

Women's perspectives on Long-Acting Reversible Contraception: A critical scoping review of qualitative research

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Long-acting Reversible Contraception (LARC) has significant promise both from a public health outlook and a social justice perspective. However, if women's empowerment is to be supported, then perspectives and experiences of LARC must be considered. This scoping review assesses contraceptive users' perspectives and experiences of contraceptive decision-making and practices. A content analysis was conducted to identify research trends in qualitative studies of contraceptive-user perspectives (n = 54), located by means of a systematic search. Interpreting finding through a reproductive justice lens, three main limitations in the scholarship were identified, viz., (1) an instrumentalist, individual-level focus; (2) a lack of consideration for diverse perspectives; and (3) an uncritical focus on young women. While the small body of qualitative research on LARC offers some valuable insights, when viewed from a sexual and reproductive justice perspective it is not sufficiently user-centered or grounded within the reproductive politics surrounding contraceptive programming and provision. Research is needed that draws on appropriate social theory; widens its focus beyond dominant groups; and is cognizant of the multi-level power relations surrounding LARC. Such work provides a nuanced picture of the complex social and contextual factors at play and inform person-centered approaches in sexual and reproductive health policy and programming.

Keywords: Long-Acting Reversible Contraception (LARC); qualitative research; women's health; service-user perspectives; scoping review; reproductive justice

Introduction

In the past decade, a new generation of Long-Acting Reversible Contraceptive (LARC) methods, with increased efficacy and acceptability, has been hailed as among the most significant global developments in reproductive health (Hillard 2013; Shoupe 2016; Higgins, Kramer, and Ryder 2016; Higgins 2017a). These new generation long-acting methods—which include sub-dermal implants (e.g., *Jadelle*, *Norplant*), intrauterine devices (e.g., *Mirena*), and injectables (e.g., *Depo Provera*)—prevent pregnancy for extended time periods (usually up to 5 years). Their success relies mainly on their “fit and forget” nature; unlike user-dependent methods (e.g., the oral contraceptive pill or condoms) they do not require user action or perfect use to be effective (Walker et al. 2018; Higgins

2018). LARC methods are therefore seen as ideal for women judged as likely to have low levels of adherence or for whom decision-making ability is restricted by socio-economic disadvantage or power relations, such as those related to gender or age. Consequently, LARC is recommended as a ‘first-line option’ for teenagers and young women, as well as poor, rural, and/or ethnic minority women (Miller 2016; Brandi and Fuentes 2020a).

Given the advantages above, and other benefits, like long-term effectiveness, cost-efficiency, and safety, LARC is seen as holding promise for promoting both public health and women’s rights. Efforts to promote access and uptake have consequently been ramped up in recent years (Mann and Grzanka 2018; Grzanka and Schuch 2020). From a public health perspective, LARC is seen as a superbly effective method for addressing unintended pregnancy at the population level (Brandi and Fuentes 2020b). From the perspective of women’s rights, the promotion of LARC as safe, affordable contraception contributes to women’s ability to control their own bodies, which is crucial for ensuring gender equity (Senderowicz 2019). However, feminist scholars caution that “contraception can be both a source of empowerment and agency for women who wish to control their fertility and a source of oppression for women deemed socially undesirable reproducers” (Gomez et al., 2018, p. 191).

Historically, women’s bodies have been treated as vehicles to address larger social problems—such as poverty, welfare dependence, or population growth—and in the process contraception has been used in coercive or oppressive ways (Stevens 2015). It is important, therefore, to consider the wider context in which the promotion of LARCs occurs, including the surrounding reproductive politics of particular settings (Gold 2014). This means considering: (i) the broader context of women’s lives, including socio-economic and other constraints on decision-making, (ii) historical reproductive injustices experienced by women from particular social groups; (iii) ongoing racial- and class-based biases in reproductive healthcare and (iv) women’s own preferences and desires (Higgins 2018; Gold 2014; Higgins, Kramer, and Ryder 2016; Gubrium et al. 2016; Gomez, Fuentes, and Allina 2014).

Importantly, a narrow focus on LARC as a ‘first line option’ and as the solution to unintended pregnancy does not necessarily attend to the underlying causes of unintended pregnancies or low contraceptive adherence and restricted decision-making, especially among marginalized women (e.g., structural and systemic dynamics; social relations related to gender, ethnicity/race, class, etc.; and sociocultural discourses and practices) (Chiweshe et al., 2017). This focus can also overshadow women’s own priorities and desires, thereby constraining decision-making. Indeed, we argue, the relative neglect of women’s perspectives is reflected in the literature on LARC (Higgins 2017a). If the goal is to empower women, then such information is crucial to contraceptive policy and programming (Gomez, Fuentes, and Allina 2014). Accordingly, research that privileges women’s perspectives is vital, providing a crucial part of the wider picture of LARC promotion and prescription beyond a narrow focus on efficacy and uptake (Gollub et al. 2016). This is especially necessary for marginalized women. As Ross and Solinger (2017, 299) contend, “the voices of poor women, disabled women, women of color, immigrant women and other marginalized individuals must be at the center of debates about reproduction”.

In this article, we investigate the extent to which research on LARC incorporates women's perspectives and addresses the considerations listed above. Our interest in research that considers the social aspects of LARC, such as decision-making, patient-provider interactions, user experiences and so on, rather than biomedical research. In addition, we focus on qualitative research because such research "allows the assessment of complex processes often missed in quantitative analyses" (Williamson et al. 2009). Unlike the more frequently used survey method, the bottom-up nature of qualitative methods potentially allows women's own priorities and concerns to surface, rather than imposing researchers' meanings and agendas (Gough and Deatrck 2015; Borer and Fontana 2012). Yet, as we show in this paper, very little qualitative research is currently being produced that centers women's voices on issues relating to the promotion, accessibility, and acceptability of LARC. This comparatively small body of emerging literature is the focus of this article.

