

Maternal Health in Nepal and Other Low-Income Countries: Causes, Contexts, and Future Directions

Jan Brunson

One longstanding challenge to improving maternal health in low-income countries has been the lack of access to skilled care during antenatal, birth, and postnatal periods. Problems of access can be attributed to a multitude of factors related to disadvantaged governments and economies, such as the lack of infrastructure including roads and hospitals, but also inequitable social hierarchies based on wealth, gender, and ethnicity or religion. Exceptional circumstances of war, political unrest, and natural disasters exacerbate these conditions. After the Millennium Development Goals have come and gone, what novel themes are emerging from research on maternal health in low-income countries? Using examples from over a decade of my field research in Nepal, as well as others from around the globe, I identify several important debates of particular relevance to future research in gender and demography on maternal health in the global South. I analyze the current and future directions in studies of maternal health in low-income countries such as Nepal, identifying three formidable challenges to achieving further declines in maternal mortality ratios in the future. I conclude by arguing that as demography's hyperfocus on fertility rates declines in conjunction with declining population growth rates around the globe, demographers are

ideally positioned to contribute more significantly to studies of women beyond the topic of how many offspring they produce – a more holistic consideration of women's experiences of reproduction (or lack thereof) and their relation to demographic characteristics such as wealth and ethnicity.

10.1 Background

Much of the research on maternal health originates and resides, in terms of scholarly disciplines, in public health or global health. These fields specialize in analyzing the biological and social determinants of maternal health in an empirical fashion, quantifying progress or decline at the population level, which is easily translated into policy. Sociology and anthropology utilize a wider variety of theoretical perspectives, including post-structuralist and critical ones, to examine similar topics from more holistic, more political, and sometimes less quantitative and empirical, ways (Scheper-Hughes 1997; Riley and McCarthy 2003). The resulting forms of data that such approaches create are less effective at generalizing at the population level. People's narratives, local systems of logic, and other forms of qualitative data are less easily translated into policy (Justice 1989). While studies of maternal health in anthropology may not use the universalizing analytical domain of "maternal health,"

J. Brunson (✉)
Department of Anthropology, University of Hawai'i,
Honolulu, HI, USA
e-mail: jbrunson@hawaii.edu

63 preferring to avoid treating “the people being
64 studied as objects whose behavior is rendered
65 into the western observer’s already existing cate-
66 gories” (Kertzer and Fricke 1997:2), recent
67 decades have produced a rich canon of ethnogra-
68 phies on various aspects of reproduction, gender,
69 and well-being.

70 In its nascent stages, scholarly investigation
71 into the domain of maternal health at the popula-
72 tion level was dominated by public health.
73 However, in the 1980s, Rosenfield and Maine
74 pointed out that public health research on mater-
75 nal and child health tended to focus on infants
76 and children and not on the mothers. Their semi-
77 nal article on public health’s paucity of attention
78 to maternal mortality (Rosenfield and Maine
79 1985), in which they queried, “Where is the M in
80 MCH?” was a call to action in the field of what
81 was then called “maternal and child health”
82 (MCH). Policymakers at that time thought it was
83 more feasible to reduce child mortality through
84 preventative measures such as immunization,
85 oral rehydration, and breastfeeding, than to pro-
86 vide pregnant women with expensive and high-
87 tech lifesaving medical care at hospitals
88 (Rosenfield et al. 2007). Spotlighting the number
89 of women dying each year, the Safe Motherhood
90 Conference in Nairobi launched a global initia-
91 tive to reduce maternal mortality in low-income
92 countries in 1987.

93 Tracking progress in maternal mortality rates
94 in low-income countries is challenging for rea-
95 sons with which demographers are quite familiar:
96 vital registration systems in rural areas are often
97 deficient, and surveys produce estimates with
98 varying margins of uncertainty. By most accounts,
99 however, progress in reducing maternal mortality
100 has been slow. The vast majority of maternal
101 deaths in low-income countries are due to direct
102 obstetrical complications, including hemorrhage,
103 infection, eclampsia, obstructed labor, and unsafe
104 abortion (Rosenfield et al. 2007). Moreover,
105 maternal deaths are only one part of the larger
106 picture of maternal morbidity. Many injuries
107 related to pregnancy and childbirth are disabling,
108 such as obstetrical fistula and uterine prolapse,
109 and have long-term impacts on women’s well-
110 being and productivity. Accurate accounting of

111 such morbidities is even more difficult to obtain
112 than that for maternal deaths due to stigma or
113 lack or reporting.

114 The Safe Motherhood Initiative, launched in
115 1987, initially emphasized improving antenatal
116 care, including screening for risk factors, and on
117 training birth attendants to use safe, hygienic
118 practices. However, many obstetrical complica-
119 tions cannot be predicted or prevented. Screening
120 can identify women with certain risk factors, but
121 the majority of obstetrical complications occur in
122 women categorized as low risk. Most births in
123 high-mortality settings take place at home, and
124 even trained attendants can only do so much to
125 save women’s lives when obstetrical emergencies
126 occur (Rosenfield et al. 2007). These observa-
127 tions regarding the ineffectiveness of identifying
128 during pregnancy who would need hospitaliza-
129 tion at birth led to a shift in focus away from
130 strategies that concentrated on the antenatal
131 period to strategies that ensure that women have
132 access to emergency obstetrical care at the time
133 of birth.¹

134 Recognition of the importance of referral sys-
135 tems in reducing maternal mortality in low-
136 income countries developed out of acknowledging
137 that obstetric emergencies are often difficult to
138 predict and that births in low-income countries
139 occur at home for a variety of reasons. Maternal
140 and neonatal deaths could therefore be prevented
141 if a functional referral system were in place to
142 allow women to reach appropriate health services
143 when complications occur (Hussein et al. 2012).
144 Thaddeus and Maine’s three delays model (1994)
145 provided a conceptual framework of the factors
146 influencing a timely arrival to a medical care
147 facility in an obstetric emergency. The three
148 delays are (1) delays in the recognition of the

¹However, it is interesting to note that a recent surge in interest and knowledge of epigenetics has brought pregnancy back into the spotlight in high-income countries, as biomedical researchers begin to learn the extent to which the prenatal environment impacts fetal and child development. In this scenario, ironically the focus shifts back to the fetus and away from the mother, who becomes the vessel for the fetus and whose own rights and desires become secondary to developing the ideal conditions for the fetus/future child.

