny and wellbeing. This state of affairs is representative of wider issues of ethnocentric bias in policy discourse on purportedly harmful cultural practices, long critiqued by anthropologists (Longman and Bradley 2016; Hart 2009; Merry 2003; Walley 1997). While many studies on polygyny and child health emphasize their potential contribution to ‘evidence-based policy,’ much of the literature reviewed here fits a broader trend of ‘policy-based evidence,’ i.e., research generated to support or evaluate pre-existing notions and policies initially formed on the basis of contemporary western cultural values and ideals rather than objective fact (see Ramalingam 2013). Indeed, polygyny has long been opposed on ethnocentric moral and theological grounds alone (Witte 2015), undoubtedly shaping current research and policy agendas. Thus, it is abundantly clear that if polygyny is on trial, then the jury is currently operating from a starting position of ‘guilty until proven innocent.’ We hope that this review encourages the adoption of a more neutral, culturally sensitive, and evidence-based approach to polygyny and other purportedly harmful cultural practices in future research and policy.

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