We conducted a scoping review of user-focused qualitative research on LARC, that is, research including women's perspectives as contraceptive users. A scoping review is useful for identifying and analyzing gaps in knowledge production and examining *how* research is conducted on a certain topic (Peters et al, 2020). Developing established scoping review methods, we apply a reproductive justice lens to appraise critically how current published research on LARC contributes to centering women's contraceptive priorities, needs, and preferences. Reproductive justice seeks to remedy the limited attention given to women's material, socio-economic, and lived realities in sexual and reproductive health—particularly those who are socially marginalized (Ross 2017a). A reproductive justice framework, importantly, centers the voices of women and other marginalized persons.

The framework makes use of an intersectional analytic lens that facilitates "an intersectional way of thinking about the problem of sameness and difference and its relation to power" (Cho, Crenshaw, & McCall 2013, 795). "Intersectionality" is rooted in Black feminist and critical race theorizations of social disadvantage, inequality, and oppression as operating within multiple, converging, or interwoven systems of power relations predicated upon social difference (gender, race, class, etc.) (Crenshaw 1989). Intersectional analyses attend to "the interaction between gender, race, and other categories of difference in individual lives, social practices, institutional arrangements, and cultural ideologies and the outcomes of these interactions in terms of power." (Davis 2008, 68).

In our analysis, we use intersectionality as an analytical strategy to connect academic knowledge production as a representational practice with broader relations of power, recognizing that "what gets studied, what is known, and who has the authority to speak ... are all negotiated within intersectional power dynamics" (Grzanka 2018, 590). Research simultaneously reflects and re/produces certain power relations (regarding reproduction, gender, or ethnicity, for instance) and, in this way, may re-enact privilege or oppression (Lynch et al. 2018, DeBlaere, Watson, & Langehr, 2018).

We explore how power relations are potentially re/produced or challenged in research vis-à-vis the selection of research foci (e.g., topics of interest) and practices (e.g., sampling strategies and

theoretical frameworks employed). This involves (i) examining the role of researcher identities on the research process (i.e., where and by whom is the research conducted?), (ii) assessing participants' intersecting identities (i.e., who are included as participants?); and (iii) locating studies contextually (DeBlaere, et al. 2018). Accordingly, our aim was to examine how qualitative research has considered intersecting social identity markers (i.e., race, ethnicity, socioeconomic status, age, gender, and sexuality). This analytical strategy allows us to address the overarching objective of determining how women's perspectives are incorporated into LARC research, including which women's perspectives are allowed, which are not, and to what effect. Importantly, the aim of this scoping review is not to synthesize research results/outcomes, as explained in the following section.

Materials and methods

Scoping reviews follow a staged approach to the identification, analysis, and synthesis of literature in a research topic area (Tricco et al. 2018). Unlike a systematic review, the aim of a scoping review is to map existing scholarship in a given area in relation to the volume of research produced, its nature and key features. They have great utility not only for identifying research gaps or omissions, but also for the way research in a particular area has been conducted. This allows researchers to make recommendations for future research based on a rigorous and systematic review of literature (Peters et al. 2015). The scoping review produces an overview of the content of identified studies that can then be further analyzed (Levac, Colquhoun, and O'Brien 2010).

For this systematic review, we developed a review protocol prior to the commencement of the study, which follows the established methodological framework developed by Arksey and O'Malley (2005) and subsequently refined by Levac and colleagues (2010). This framework allows for the systematic exploration of a topically diverse and methodologically heterogeneous body of research within the scope of the research question. The protocol was not published or registered but is included as Appendix 1.

The stages that we followed are described below, viz., (i) development of search strategy, (ii) screening and selection, (iii) data extraction, and (iv) content analysis. For reporting, we used the Preferred Reporting Items for Systematic reviews and Meta-Analyses extension for Scoping Reviews (PRISMA-ScR) developed by Tricco and colleagues (2018). This comprises a set of 20 essential items and 2 optional items to help improve the quality, completeness, and transparency of scoping reviews, which are substantively different from systematic reviews.

Search strategy

We sought to locate qualitative studies published in English peer-reviewed journals between January 2008 and October 2018 (when the search was conducted). To locate relevant literature, we used *EBSCO Discovery service*, searching the University library's entire catalogue and selected electronic databases including *PsyInfo*, *PubMed*, *ScienceDirect* and *Scopus*. The search terms used in all databases were ("Long Acting Reversible Contracept*" OR "LARC" OR "Intrauterine device" OR

“Intra-uterine device*” OR “Injectable Contracept*” OR “Subdermal Contraceptive Implant”) AND (“Qualitative” OR “Qualitative method*” OR “Qualitative Methodolog*” OR “Qualitative Research” OR “Qualitative analysis”). In addition to an electronic search, we also manually reviewed the reference lists of several key papers to identify and locate literature not captured during initial searches. Our initial search yielded 1,219 articles; these were then further screened against selection criteria as described in the following section.

Screening and selection

The second author screened the publications located during the initial search against established eligibility criteria. To be included in the review, publications needed to be: (i) qualitative studies, (ii) reporting on user perspectives of LARC, (iii) published in English, (iv) in peer reviewed journals, (v) in the last decade years (2008 – 2018). This period was chosen as broadly corresponding with the rise in popularity and use of LARC. Based on these inclusion criteria, publications were rejected if they: (i) used quantitative methodology, (ii) focused on the perspectives of medical personnel, or (iii) did not substantively focus on one or more LARC method. (The process that was followed is summarized in figure 1.)