149 problem and the decision to seek care in the
 150 household, (2) delays in reaching the appropriate
 151 facility, and (3) delays in the care received once
 152 the woman reaches the facility. The three delays
 153 are interrelated, and interventions aimed at one
 154 delay may result in improvements in another.
 155 Programs that aim to improve referral systems
 156 build and upgrade rural health centers and attempt
 157 to stock them consistently with necessary sup-
 158 plies and equipment. They make efforts to train
 159 community health workers as well as ensure that
 160 rural health posts and hospitals are adequately
 161 staffed with doctors and nurses. And since a func-
 162 tioning referral system includes transport, pro-
 163 grams aim to ensure adequate transport between
 164 facilities, as well. The three delays model contin-
 165 ues to be highly useful for research on improving
 166 birth outcomes in low-income countries.

167 Over time, the scope of what constitutes safer
 168 motherhood has widened considerably. A major
 169 factor was the incorporation of a human rights
 170 approach into the definition of Safe Motherhood
 171 following the agenda set at the International
 172 Conference on Population and Development
 173 (ICPD) in 1994. By defining maternal death as
 174 social injustice, programs for “safer motherhood”
 175 invoked a much broader range of political, social,
 176 and economic initiatives than was previously
 177 possible (UNFPA et al. 1997). Lists of relevant
 178 health risks included poor nutrition, illiteracy,
 179 lack of income and employment opportunities,
 180 inadequate health and family planning services,
 181 and low social status. Hussein has argued, in fact,
 182 that the burgeoning of safer motherhood mes-
 183 sages has, in some cases, led to confusion at the
 184 programmatic and implementation levels in
 185 places like Nepal (Hussein and Clapham 2005).

186 Much has changed since Rosenfield and
 187 Maine’s 1985 call for a focus on the “M” in
 188 MCH. For the past three decades, improving
 189 maternal health has been high on the global
 190 development agenda. One of the eight United
 191 Nations Millennium Development Goals estab-
 192 lished in 2000 was to reduce the maternal mortal-
 193 ity ratio by 75% by 2015. Between 1990 and
 194 2015, maternal mortality worldwide dropped
 195 about 44% (Alkema et al. 2015). Of the 95 coun-
 196 tries with high levels of maternal mortality in

197 1990, 9 countries achieved MDG 5A, and another
 198 39 countries made significant progress.

199 While progress has been made, approximately
 200 303,000 women died in 2015 during and follow-
 201 ing pregnancy and childbirth. Almost all of these
 202 deaths occurred in low-resource settings, and
 203 most could have prevented (Alkema et al. 2015).
 204 Almost all maternal deaths (99%) occurred in
 205 developing countries. More than half of those
 206 deaths occurred in sub-Saharan Africa, and
 207 almost one third occurred in South Asia (WHO
 208 2016). Wide disparities in maternal mortality also
 209 exist within countries, in association with dimen-
 210 sions of social advantage such as wealth and with
 211 rural residence.

10.2 Context of the Research 212

213 In the case of Nepal, the recently released 2016
 214 Nepal Demographic and Health Survey shows
 215 (Ministry of Health 2017) that pregnancy-related
 216 maternal mortality ratios² dropped notably in the
 217 time between the 1996 and 2006 surveys,³ but the
 218 decline has stalled between the 2006 and 2016
 219 surveys. In the 2016 NDHS, the pregnancy-
 220 related mortality ratio is estimated as 259 (CI:
 221 151–366) compared to 281 (CI: 178–384) in
 222 2006. The confidence intervals for the 2006 and
 223 2016 ratios overlap substantially. This newly
 224 released data must be causing some disappoint-
 225 ment throughout the development community
 226 and those working to further reduce maternal
 227 mortality ratios.

228 The broader context of achieving lower mater-
 229 nal mortality ratios in Nepal involves a consider-
 230 ation of several facts, first and foremost that 41%
 231 of births are delivered at home (Ministry of
 232 Health 2017). In a nation that has a strong referral
 233 system and near universal attendance of birth by

²The definition of maternal mortality has changed in the 2016 NDHS, and the new definition now excludes deaths from accidents or violence. Current estimates are not directly comparable to prior estimates, which are essentially pregnancy-related mortality ratios. Therefore, I use pregnancy-related mortality ratios in order to use a consistent measurement that can be compared over time.

³See Hussein et al. (2011) for an appraisal of this decline.

234 a skilled provider, that statistic would cause no
 235 concern. But in Nepal, only 58% of births are
 236 assisted by a skilled provider, and one in ten
 237 births are assisted by no one (Ministry of Health
 238 2017). In a key country-level study conducted in
 239 2008, the direct leading causes of maternal death
 240 in Nepal were hemorrhage (24%), hypertensive
 241 disorders (21%), and complications related to
 242 abortion (7%) (Suvedi et al. 2009). Indirect
 243 causes included limited health literacy across
 244 Nepal, weak health systems, and lack of facilities
 245 (Suvedi et al. 2009). For Nepalis who do not live
 246 in urban centers, roughly 80% of the population,
 247 sub-health posts, health posts, and primary
 248 healthcare centers are the only facilities avail-
 249 able. These facilities qualify for the official label
 250 “birthing centers” in Nepal, which means they
 251 are staffed mostly with locally recruited staff
 252 nurses, auxiliary nurse midwives, and maternal
 253 child health workers. They are equipped to assist
 254 only normal institutional or home births (Suvedi
 255 et al. 2009). Thus, for most of the country’s popu-
 256 lation, in rural areas with only birthing centers,
 257 many challenges to establishing a functioning
 258 referral system remain, including the most obvi-
 259 ous for remote settings: adequate transportation
 260 and infrastructure that make transferal to a better
 261 equipped and staffed facility possible.

262 The intermittent periods of ethnographic
 263 research that I describe in this chapter focus on a
 264 semi-urban community on the edge of the
 265 Kathmandu Valley, where a hospital is quickly
 266 reached by taxi, or by bus in under 30 min, and a
 267 health post is in walking distance. In this loca-
 268 tion, with these facilities and services available, I
 269 found that there were still women giving birth
 270 unassisted by a skilled provider, and even some
 271 giving birth alone (Brunson 2010). I also discov-
 272 ered that typically families did not utilize what
 273 was then a sub-health post (upgraded to a health
 274 post in 2014) for antenatal or delivery assistance;
 275 rather, when they did seek care, they preferred
 276 the teaching hospital located a few kilometers
 277 further down the road towards Kathmandu
 278 (Brunson 2010). Families in this community typ-
 279 ically had two or three children, a shift in com-
 280 parison to the higher fertility of the previous
 281 generation. Families had accepted the two-child

282 ideal family size that was promoted by family
 283 planning organizations, but due to the patrilocal
 284 marriage system, women who had no sons after
 285 the births of two girls were conflicted over giving
 286 birth again (Brunson 2016).