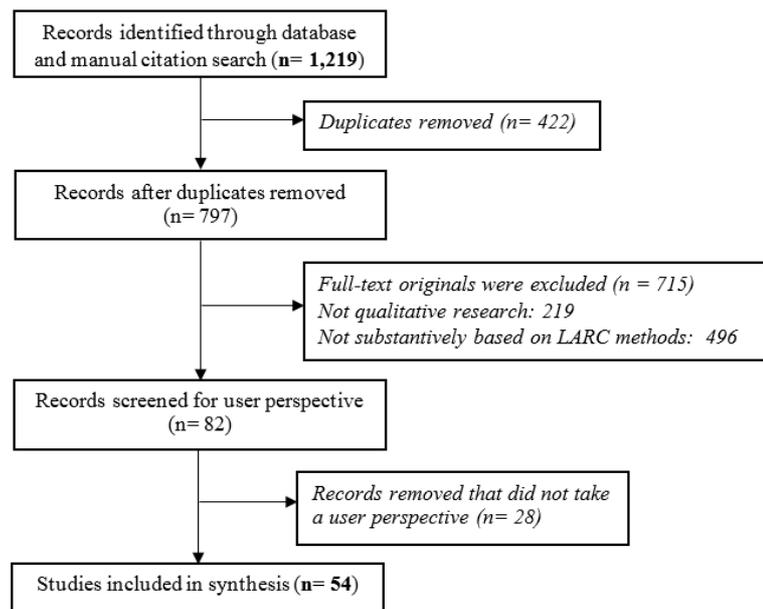


Figure 1. Flow diagram for article selection

After eliminating duplicates (422), the second author applied the criteria above to the remaining records, eliminating articles that reported on quantitative studies (219), and those not substantively focused on LARC (496). These exclusions were reviewed and accepted by Author1. Then, the full text versions of a remaining 82 were then independently reviewed by each author. During this process a further 28 studies that did not include service users/women as participants were removed. Finally,

we compared our selections and reached consensus on a final list of 54 full-text articles that all used qualitative methodology to investigate user perspectives on LARC. (This list appears as Appendix 2.)

Coding and Data extraction

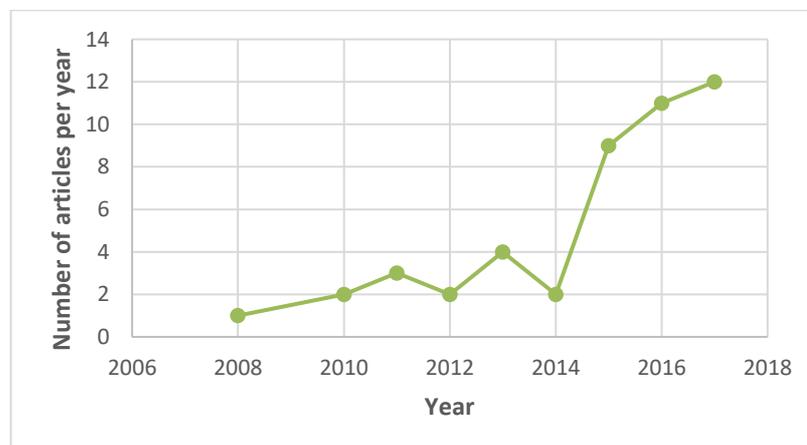
To code our final selection of 54 articles, we developed and piloted a data extraction form, guided by sexual and reproductive justice theory. Our primary objective when selecting items for the tool was to ensure that they adequately captured the study context, issues being addressed, theoretical underpinnings, and, importantly, the participant characteristics. We agreed upon 13 items for extraction, with eight items related to the study context, methodology and main research foci and the remainder concerned with participant characteristics (age, sexuality, race/ethnicity, class, and relationship status). The data were coded independently and disagreements that arose between the researchers were resolved through consensus.

Data analysis

We began with a descriptive content analysis of data extracted from the literature using our codes (see results) to explore the data and identify emerging trends. We then undertook a more advanced interpretative qualitative analysis comprising a thematic narrative appraisal of the scope and nature of literature on LARC. We used our research questions and a Reproductive Justice lens to guide the development and interpretation of themes, analyzing trends, and any absences they implied, through a reproductive justice lens. Our analysis sought to examine the consideration of intersecting social identity markers (i.e., race, ethnicity, socioeconomic status, age, gender and sexuality) that shape contraceptive decision-making and practices, which we address in the discussion.

Results

While quantitative methodology still dominates LARC research, we note a marked increase in the number of qualitative studies overall. Moreover, within the corpus of qualitative research, most studies (80%) *do* include contraceptive users as participants. It is also possible to see that the number of studies taking a user-perspective has increased substantially in recent years (figure 1). Nevertheless, qualitative research remains a small fraction (27%) of the overall body of LARC research.



*Figure 2. Production of user-perspective qualitative research over time***Note.** Data for incomplete year (2018) omitted.**Study Characteristics: location, methodology, and research focus**

Most qualitative studies including user perspectives have been conducted in the ‘global north’. Our results show (Table 1) that over 80 percent of studies we reviewed took place in high-income countries in Europe and North America, with relatively few published studies in middle- and low-income countries.^a

Table 1. Location of research by country type

Country type	Frequency	Percent
Low-income countries	8	14.8
Middle-income countries	2	3.7
High-income countries	44	81.5
Total	54	100.0

Table 2 (below) summarizes the study methodologies identified. Data collected in institutional settings, such as healthcare (38.9%) or education (13%), account for more than half research contexts, presumably due to the convenience in accessing and recruiting populations of interest. Fewer than a quarter of studies took place in community settings (22.2%). Surprisingly, only three (5.6%) of the studies published in the last decade have drawn on increasingly popular Internet-based methods for collecting qualitative data (Morison et al. 2015). Interviewing is the main data collection method used (n=27), followed by the combined use of interviewing and focus groups (n=13), and then focus groups alone (n = 5). Finally, we note that most studies are conducted from a descriptive or realist theoretical perspective (87%), using methods such as grounded theory to analyze their data. Social Cognitive Theory was utilized by six intervention-focused studies. None of the studies reviewed use critical social theory, although six of the studies broadly frame their work in a sexual and reproductive justice perspective.

Table 2. Methodology (n = 54)

	Frequency	Percent
Study/recruitment site		
Not specified	1	1.9
School/University	7	13.0
Community	12	22.2
Healthcare setting	21	38.9
Mixed	10	18.5
Online	3	5.6
	54	100

^a We use the World Bank’s (2018) Country Classification by Income as a proxy for classifying countries according to relative wealth and development.

Data Collection Method		
Interviews	27	50.0
Interviews & Focus Groups	13	24.1
Focus Groups	5	9.3
Mixed methods (+ survey)	9	16.7
	54	100
Theoretical framing		
Not specified	1	1.9
Descriptive/Realist	47	87.0
Social Cognition	6	11.1
	54	100

Just over half of the studies (51.9%) deal with LARCs in general or consider several different methods (Table 3). Where a single method is focused on, this is most often Intrauterine Devices (IUD) (40.7%) and, to a much lesser extent, subdermal implants (7%). None focus exclusively on injectable contraception (e.g., *Depo Provera*).

Table 3. Study focus: Type of LARC method

	Frequency	Percent
More than one method	28	51.9
IUD only	22	40.7
Subdermal Implant only	4	7.4
Injectable only	0	0
Total	54	100.0

Finally, figure 3 (below) illustrates the specific issues explored and relative attention given to each.

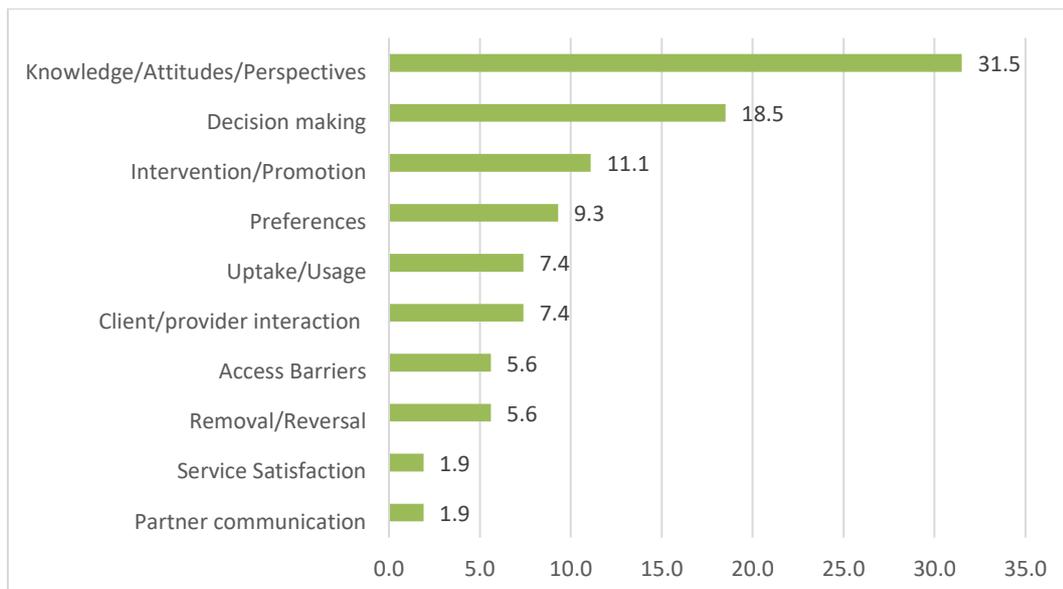


Figure 3. Research focus: issues focused on (%)

By far the issue most researched is women's knowledge, attitudes, and perspectives on LARC (31.5% or 17 articles). Thereafter, contraceptive decision-making is considered in almost a fifth (18.5%) of the studies and method preferences in less than a tenth. Eleven percent of studies were reviews of interventions and other efforts aimed at the promotion of LARC and its uptake. In contrast, relatively few studies examine barriers to accessing LARC (n=3) or the factors contributing to its uptake (n=4).

Participant Characteristics

As the overview of participant characteristics in table 4 (below) shows, most of the studies (82%) include only women, with less than ten percent including men's or male partners' perspectives. None report trans men or gender fluid participants. Unsurprisingly, given that contraception is relevant to women in their childbearing years, female participants tend to be within the 15- to 44-years age range (Table 4). However, our analysis indicates a tendency in the research to focus on younger women. Approximately half of the studies include only teenage (under 19 years) and adolescent (under 25) participants.^b A further nineteen percent of studies expand the age range to thirty years. In contrast, only about twenty-eight percent of the studies include all women of childbearing age (15-44 years).

Race/ethnicity are included as factors of interest in approximately eighty percent of studies. Of these, most (54%) consider these categories in the recruitment of a representative sample, but do not substantively address them in the analysis or findings. Only a very small proportion of studies specifically explore the perspectives of ethnic or racial minorities (13%), indigenous populations (1.9% or 1 study), or participants outside of North America or Europe (11%).