287 The vignettes in this chapter come from mul-
 288 tiple periods of research spanning over a decade
 289 in this single community. Nepal contains a sur-
 290 prising amount of ethnic and linguistic diversity
 291 for its small size, and this study is limited to a
 292 cultural subgroup, Parbatiya Hindus. This group
 293 includes Bahun (or Brahman), Chhettri, Thakuri,
 294 and Dalit. The designation Parbatiya, or Hindu-
 295 caste, is based on linguistic and historical distinc-
 296 tions, but ultimately it is a loose approximation of
 297 a cultural group that is heterogeneous because of
 298 the subgroups (often glossed as “castes”) that
 299 comprise it and the increasingly porous boundar-
 300 ies that demarcate it. The vignettes that follow
 301 come primarily from 28 case studies with mar-
 302 ried women of varied caste, wealth, and house-
 303 hold statuses, that I followed during 13 months of
 304 fieldwork during 2003–2005, with follow-up vis-
 305 its in 2009 and 2010. During the discussion of
 306 respectful maternity care, I also include the story
 307 of a woman from a period of fieldwork in 2015.
 308 The following quote eloquently captures the
 309 essence and strength of such long-term ethno-
 310 graphic research:

311 Repeatedly returning, one begins to grasp what
 312 happens in the meantime – the events and practices
 313 that enable wider social and political change,
 314 alongside those that debilitate societies and indi-
 315 viduals, dooming them to stasis and intractability.
 316 In such returns, entanglements and intricacies are
 317 revealed. We witness the very temporality of poli-
 318 tics, technology, money, and survival. The ethnog-
 319 rapher demarcates previously uncharted landscapes
 320 and tracks people moving through them. By
 321 addressing complicated transformations of institu-
 322 tions and lives in contexts of adversity, ethnogra-
 323 phy is uniquely qualified to confront and humanize
 324 the ways problems and policies are framed and
 325 interventions carried out. (Biehl 2007:47)

326 This chapter aims to bring into conversation
 327 micro-level interviews, national level data, and
 328 even global manifestos and models. Between
 329 2016 and 2030, as part of the Sustainable
 330 Development Goals, the target is to reduce the
 331 global maternal mortality ratio to less than 70 per

332 100,000 live births (WHO 2016). What are some
333 of the significant obstacles to achieving this in
334 low-income countries such as Nepal, and what
335 can demography contribute?

336 10.3 Gendered Dynamics 337 of Power at the Societal 338 and Familial Levels

339 One of the major impediments to improving
340 maternal health statistics further in low-income
341 countries is that at the societal and familial levels,
342 maternal health is fraught with deeply ingrained
343 gendered power dynamics. For this reason, in
344 fact, maternal mortality rates are considered to be
345 a good approximation of not only levels of gen-
346 der equity in a society, but of societal develop-
347 ment itself. In Nepal, much research has been
348 devoted to uncovering some of the ways that gen-
349 dered power dynamics systematically operate at
350 the familial or household level. Maternal and
351 child nutrition, for example, have been largely
352 shaped by unspoken gender rules regarding who
353 eats first in a family and who receives choice
354 foods such as meat or even lentils (Gittelsohn
355 et al. 1997; Messer 1997). Prenatal nutrition and
356 care is another good example; Nepali women
357 may not be able to modify their diets or subsis-
358 tence labor during pregnancy (Panter-Brick 1989;
359 Brunson 2018). The gendered norms operating in
360 Nepal are particularly complex, as they vary with
361 other social statuses such as caste and wealth
362 (Cameron 1998; Brunson 2016) and ethnicity
363 (March 2002). With this as the backdrop, a por-
364 tion of my previous research focused on the gen-
365 dered dynamics of decision making during
366 obstetric emergencies at home, part of the “first
367 delay” in Thaddeus and Maine’s three delays
368 model.

369 Women in my case studies generally were
370 socialized to remain quiet or speak modestly
371 about their suffering, and it was men who made
372 decisions such as determining at what point a
373 situation was dangerous or life-threatening
374 enough that it warranted being taken to the hospi-
375 tal. The way in which a young, high-caste mother
376 in her 20s, Anjala, told the story of the complica-

377 tions that occurred after she went into labor and
378 the actions that were taken provide insight into
379 the different roles family members act out in such
380 scenarios.

381 Anjala was the daughter-in-law of a multi-
382 generational family living in a large, three-story
383 cement home perched on a higher portion of the
384 mountainside community. She reported that she
385 was particularly well cared for by her parents-in-
386 law, evidenced by her mother-in-law assisting
387 with her more laborious chores, such as gathering
388 fodder, and taking her to antenatal appointments
389 at the teaching hospital. Anjala went into labor on
390 a Friday evening but refused to go to the hospital
391 initially, and continued to refuse even after being
392 in labor for more than 24 h without discernible
393 progress. During the interview, she made a point
394 of saying that twice she rejected the admonitions
395 of her husband’s elder brother to go to the hospi-
396 tal, and then finally she gave into the reprimands
397 of her husband’s family. At another point in the
398 interview just after this story, she claimed that the
399 labor pain was not that bad – she had “slight
400 stomach pain.” She minimized her role and her
401 agency in this situation in order to follow the
402 social script of being a good woman and daughter-
403 in-law. She did not want to appear to be demand-
404 ing, even in her act of telling the story with only
405 me and my research assistant present. Often
406 women would break from the script of being a
407 good woman when they were talking with only
408 other women present; they would subvert domi-
409 nant gender scripts through humor or sarcasm.
410 But Anjala stayed on script. After her vacuum-
411 assisted birth at the hospital, she lost much blood
412 and fluids, and she remained there for 4 days on
413 an intravenous solution. I will return to Anjala’s
414 story in the next section’s discussion of respectful
415 maternity care, offering additional information
416 that may have influenced her initial refusal to go
417 to the hospital.

418 Even in instances where women do feel suffi-
419 ciently knowledgeable and empowered to sug-
420 gest transfer to a hospital, women are often in no
421 condition to make that demand – they may be
422 barely conscious during an obstetric emergency.
423 Shanta delivered her second child at home. There
424 was a lack of money at that time, she said, and

425 since she started to have labor pains around mid-
 426 night, she thought, “Why give trouble to others in
 427 the night. I called to my mother-in-law just before
 428 she was born”. She figured that there was no one
 429 to take her to the hospital in the middle of the
 430 night anyway, so why should she wake the other
 431 family members. The labor pain was not as bad
 432 as it was with her first birth, her son, and she gave
 433 birth “easily” to her daughter around five in the
 434 morning. Shanta said,

435 She was born easily, but the placenta did not fall
 436 easily. It did not come out for 2–3 h, so it became
 437 difficult to cut it. My daughter became so ‘serious’
 438 and so did I. Different people were saying different
 439 things. Whom should I believe? I was ‘serious’
 440 because of bleeding, I was in a dilemma... what to
 441 do? I fell unconscious for about twenty minutes.
 442 All the family members were weeping. They
 443 thought I was dying.