Beyond gender, age, and ethnicity, certain key demographic characteristics are not explicitly reported on or included as an important in the research. Around half of the studies do not report on social class or relationship status (50% and 53.7% respectively). Only four studies (7%) address the perspectives of poor or low-income women specifically, while forty-one percent of studies include it simply to describe the study population. Likewise, sexuality is only ever included as a descriptor of the study population and never addressed in any detail. Most studies (78%) do not specify participants' sexuality. A small proportion explicitly account for diverse sexualities (11%) or explicitly reported that participants were heterosexual (11%). We were able to deduce that the participants were heterosexual (e.g., using language) in three studies, which we report as an inference.

^b There is wide variation in how the literature defined various age categories addressed in studies, with little justification for these. While categories for 'teenage' and 'childbearing age' are fairly uncontentious, defining adolescence was inconsistent. Following Sawyer et al. (2018), we included all categories under 25 years as adolescence. This reflects that social transitions such as financial independence, marriage, and childbearing, now take place, on average, later than they did fifty years ago.

Table 4: Sample Characteristics (n = 54)

Characteristic	Frequency	Percent
Participants		
Women	44	81.5
Women & Men/Male Partner	5	9.3
Women & Healthcare Workers	4	7.4
Women, Men & Healthcare Workers	1	1.9
		100.0
Participant Age		
Not specified	3	5.6
Teens (<19)	6	11.1
Adolescents (<25)	20	37.0
Adolescents and Young Adults (<30)	10	18.5
Childbearing age (15-44)	15	27.8
		100.0
Ethnicity or Race		
Not specified	11	20.4
Ethnic Minority	7	13.0
Indigenous	1	1.9
Multiple	29	53.7
African	4	7.4
Indian	2	3.7
		100.0
Social Class		
Not specified	27	50.0
Poor/Low Income	4	7.4
Middle class/wealthy	1	1.9
Mixed	22	40.7
		100.0
Relationship status		
Not specified	29	53.7
Married/partnered	5	9.3
Mixed	20	37.0
		100.0
Sexuality		
Not specified	42	77.8
Heterosexual	3	5.6
Heterosexual (inferred)	3	5.6
Mixed	6	11.1
		100.0

The observations and interpretations above must of course be evaluated in light of our focus on English-language peer-reviewed journal articles. The omission of other publication formats (e.g., books, chapters), 'grey' literature, and peer-reviewed articles not published in English could be seen as limiting. Still, given that academic journal articles are generally more widely accessible to academic communities and English-language journals tend to dominate in terms of knowledge production, we believe that our review does provide a reasonable indication of the state of research on the subject.

Discussion

There has been a steady increase in the number of published studies on LARC in the last decade, likely due to wider acceptance of long-acting methods as a viable contraceptive option (Hillard 2013; Shoupe 2016). Though still far outweighed by quantitative work, this increase marks a positive trend in the developing body of literature. Qualitative research illuminates the perspectives of participants in ways that quantitative research, such as surveys, cannot (Borer and Fontana 2012). For instance, qualitative methods are increasingly recognized as a valuable way of assessing client experiences and improving health services (Gough and Lyons 2016). More fundamentally, from a justice-oriented standpoint, it must be recognized that women are the ones materially affected by the practices and politics surrounding LARCs, especially young, socially disadvantaged, and ethnic minority women (Roberts et al. 2016). Reading the findings through the intersectional lens of the reproductive justice framework, we have sought to determine how women's viewpoints have been incorporated into qualitative research on LARC and identify three main limitations, discussed in turn below.

(i) An instrumentalist, individual-level focus

Existing research tends to treat LARC chiefly within a medicalized framework. When studies do explore the social factors relating to LARC uptake, retention, satisfaction, safety, and the long-term outcomes, a substantial proportion use quantitative methodologies. Even within the developing body of qualitative literature, most studies take place in medical or institutional settings and tend to focus on individual-level factors (e.g., knowledge, beliefs, attitudes, practices or perceptions) influencing uptake and continuation. For example, women are asked about factors influencing choice, including awareness of and concerns about LARC (e.g., Coates et al., 2018) or about their attitudes toward different kinds of contraceptive methods (e.g., Glasier et al., 2008). This research seeks to identify modifiable 'client-side barriers' such as inaccurate knowledge or negative attitudes (Higgins 2017b) and to contribute to interventions, such as targeted counselling (Potter, Rubin, and Sherman 2014; SE and Winrob 2010), or improved information-giving, education and health promotion efforts (Rose et al. 2011; Spies et al. 2010; Greenberg et al. 2017).

However, this instrumentalist focus is too narrowly centered on behavior and cognitions and fails to fully explore women's experiences within the wider social context in which contraceptive practices and decision-making occurs. For instance, women's decision-making agency may be limited by contextual factors such as coercion by male partners in heterosexual partnerships or provider bias. This oversight is evident in the small number of studies that explore access barriers or broader contextual factors that influence uptake and continuation.

The instrumentalist and individual level focus is further illustrated by the fact that few studies include the perspectives of men or male partners. This is not inherently a limitation, as foregrounding women's perspectives should be a priority. What it does suggest, however, is that research seldom considers men and the partners of women accessing or considering LARC. This oversight limits the

opportunity to understand how LARC decision-making is shaped by gendered power relations within the context of heterosexual partnerships (c.f. Lewis et al., 2012).

A few studies do take a broader approach, exploring broader aspects of women's experiences, such as: contextual factors shaping method selection (Higgins et al. 2015; Higgins 2017b; C Zeal, Higgins, and Newton 2016; Carley Zeal, Higgins, and Newton 2018), or the client-caregiver context and how this restricts/enables decision-making (Brandi et al. 2018; Amico et al. 2016; Stevens 2018; Anu Manchikanti Gomez and Wapman 2017; Higgins, Kramer, and Ryder 2016; Anu M Gomez, Fuentes, and Allina 2014). This research also usefully illuminates how women's desires, preferences, and priorities may not align with those of (well-meaning) experts (Sundstrom et al. 2017; Anu Manchikanti Gomez, Mann, and Torres 2018b; Higgins et al. 2016; Higgins 2017a).

These studies reveal the importance of not allowing enthusiasm for LARC and the goal of increasing uptake to eclipse women's voices (Anu Manchikanti Gomez and Freihart 2017). Such findings can inform person-centered approaches that, for example, "support women in matching with methods that align with their preferences, potentially increasing contraceptive satisfaction and continuation and the number of women who can actualize their pregnancy desires" (Anu Manchikanti Gomez and Freihart 2017). A good example of how this wider, contextualized perspective can be accomplished is Holt et al.'s (2020) person-centered framework, recently proposed for "policymakers, program implementers, and researchers [to] use as a blueprint for considering a broader range of factors" (S878) in contraceptive care. The framework, underpinned by a socio-ecological perspective, considers programmatic and policy aspects as well as broader structural and social factors. Importantly, it locates the person in context: as embedded in community and social contexts and is intended to help promote equitable access.

More research that contextualizes contraceptive decision-making and use is needed. One of the primary limitations of the current qualitative scholarship is the lack of theoretical perspectives to move beyond the individual level and, thus, to account overtly for complexity in the social, economic and political dimensions shaping contraceptive practices and decision-making. This is insufficient from a sexual and reproductive justice perspective, which argues that contraceptive care does not occur in a neutral context, but is inextricably embedded in persistent racial, socio-economic, and other inequalities (Anu Manchikanti Gomez, Fuentes, and Allina 2014). Overall, there is a clear need for studies that draw on appropriate social theory to illuminate the contextual dimension, which includes aspects beyond individual control. It would be valuable to increase the use of critical social theories (e.g., post structuralism, post colonialism, critical masculinities theory) that illuminate and challenge the broader social systems and structures in which contraceptive use and care are embedded. In particular, feminist frameworks can assist with exploring the underlying norms within the wider, highly gendered context of contraception, in which women are seen as primarily responsible for pregnancy prevention and contraceptive management (Wigginton et al. 2014).

(ii) A lack of diverse perspectives

Most research lacked purposeful attention to diversity. Only a handful of studies explicitly mention diversity as part of their research design, in relation to ethnicity (Rose et al. 2011), race and socio-economic status (Higgins et al. 2015; Higgins 2017b; Higgins, Kramer, and Ryder 2016), or diversity in general (Hoggart and Newton 2013; Hoggart, Louise Newton, and Dickson 2013). Alternatively, in several cases a mixed sample is purely incidental as researchers used convenience or purposive sampling strategies for recruitment. This lack of consideration for the importance of including marginalized viewpoints is evident in the number of studies that fail even to report on ethnicity (20.4%), class (50%), relationship status (53.7%) and sexuality (79.6%).

When participant characteristics are reported, there tends to be a focus on dominant groups (e.g. the White middle-class). Compounding this, very few studies explore women's perspectives on LARC in developing or even middle-income contexts, where many of the factors determining access to and use of LARC are likely to differ from those in relatively well-resourced settings.

A clear gap in the literature pertains to sexual and gender minorities. It is true that most women who wish to prevent pregnancy would most likely be heterosexual, cisgender women, but failing to attend to this explicitly leaves heterosexuality as a taken for granted norm that can obscure diverse sexualities within samples and omit the possibility of LARC as an option for sexual minorities. Admittedly, the issue of sexual and gender minority persons needing to prevent pregnancy is a complex issue, but silence on this issue may compound the challenges and marginalization that they already experience and unwanted pregnancy may hold particularly difficult consequences for trans men and gender diverse individuals.

(iii) An uncritical focus on young women

In contrast with the lack of consideration of minority groups, teenaged and younger women/mothers have been foregrounded in LARC research, with most attention concentrated on women under the age of 25 years of age. This focus may seem merely pragmatic: preventing 'early' and unintended pregnancy in a 'key population' generally not desiring of, or seen as unready for, parenthood. It may also be justified by a population-based approach to public health, since adolescents are deemed high risk for unintended pregnancies and as contributing disproportionately to unintended pregnancy rates (Schmidt et al. 2015). Still, the view of age as a risk factor should not simply be accepted uncritically and reiterated in research.

Critical feminist research has shown that a seemingly factual risk-based rationale is in fact value-laden and informed by culturally defined moral problems, power relations, ideas about proper development, and ideal citizenship (Brown et al. 2013). Notably, a deficit-based understanding of adolescence drawn from developmental psychology—in which 'developmental changes' render young people more inclined to 'risk-taking behaviors' (Macleod 2017)—underpins the positioning of adolescents ideal users of LARC, prompting advocates such as Hillard (2013, S1), for instance, to

assert: “we see a clear need to move toward methods of contraception that are ‘forgettable’ and easier for adolescents ... to use”. The view of adolescents as being not fully capable of making rational reproductive choices and unable to be trusted with adherence to other forms of contraception potentially stigmatizes young women as unreliable or lacking concern for their own and others’ the best interests (their children, society etc.). They are not only *at-risk*, but simultaneously *a risk* (Monterro and Kelly 2016).