444 Shanta did not indicate how much time passed
 445 in this way, but she said that the family members
 446 called the village health worker. The midwife
 447 was able to pull out the placenta, but there was
 448 excessive bleeding. The village health worker
 449 recommended that she be taken to the hospital.
 450 Someone fetched a taxi, and they took her to the
 451 teaching hospital. She regained consciousness on
 452 the way to the hospital.

453 Shanta remarked that many women die when
 454 the placenta does not come out. Some old people,
 455 she reported, say that cow dung should be thrust
 456 in the mouth – others said hair – so that one
 457 would vomit. Some recommended using a small
 458 hoe, and Shanta winced in telling this, citing the
 459 possibility of tetanus. She had been trained as a
 460 volunteer village health worker, and she knew
 461 what should have been done in her situation
 462 according to a biomedical model – but she said
 463 she was unable to speak adequately at that time.

464 These two stories and other similar ones high-
 465 light the importance of male involvement in
 466 obstetric emergencies in this social context.
 467 Women are likely to be limited, for both social
 468 and physical reasons, in their ability to decide

469 and assert that their situation necessitates hospi-
 470 talization during obstetric emergencies. Part of
 471 the breakdown in women giving birth with the
 472 assistance of a trained professional, and in
 473 women being hospitalized in a timely fashion
 474 during an obstetric emergency, may result from a
 475 combination of factors. Birth is considered a nat-
 476 ural event that does not warrant much special
 477 attention. Older women told stories of giving
 478 birth alone during the night or on the way home
 479 from the fields. In the past, a female relative
 480 would help a woman during delivery. Birth was
 481 both the domain and responsibility of women.
 482 With the advent of hospital deliveries and avail-
 483 ability of trained health professionals to assist
 484 with birth, obtaining such care began to involve
 485 the decision-making power and the initiative to
 486 act that was in the hands of the men in the fami-
 487 ly.⁴ But men have not been knowledgeable about
 488 birth in the past, and may not even be alerted that
 489 it is happening.

490 In a much different setting in Nepal, Mullany’s
 491 research with couples delivering in the major
 492 public hospital in urban Kathmandu revealed that
 493 a key obstacle to Nepali husbands’ involvement
 494 in antenatal care and deliveries was their lack of
 495 knowledge regarding women’s maternal health,
 496 along with social stigma and shyness or embar-
 497 rassment. Mullany concluded, “Appealing to
 498 men as ‘responsible partners’ whose help is
 499 needed to reach the endpoint of ‘healthy families’
 500 may, for example, provide an effective approach
 501 for targeting men in the Nepal setting” (Mullany
 502 2006:2808). Young men and health providers
 503 alike in her study stated that young men (in this
 504 setting) were ready to be more involved with
 505 maternal health, but they needed education and
 506 either the will to ignore the social stigma attached

⁴Carolyn Sargent made a similar point about the medical-
 ization of birth among the Bariba of Benin: she took the
 argument a step further by concluding that women’s
 reproductive choices were being limited by the encour-
 agement of hospital-based births by handing control over
 obstetric care to men.

507 to helping one's wife or programs aimed at
508 changing such stigma.

509 **10.4 Respectful Maternity Care**

510 Another major impediment to improving maternal
511 health statistics further in low-income countries
512 is providing skilled assistance at birth and a
513 referral system for obstetric emergencies without
514 importing the harmful cultural artifacts of the history
515 of gynecological practice in the United States.
516 While many biomedical advances save women's
517 lives during obstetric emergencies, through
518 managing obstructed labor, hemorrhaging,
519 eclampsia, and postpartum infection, the history
520 of the medicalization of birth and the rise of
521 obstetrics contains many troublesome chapters,
522 including the professionalization of delivering
523 normal births and the outlawing of midwifery,
524 the use of iatrogenic medicinal and technological
525 interventions in birth, and the failure to recognize
526 the importance of the social or environmental
527 aspects of a successful birth such as physical and
528 emotional support for the laboring woman (Bell
529 2009; Cheyney 2010; Davis-Floyd et al. 2009).

530 One of the appeals of the referral system, and,
531 as a result, the three delays model, is that it begins
532 with the assumption that women will want or
533 need to give birth at home or a nearby birthing
534 center, the first level of maternity care in the
535 referral system. This is an important starting
536 point ideologically for scholars and practitioners
537 critical of the medicalization of childbirth and the
538 history of interventionist gynecology in the
539 United States, but also pragmatically for low-
540 income countries where sufficient infrastructure
541 and personnel do not exist for universal institu-
542 tionalized birth.

543 Global health scholars recently coined catchy
544 phrases to describe the two extremes of
545 approaches to obstetric care that should be
546 avoided: "too much too soon" (TMTS) and "too
547 little too late" (TLTL). Too much too soon

548 describes the routine over-medicalization of normal
549 pregnancy and birth. It includes the unneces-
550 sary use of non-evidence-based interventions, as
551 well as the use of interventions that are life sav-
552 ing when used appropriately, but harmful when
553 applied routinely or overused. As institutional
554 births increase, TMTS causes harm and increases
555 health costs unnecessarily, and often concentrates
556 disrespect and abuse. Too little too late, on the
557 other hand, describes maternal health care with
558 inadequate resources, below evidence-based
559 standards, or care withheld or unavailable until
560 too late to help (Miller et al. 2016). TLTL char-
561 acterizes the situation in rural areas of low-income
562 countries, while TMTS may characterize some
563 women's experiences in an urban center of one of
564 those same countries.

565 If one of the fundamental goals of global
566 maternal health programs is for every birth to be
567 attended by a skilled professional (de Bernis
568 et al. 2003), whether at home or in an institution,
569 then the relations between that skilled profes-
570 sional and the birthing woman are of utmost
571 importance. In recent years a surge in interest in
572 respectful maternity care has been building,
573 drawing increasing attention to the treatment of
574 birthing women by practitioners. Anthropologists
575 have documented how birthing women may be
576 abused verbally or even physically in hospital
577 settings (Dixon 2015; Smith-Oka 2012, 2015),
578 particularly when a large gap in social standing
579 (due to gender, profession, wealth, education, or
580 ethnicity) exists between practitioner and patient.
581 These scholars reveal the deeper patterns of
582 social inequality and violence that play out in
583 hospital delivery rooms.

584 In Nepal's highly stratified society, service
585 provider attitudes and behaviors have been
586 reported to affect healthcare utilization by
587 women, specifically issues such as patronage and
588 negative attitudes (Clapham et al. 2008; Suvedi
589 et al. 2009). Women's perceptions of staff atti-
590 tudes, along with the availability of equipment
591 and drugs, were found to have an effect in Kaski,

592 a district in the central hills of Nepal (Karkee
593 et al. 2015). In that study, women bypassed their
594 nearest birth centers because they perceived
595 lower-level facilities to have limited equipment
596 and competent staff to deal with birth complica-
597 tions. Over-crowding in hospitals is an ongoing
598 problem due to such widespread perspectives.