Nowhere is risk-thinking more evident than in the rhetoric surrounding teenage pregnancy, which is widely constructed as an intractable social problem (Macleod 2017), and prominent in discussions about LARC (e.g., Pickering and colleagues). ‘Early’ pregnancy is associated with “remarkable impacts on individual teens (both teen mothers and teen fathers), their children, and on our society” (Hillard 2013, S1). Despite significant contrary evidence—indicating that under certain social and cultural conditions, teenage mothers may enjoy comparative advantages *vis-à-vis* older mothers (see Macleod, 2017)—the narrative of the negative consequences of teenage pregnancy and motherhood persists, deep-rooted in mainstream developmental psychology and its normative Western assumptions about childbearing and motherhood. Thus, the focus on young women is not simply pragmatic, but driven by a concern with the ‘problem’ of teenage pregnancy. Thus, while making a wider array of contraceptive options accessible to young women is vital, it is also important to question the uncritical problematisation of teenage pregnancy that seems to drive the focus on young women.

Rather than orienting research to the “problem” of young women’s sexuality, critical feminist researchers point to the need for research that approaches young women as possessing valuable expertise on their sexual and reproductive lives (Allen 2011). This aligns with a reproductive justice approach, which emphasizes the need to center the perspectives of those on the margins (Ross 2017b). A more critical, nuanced approach, which amplifies young women’s voices, is needed to tease out the array of power relations that enable and constrain young women’s contraceptive choices and practices, such as sexual violence, shaming and stigmatizing practices, socio-economic precarity, denial of services and so forth. Such research can potentially contribute to making contraception available to those young women who wish to use it.

In conclusion, while existing qualitative research does add value to our understanding of the social dimensions of LARC uptake and use, work that captures women’s voices, their views of LARC, and the role that power plays in decision-making remains lacking. The medicalized, individualizing, and normative focus of much of the qualitative research we reviewed masks the role contextual factors and does little to challenge the targeted LARC promotion efforts that problematize certain women— young, socio-economically deprived or ethnic minorities. That none of the studies we reviewed used critical social theory suggests a lack of concern for understanding the role of power in reproductive decision-making, and by implication sexual and reproductive justice. If women’s interests truly are a central motivator in efforts to promote LARC, then this must change. Qualitative work is urgently required that locates women’s perspectives within the complex social and contextual factors at play

in order to inform much-needed person-centered approaches in sexual and reproductive health policy and programs (Brandi and Fuentes 2020b; Holt et al. 2020).

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References

- Allen, Louisa. 2011. *Young People and Sexuality Education: Rethinking Key Debates*. Springer.
- Amico, Jennifer R., Ariana H. Bennett, Alison Karasz, and Marji Gold. 2016. "“She Just Told Me to Leave It’”: Women’s Experiences Discussing Early Elective IUD Removal." *Contraception* 94 (4). Elsevier Inc.: 357–361. doi:10.1016/j.contraception.2016.04.012.
- Arksey, Hilary, and Lisa O’Malley. 2005. "Scoping Studies: Towards a Methodological Framework." *International Journal of Social Research Methodology* 8 (1). Routledge: 19–32. doi:10.1080/1364557032000119616.
- Borer, M.I., and A. Fontana. 2012. "Postmodern Trends: Expanding the Horizons of Interviewing Practices and Epistemologies." In *The SAGE Handbook of Interview Research: The Complexity of the Craft*, edited by J.F. Gubrium, 45–60. Thousand Oaks, Calif: SAGE Publications.
- Brandi, Kristyn, and Liza Fuentes. 2020a. "The History of Tiered-Effectiveness Contraceptive Counseling and the Importance of Patient-Centered Family Planning Care." *American Journal of Obstetrics and Gynecology*, November. Mosby Inc. doi:10.1016/j.ajog.2019.11.1271.
- Brandi, Kristyn, and Liza Fuentes. 2020b. "The History of Tiered-Effectiveness Contraceptive Counseling and the Importance of Patient-Centered Family Planning Care." *American Journal of Obstetrics and Gynecology* 222 (4). Mosby Inc.: S873–S877. doi:10.1016/j.ajog.2019.11.1271.
- Brandi, Kristyn, Elisabeth Woodhams, Katharine O White, and Pooja K Mehta. 2018. "An Exploration of Perceived Contraceptive Coercion at the Time of Abortion." *Contraception* 97 (4): 329–334. doi:10.1016/j.contraception.2017.12.009.
- Brown, Sally, Jeannie Shoveller, Cathy Chabot, and Anthony D. LaMontagne. 2013. "Risk, Resistance and the Neoliberal Agenda: Young People, Health and Well-Being in the UK, Canada and Australia." *Health, Risk and Society* 15 (4): 333–346. doi:10.1080/13698575.2013.796346.
- Coates, Charrelle, Catherine M Gordon, and Tina Simpson. 2018. "A Qualitative Study Exploring Contraceptive Practices And Barriers To Long-Acting Reversible Contraceptive Use In A Sample Of Adolescents Living In The Southern United States." *Journal Of Pediatric And Adolescent Gynecology*, July. Division of Adolescent and Transition Medicine, Cincinnati Children’s Hospital Medical Center, Cincinnati, OH, United States. Electronic address: charrelle.coates@cchmc.org.: North American Society for Pediatric and Adolescent Gynecology. doi:10.1016/j.jpap.2018.07.006.
- Crenshaw, Kimberle. 1989. "Demarginalizing the Intersection of Race and Sex: A Black Feminist Critique of Antidiscrimination Doctrine, Feminist Theory and Antiracist Politics." *University of Chicago Legal Forum* 1989: 139–167.
- Davis, Kathy. (2008). "Intersectionality as buzzword." *Feminist Theory*, 9 (1), 67–85.