599 While most women in my research did not
600 speak poorly of the hospitals or treatment they
601 received there, a couple of women had minor
602 complaints about the long lines and wait time and
603 the attitudes of the nurses or doctors. One
604 woman's experience, however, was harrowing.
605 Shanta gave birth to her eldest child, a son, at the
606 teaching hospital. The nurses showed her son to
607 her, but then later another nurse picked up her
608 baby and handed him to another woman who also
609 had given birth. Shanta had heard of such a thing
610 happening before, and so she was worried and
611 was keeping watch over her son despite feeling
612 weak. She said, "A woman near my bed had
613 given birth to a daughter. That woman was claim-
614 ing my son, saying this child is mine. Of course,
615 she was unaware of the switch. I got up and said,
616 'That is my baby.' I scolded that nurse. My son
617 would have been exchanged if I had not taken
618 care! That woman also could have taken my son
619 because she already had four daughters." This
620 near swapping of infants occurred after she had
621 already experienced another mishap. She had
622 needed stitches after giving birth, and the nurses
623 who were working on her were students at the
624 teaching hospital. She needed six stitches, but
625 some of the stitches were so crooked that the
626 senior nurse scolded the student nurses when she
627 saw their work. She ordered them to repeat the
628 process. After the senior nurse left, the student
629 "stitched it her own way," according to Shanta,
630 and it started to bleed. Such experiences, even if
631 they are rare, do not build confidence in hospital
632 deliveries amongst women or their families.

633 In Anjala's case described in the previous sec-
634 tion, another potential reason for delaying going
635 to the hospital also deserves consideration:
636 Anjala might have wanted to avoid the hospital.
637 She commented on how, during her antenatal
638 appointments, the "nurses used to scold me and
639 say, 'Why is such a small girl going to give birth

640 so early?'" Then she laughed, explaining that
641 they must have thought that she was young, when
642 in fact she was 22 at the time of her first birth,
643 because she happened to be very petite and
644 looked younger than her age. This (misguided)
645 admonishment by the nurses hints at the possibil-
646 ity of mistreatment by hospital staff, however in
647 this particular case she reported that her experi-
648 ences at the hospitals were good. Anjala did not
649 indicate that this was the reason she did not want
650 to give birth in the hospital during her delayed
651 labor described in the previous section; I simply
652 suggest that such moralizing on the part of nurses
653 might be part of the broader context of why one
654 might want to avoid the hospital.

655 The final vignette that I wish to use to illus-
656 trate one of the challenges to further reducing
657 maternal mortality ratios in low-income coun-
658 tries comes from an interview with an economi-
659 cally and socially vulnerable woman who had
660 lost her home in the 2015 Nepal earthquakes. She
661 had four young children, but her husband was
662 typically not around. He came and went in irregu-
663 lar intervals, often gone for days at a time, and
664 she did not seem to miss his presence since when
665 he was there he was often violent. She was in
666 late-stage pregnancy, by her best estimation, and
667 was due any time. Looking around at her young
668 children and her lack of other family members to
669 assist her with the birth, I inquired whether she
670 intended to utilize the health post birth center.
671 She replied no, that one of the neighbor women
672 might help if there was any trouble. Given my
673 past experience of gathering stories of similar
674 women in this community giving birth unassisted
675 and alone (Brunson 2010), it was hard for me to
676 believe her more affluent neighbors would come
677 to her aid in a timely fashion and be qualified to
678 make decisions about her welfare. Her level of
679 impoverishment and abandonment contrasted
680 sharply to the significantly more comfortable
681 lives of her neighbors.

682 The next day after interviewing her, I visited
683 the new local health post a few kilometers down
684 the mountainside from her home. The concrete
685 building and paint still looked new, and the medi-
686 cal equipment was shiny. The nurses gave me a
687 tour of the new facility, including an empty labor-

688 ing room and delivery room. In the delivery
689 room, center stage, was a hard table with stirrups
690 attached to spindly metal mechanisms holding
691 them at the ready. It was hard to imagine the
692 woman being able to navigate such a setting
693 without fear and discomfort when confronted by
694 such an uninviting contraption and the unfamiliar
695 expectations of the medical staff about how she
696 ought to comport her body during birth. If she
697 perished in childbirth at home, I doubt her death
698 would be entered into any registry. Her poverty
699 and her lack of support rendered her invisible.

700 10.5 Considerations 701 for the Future

702 10.5.1 The Utility and Limitations 703 of an Obstetric Transition 704 Model

705 The recent development of an obstetric transition
706 model to explain the varying causes for maternal
707 mortality at different “stages” is worth consider-
708 ing in relation to the themes I identified in this
709 chapter as ongoing challenges to achieving
710 improvements in maternal health. The obstetric
711 transition model is a theoretical framework that
712 attempts to explain gradual changes that coun-
713 tries experience as they eliminate what is labeled
714 avoidable maternal mortality. The broad, world-
715 wide pattern that the model documents includes
716 the following: a shift from maternal deaths pre-
717 dominantly due direct obstetric causes to deaths
718 due to indirect causes; from deaths due to com-
719 municable diseases to deaths caused by non-
720 communicable diseases; from a younger maternal
721 population to an older one; and a decrease in
722 maternal mortality ratio (MMR), along with an
723 increase in institutionalized maternity care, and
724 eventually over-medicalization (Souza et al.
725 2014).

726 There are five stages in the model, ranging
727 from stage 1 in which the MMR is greater than
728 1000 and women do not receive professional
729 obstetric care, to stage 5 in which the MMR is

730 less than 5 and indirect obstetric causes associ-
731 ated with chronic-degenerative diseases are the
732 main obstacles. In stage 5, one of the main chal-
733 lenges is managing vulnerable populations.
734 Nepal fits in stage 3 of the model, which is char-
735 acterized as follows:

736 Stage 3 (MMR: 299–50 maternal death/100,000
737 live births): Fertility is variable and direct causes
738 of mortality still predominate. This is a complex
739 stage, because access continues to be an issue for a
740 large part of the population. However, since a high
741 proportion of pregnant women arrive at health ser-
742 vices, quality of care is one of the main determi-
743 nants of health outcomes, particularly related to
744 overburdened health services. Primary prevention,
745 as well as secondary and tertiary prevention, is
746 fundamental to improve maternal health outcomes
747 in this stage. In other words, the quality of care,
748 skilled childbirth care and adequate management
749 of complications are essential for the reduction in
750 maternal mortality. (Souza et al. 2014)

751 In the next stage, stage 4, an aspect that
752 emerges is the increasing role of medicalization
753 as a *threat* to the quality and improvement of
754 health outcomes. This is what I argue is on the
755 horizon for women in Nepal, but I am optimistic
756 that countries like Nepal can learn from the mis-
757 takes of over-medicalization in mid- and high-
758 income countries and health practitioners can
759 actively work to avoid this.

760 The strength of the obstetric transition model is
761 that it clearly differentiates and demarcates what
762 the burden of disease is likely to be at the national
763 level in various countries around the globe. It
764 serves as an excellent reminder that the causes and
765 contexts of maternal health differ dramatically
766 depending on whether one is considering a low-
767 income country or a high-income one. The limita-
768 tions and drawbacks of such a model are the ways
769 in which it obscures the variation that one would
770 find within a single nation such as Nepal, in which
771 the urban elite have much better access to high
772 quality care during pregnancy and birth (not to
773 mention nutritious food, clean water, etc.), while
774 the rural poor may have to travel hours by foot to
775 reach the nearest low-level birthing center. Such a
776 model, then, has the potential to erase the effects
777 of abject poverty and the inequitable distribution

778 of resources within a society on women's lives.
 779 Pockets of society in the United States, for exam-
 780 ple, still experience the same causes of maternal
 781 mortality that predominate in a low-income coun-
 782 try. Instead of smoothing over such pockets of vul-
 783 nerable populations in order to focus on the greater
 784 national-level trends, those pockets need to be dis-
 785 covered and targeted. By placing all nations onto a
 786 single, linear model, according to stage of devel-
 787 opment, the obstetric transition model repeats
 788 some of the mistakes of the demographic transi-
 789 tion model. It flattens the contours of social life
 790 that shape maternal health outcomes, and it is
 791 tinged with the assumptions of modernization the-
 792 ory. There is much to learn from the model, how-
 793 ever, and its utility should be exploited while, at
 794 the same time, disallowing it to become yet another
 795 totalizing and monolithic model of population or
 796 health transitions.

797 **10.5.2 A Manifesto for Maternal** 798 **Health Post-2015**

799 The manifesto for maternal health (Langer et al.
 800 2013) created at the Global Maternal Health
 801 Conference in Arusha aspired to look ahead to
 802 the post-MDG world, post 2015, and identify the
 803 critical areas for continued efforts to improve
 804 global maternal health. Its list of goals includes
 805 the themes I identified in this chapter. Point 4, for
 806 example, highlights the importance of gender
 807 disparities and poverty in determining the care
 808 that women receive. Point 7 of the manifesto
 809 states that respectful maternity care for all women
 810 is an ethical imperative. And point 6 echoes my
 811 conclusion about the pregnant woman who did
 812 not want antenatal care or to deliver her child at
 813 the local health post. It reads,

814 A much greater emphasis must be put on reaching
 815 the unseen women who are socially excluded
 816 because of culture, geography, education, disabili-
 817 ties, and other driving forces of invisibility. If we
 818 are serious about redressing gender and access

819 inequities, we have to ask fundamental and
 820 difficult questions about the nature of our
 821 societies and the value, or sometimes lack of
 822 value, we ascribe to individuals, especially
 823 women, in those societies.

824 In addition, one of the points in the manifesto
 825 clearly identifies a need that could be filled by the
 826 expertise, skills, and methods of demographers.
 827 Point 10 states,

828 A critical gap that threatens the future health of
 829 women and mothers is the catastrophic failure to
 830 have reliable information on maternal deaths and
 831 health outcomes within and across countries. This
 832 gap in measurement, information, and accountabil-
 833 ity must be a priority now and post-2015.

10.6 Conclusion 834

835 As concerns over a global population explosion
 836 wane among policy makers, funding agencies,
 837 and demographers alike, the tremendous amount
 838 of effort devoted to research on fertility – at least
 839 in terms of limiting fertility – can ease. This
 840 opens up space for demographic research to
 841 focus not merely on gender and population
 842 increase or decrease, but gender and the condi-
 843 tions of reproduction. Just as in studies of gender
 844 and migration, demographers are not only inter-
 845 ested in the sum of who is moving, they are inter-
 846 ested in the quality of life of those individuals,
 847 the challenges they face, and the challenges that
 848 governments face in hosting them. Demographers
 849 in a discipline that has traditionally been focused
 850 on fertility rates now have the latitude to expand
 851 their expertise to other aspects of fertility, includ-
 852 ing maternal and infant health. This is not to say
 853 that demographers have not played a critical role
 854 in researching and contributing to such issues
 855 prior to this point; indeed, many have. Rather, I
 856 argue that topics such as maternal health no lon-
 857 ger need to be located on the periphery of demog-
 858 raphy's concerns and priorities. Demography has
 859 the ability (methodologically and analytically)

860 and the expertise to reveal at the population level
861 who suffers and who does not in matters of repro-
862 duction, and to theorize why. Future scholarship
863 can focus on the importance of health and edu-
864 cated individuals for strengthening economies
865 and communities, rather than being consumed by
866 the drive to lower fertility rates. Instead of con-
867 vincing low-income countries that the future of
868 their economic health is tied to curbing popula-
869 tion growth, perhaps a new proclamation for gov-
870 ernments can be that the health and education of
871 men and women is necessary for the future health
872 of communities and economic growth.

873 Instead of making women count primarily
874 through calculations of fertility rates and mater-
875 nal mortality rates, the scope of demographic
876 inquiry can be widened to include a better bal-
877 ance of research on topics such as antenatal and
878 postnatal health. Maternal deaths, for example,
879 typically estimated by dividing by the number of
880 live births to create a ratio that can be compared
881 across varying population sizes, has been used as
882 the standard global health indicator for measur-
883 ing maternal health. There is some irony to the
884 use of this metric to measure maternal health; it is
885 as if not dying because of childbirth indicates sat-
886 isfactory maternal health. This indicator cannot
887 capture the morbidity of women who do not die,
888 but who may experience severe morbidity and
889 loss of productivity instead. Overcoming the
890 shortcomings of this indicator requires a shift in
891 focus from maternal mortality to maternal mor-
892 bidity, the major and minor health problems
893 women endure as a result of pregnancy and child-
894 birth (Brunson 2018). Recently leaders in the
895 field of maternal health in developing countries
896 have made an additional argument for this shift in
897 focus to morbidity, based in the logic that as
898 global maternal mortality declines, or as the per-
899 ceived crisis of women dying in childbirth sub-
900 sides, resources and energy can be directed
901 toward “health, productivity, and dignity”
902 (Langer et al. 2013) instead of a triage approach.
903 And with respect to fertility, Marcia Inhorn and
904 others have issued similar calls for studies of

infertility in low-income countries (Inhorn and 905
Van Balen 2002; also see Wilson 2014 for the 906
United States), a topic that historically had been 907
ignored in stark contrast to the abundance of 908
research on contraceptive uptake and limiting 909
fertility. 910

In this way, demography need not reinvent the 911
wheel. Some scholars have been researching 912
these issues in the global South for decades but 913
on a different scale, conducting community stud- 914
ies or household studies. Scholars in global health 915
and anthropology are already calling for these 916
shifts and laying the groundwork at the edges of 917
demography, engaging in innovative work on 918
metrics, for example (Adams 2016; Adams et al. 919
2015). I hope that demographers will join us in 920
those fertile interdisciplinary interstices. 921

922 References

- Adams, V. (Ed.). (2016). *Metrics: What counts in global* 923
health. Durham: Duke University Press. 924
- Adams, V., Craig, S. R., & Samen, A. (2015). Alternative 925
accounting in maternal and infant global health. 926
Global Public Health, 11(3), 276–294. [https://doi.org/](https://doi.org/10.1080/17441692.2015.1021364) 927
[10.1080/17441692.2015.1021364](https://doi.org/10.1080/17441692.2015.1021364). 928
- Alkema, L., Chou, D., Hogan, D., Zhang, S., Moller, 929
A.-B., Gemmill, A.,... Say, L. (2015). Global, 930
regional, and national levels and trends in maternal 931
mortality between 1990 and 2015, with scenario- 932
based projections to 2030: A systematic analysis by 933
the UN maternal mortality estimation inter-agency 934
group. *The Lancet*, 387(10017), 462–474. doi:[https://](https://doi.org/10.1016/S0140-6736(15)00838-7) 935
[doi.org/10.1016/S0140-6736\(15\)00838-7](https://doi.org/10.1016/S0140-6736(15)00838-7). 936
- Bell, S. (2009). *DES daughters: Embodied knowledge* 937
and the transformation of women's health politics. 938
Philadelphia: Temple University Press. 939
- Biehl, J. (2007). *Will to live: AIDS therapies and the poli-* 940
tics of survival. Princeton: Princeton University Press. 941
- Brunson, J. (2010). Confronting maternal mortality, 942
controlling birth in Nepal: The gendered politics of 943
receiving biomedical care at birth. *Social Science and* 944
Medicine, 71(10), 1719–1727. 945
- Brunson, J. (2016). *Planning families in Nepal: Global* 946
and local projects of reproduction. New Brunswick: 947
Rutgers University Press. 948
- Brunson, J. (2018). *Concealed pregnancies and protected* 949
postpartum periods: Critical junctures in promoting 950
maternal health in Nepal. Manuscript submitted for 951
publication. 952

- 953 Cameron, M. M. (1998). *On the edge of the auspicious: Gender and caste in Nepal*. Chicago: University of
954 Illinois Press. 1012
- 956 Cheyney, M. (2010). *Born at home: The biological, cul- 1013*
957 tural, and political dimensions of maternity care in the 1014
958 United States. Belmont: Wadsworth. 1015
- 959 Clapham, S., Pokharel, D., Bird, C., & Basnett, I. 1016
960 (2008). Addressing the attitudes of service providers: 1017
961 Increasing access to professional midwifery care in 1018
962 Nepal. *Tropical Doctor*, 38(4), 197–201. [https://doi.
963 org/10.1258/td.2008.070291](https://doi.org/10.1258/td.2008.070291). 1019
- 964 Davis-Floyd, R., Barclay, L., Tritten, J., & Daviss, B.-A. 1020
965 (2009). *Birth models that work*. Berkeley: University 1021
966 of California Press. 1022
- 967 de Bernis, L., Sherratt, D. R., AbouZahr, C., & Van 1023
968 Lerberghe, W. (2003). Skilled attendants for pregn- 1024
969 nancy, childbirth and postnatal care. *British Medical 1025*
970 *Bulletin*, 67, 39–57. 1026
- 971 Dixon, L. Z. (2015). Obstetrics in a time of violence: 1027
972 Mexican midwives critique routine hospital practices. 1028
973 *Medical Anthropology Quarterly*, 29(4), 437–454. 1029
974 <https://doi.org/10.1111/maq.12174>. 1030
- 975 Firoz, T., Ateka-Barrutia, O., Rojas-Suarez, J. A., 1031
976 Wijeyaratne, C., Castillo, E., Lombaard, H., & Magee, 1032
977 L. A. (2015). Global obstetric medicine: Collaborating 1033
978 towards global progress in maternal health. *Obstetric 1034*
979 *Medicine*, 8(3), 138–145. [https://doi.org/10.1177/175
980 3495X15595308](https://doi.org/10.1177/1753495X15595308). 1035
- 981 Gittelsohn, J., Thapa, M., & Landman, L. T. (1997). 1036
982 Cultural factors, caloric intake and micronutrient suf- 1037
983 ficiency in rural Nepali households. *Social Science & 1038*
984 *Medicine*, 44(11), 1739–1749. [https://doi.org/10.1016/
985 S0277-9536\(96\)00375-9](https://doi.org/10.1016/S0277-9536(96)00375-9). 1039
- 986 Hussein, J., & Clapham, S. (2005). Message in a bottle: 1040
987 Sinking in a sea of safe motherhood concepts. *Health 1041*
988 *Policy*, 73(3), 294–302. [https://doi.org/10.1016/j.
989 healthpol.2004.11.021](https://doi.org/10.1016/j.healthpol.2004.11.021). 1042
- 990 Hussein, J., Bell, J., Dar Iang, M., Mesko, N., Amery, J., 1043
991 & Graham, W. (2011). An appraisal of the maternal 1044
992 mortality decline in Nepal. *PLoS One*, 6(5), e19898. 1045
993 <https://doi.org/10.1371/journal.pone.0019898>. 1046
- 994 Hussein, J., Kanguru, L., Astin, M., & Munjanja, S. 1047
995 (2012). The effectiveness of emergency obstetric 1048
996 referral interventions in developing country settings: 1049
997 A systematic review. *PLoS Medicine*, 9(7), e1001264. 1050
998 <https://doi.org/10.1371/journal.pmed.1001264>. 1051
- 999 Inhorn, M., & Van Balen, F. (2002). *Infertility around 1052*
1000 the globe: New thinking on childlessness, gender, and 1053
1001 reproductive technologies. Berkeley: University of 1054
1002 California Press. 1055
- 1003 Justice, J. (1989). *Policies, plans, and people*. Berkeley: 1056
1004 University of California Press. 1057
- 1005 Karkee, R., Lee, A. H., & Binns, C. W. (2015). Bypassing 1058
1006 birth centres for childbirth: An analysis of data from a 1059
1007 community-based prospective cohort study in Nepal. 1060
1008 *Health Policy and Planning*, 30(1), 1–7. [https://doi.
1009 org/10.1093/heapol/czt090](https://doi.org/10.1093/heapol/czt090). 1061
- 1010 Kertzer, D. I., & Fricke, T. (1997). Toward an anthro- 1062
1011 logical demography. In D. I. Kertzer & T. Fricke 1063
(Eds.), *Anthropological demography* (pp. 1–35). 1064
Chicago: University of Chicago Press. 1065
- Langer, A., Horton, R., & Chalamilla, G. (2013). 1066
A manifesto for maternal health post-2015. *The 1067*
1068 *Lancet*, 381(9867), 601–602. [https://doi.org/10.1016/
1069 S0140-6736\(13\)60259-7](https://doi.org/10.1016/S0140-6736(13)60259-7). 1070
- March, K. (2002). *“If each comes halfway”: Meeting 1071*
1072 tamang women in Nepal. Ithaca: Cornell University 1073
1074 Press. 1075
- Messer, E. (1997). Intra-household allocation of food 1076
1077 and health care: Current findings and understand- 1078
1079 ings—Introduction. *Social Science & Medicine*, 44(11), 1675–1684. [https://doi.org/10.1016/
1080 S0277-9536\(96\)00370-X](https://doi.org/10.1016/S0277-9536(96)00370-X). 1081
- Miller, S., Abalos, E., Chamillard, M., Ciapponi, A., 1082
1083 Colaci, D., Comandé, D.,... Althabe, F. (2016). 1084
1085 Beyond too little, too late and too much, too soon: A 1086
1087 pathway towards evidence-based, respectful maternity 1088
1089 care worldwide. *The Lancet*, 388(10056), 2176–2192. 1090
1091 doi:[https://doi.org/10.1016/S0140-6736\(16\)31472-6](https://doi.org/10.1016/S0140-6736(16)31472-6). 1092
- Ministry of Health – MOH/Nepal, New ERA/Nepal, 1093
1094 & ICF. (2017). Nepal demographic and health sur- 1095
1096 vey 2016. Retrieved from Kathmandu, Nepal: [http://
1097 dhsprogram.com/pubs/pdf/FR336/FR336.pdf](http://dhsprogram.com/pubs/pdf/FR336/FR336.pdf). 1098
- Mullany, B. C. (2006). Barriers to and attitudes towards 1099
1100 promoting husbands’ involvement in maternal health 1101
1102 in Katmandu, Nepal. *Social Science & Medicine*, 62(11), 2798–2809. 1103
- Panter-Brick, C. (1989). Motherhood and subsistence 1104
1105 work: The Tamang of rural Nepal. *Human Ecology*, 17(2), 205–228. 1106
- Rath, A. D., Basnett, I., Cole, M., Subedi, H. N., Thomas, 1107
1108 D., & Murray, S. F. (2007). Improving emergency 1109
1110 obstetric care in a context of very high maternal mor- 1111
1112 tality: The Nepal safer motherhood project 1997– 1112
1113 2004. *Reproductive Health Matters*, 15(30), 72–80. 1113
- Raynes-Greenow, C. (2017). Gaps and challenges 1114
1115 underpinning the first analysis of global coverage 1116
1117 of early antenatal care. *The Lancet Global Health*, 5(10), e949–e950. doi:[https://doi.org/10.1016/
1118 S2214-109X\(17\)30346-7](https://doi.org/10.1016/S2214-109X(17)30346-7). 1119
- Riley, N., & McCarthy, J. (2003). *Demography in the age 1120*
1121 of the postmodern. Cambridge: Cambridge University 1121
1122 Press. 1122
- Rosenfield, A., & Maine, D. (1985). Maternal mortality – 1123
1124 A neglected tragedy: Where is the M in MCH? *The 1124*
1125 *Lancet*, 326(8446), 83–85. [https://doi.org/10.1016/
1126 S0140-6736\(85\)90188-6](https://doi.org/10.1016/S0140-6736(85)90188-6). 1127
- Rosenfield, A., Min, C. J., & Freedman, L. P. (2007). 1128
1129 Making motherhood safe in developing countries. 1129
1130 *New England Journal of Medicine*, 356(14), 1395– 1130
1131 1397. <https://doi.org/10.1056/NEJMp078026>. 1131
- Scheper-Hughes, N. (1997). Demography with- 1132
1133 out numbers. In D. I. Kertzer & T. Fricke (Eds.), 1133
1134 *Anthropological demography*. Chicago: University of 1134
1135 Chicago Press. 1135
- Smith-Oka, V. (2012). Bodies of risk: Constructing moth- 1136
1137 erhood in a Mexican Public Hospital. *Social Science 1136*
1137 and Medicine, 75(12), 2275–2282. 1137

- 1071 Smith-Oka, V. (2015). Microaggressions and the repro- 1086
1072 duction of social inequalities in medical encoun- 1087
1073 ters in Mexico. *Social Science & Medicine*, 143(Supplement C), 9–16. [https://doi.org/10.1016/j.](https://doi.org/10.1016/j.socscimed.2015.08.039) 1088
1074 [socscimed.2015.08.039](https://doi.org/10.1016/j.socscimed.2015.08.039). 1089
- 1075 Souza, J. P., Tunçalp, Ö., Vogel, J. P., Bohren, M., Widmer, 1090
1076 M., Oladapo, O. T.,... Temmerman, M. (2014). 1091
1077 Obstetric transition: The pathway towards ending 1092
1078 preventable maternal deaths. *BJOG: An International* 1093
1079 *Journal of Obstetrics & Gynaecology*, 121, 1–4. 1094
1080 doi:<https://doi.org/10.1111/1471-0528.12735>. 1095
- 1081 Suvedi, B. K., Pradhan, A., Barnett, S., Puri, M., Chritrikar, 1096
1082 S. R., Poudel, P.,... Hulton, L. (2009). *Nepal maternal* 1097
1083 *mortality and morbidity study 2008/2009: Summar of* 1098
1084 *preliminary findings*. Retrieved from Kathmandu 1099
1085 1100
- Thaddeus, S., & Maine, D. (1994). Too far to walk: 1101
Maternal mortality in context. *Social Science & Medicine*, 38(8), 1091–1110. [https://doi.org/10.1016/0277-9536\(94\)90226-7](https://doi.org/10.1016/0277-9536(94)90226-7).
- UNFPA, UNICEF, Bank, T. W., WHO, IPPF, & Council, T. P. (1997). *The safe motherhood action agenda: Priorities for the next decade*. Retrieved from <http://documents.worldbank.org/curated/en/403701468764711167/The-safe-motherhood-action-agenda-priorities-for-the-next-decade>
- WHO. (2016). Maternal mortality fact sheet. Retrieved from <http://www.who.int/mediacentre/factsheets/fs348/en/>
- Wilson, K. (2014). *Not trying: Infertility, childlessness, and ambivalence*. Nashville: Vanderbilt University Press.

Uncorrected Proof