- Glasier, A, J Scorer, A Bigrigg, Anna Glasier, Jane Scorer, and Alison Bigrigg. 2008. "Attitudes of Women in Scotland to Contraception: A Qualitative Study to Explore the Acceptability of Long-Acting Methods." *Journal of Family Planning & Reproductive Health Care* 34 (4). NHS Lothian Family Planning/Well Woman Services, Edinburgh, UK: BMJ Publishing Group: 213–217. doi:10.1783/147118908786000497.
- Gold, Rachel Benson. 2014. "Guarding Against Coercion While Ensuring Access: A Delicate Balance." *Guttmacher Policy Review* 17 (3): 8–14. <https://www.guttmacher.org/about/gpr/2014/09/guarding-against-coercion-while-ensuring-access-delicate-balance>.
- Gollub, E. L., J. Devieux, J.-G. Michele, S. Pierre Ste-Rose, S. Neptune, and V. Pelletier. 2016. "'This Method, I Think, Can Shed New Light': Haitian-American Women's Reflections on Risk, Culture, and Family Planning Decisions From a Short-Term Trial of a Cervical Barrier (Femcap)." *International Quarterly of Community Health Education* 36 (4): 253–263. doi:10.1177/0272684X16666432.
- Gomez, Anu M, Liza Fuentes, and Amy Allina. 2014. "Women or LARC First? Reproductive Autonomy and the Promotion of Long-Acting Reversible Contraceptive Methods." *Perspectives on Sexual & Reproductive Health* 46 (3): 171–175. doi:10.1363/46e1614.Women.
- Gomez, Anu Manchikanti, and Bridget Freihart. 2017. "Motivations for Interest , Disinterest and Uncertainty in Intrauterine Device Use Among Young Women." *Maternal and Child Health Journal* 21 (9). Springer US: 1753–1762. doi:10.1007/s10995-017-2297-9.
- Gomez, Anu Manchikanti, Liza Fuentes, and Amy Allina. 2014. "Women or LARC First? Reproductive Autonomy and the Promotion of Long-Acting Reversible Contraceptive Methods." *Perspectives on Sexual & Reproductive Health* 46 (3): 171–175. doi:10.1363/46e1614.Women.
- Gomez, Anu Manchikanti, E S Mann, and V Torres. 2018a. "'It Would Have Control over Me Instead of Me Having Control': Intrauterine Devices and the Meaning of Reproductive Freedom." *Critical Public Health* 28 (2): 190–200. doi:10.1080/09581596.2017.1343935.
- Gomez, Anu Manchikanti, Emily S. Mann, and Vanessa Torres. 2018b. "'It Would Have Control over Me Instead of Me Having Control': Intrauterine Devices and the Meaning of Reproductive Freedom." *Critical Public Health* 28 (2). Taylor & Francis: 190–200. doi:10.1080/09581596.2017.1343935.
- Gomez, Anu Manchikanti, and Mikaela Wapman. 2017. "Under (Implicit) Pressure: Young Black and Latina Women's Perceptions of Contraceptive Care." *Contraception* 96 (4). Elsevier: 221–226. doi:10.1016/j.contraception.2017.07.007.
- Gough, Brendan, and J.A. Deatrick. 2015. "Qualitative Health Psychology Research: Diversity, Power, and Impact." *Health Psychology* 34 (4): 289–292.
- Gough, Brendan, and Antonia Lyons. 2016. "The Future of Qualitative Research in Psychology: Accentuating the Positive." *Integrative Psychological and Behavioural Science* 50: 234–243. doi:10.1007/s12124-015-9320-8.
- Greenberg, Katherine Blumoff, Sara Catherine Jenks, Nina Piazza, Beatriz Ramos Malibiran, and C. Andrew Aligne. 2017. "A Snapshot of Urban Adolescent Women's Contraceptive Knowledge at the Onset of a Community Long-Acting Reversible Contraceptive Promotion Initiative." *Journal of Pediatric and Adolescent Gynecology* 30 (4). Elsevier Inc: 474–478. doi:10.1016/j.jpog.2017.01.003.
- Grzanka, Patrick R., and Elena Schuch. 2020. "Reproductive Anxiety and Conditional Agency at the Intersections of Privilege: A Focus Group Study of Emerging Adults' Perception of Long-Acting Reversible Contraception." *Journal of Social Issues* 76 (2): 270–313. doi:10.1111/josi.12363.

- Gubrium, Aline C., Emily S. Mann, Sonya Borrero, Christine Dehlendorf, Jessica Fields, Arline T. Geronimus, Anu Manchikanti Gomez, et al. 2016. "Realizing Reproductive Health Equity Needs More than Long-Acting Reversible Contraception (LARC)." *American Journal of Public Health* 106 (1): 18–19. doi:10.2105/AJPH.2015.302900.
- Higgins, Jenny A. 2017a. "Pregnancy Ambivalence and Long-Acting Reversible Contraceptive (LARC) Use Among Young Adult Women: A Qualitative Study." *Perspectives on Sexual and Reproductive Health*. doi:10.1363/psrh.12025.
- Higgins, Jenny A. 2017b. "Pregnancy Ambivalence and Long-Acting Reversible Contraceptive (LARC) Use Among Young Adult Women: A Qualitative Study." *Perspectives on Sexual and Reproductive Health*. doi:10.1363/psrh.12025.
- Higgins, Jenny A., Renee D. Kramer, and Kristin M. Ryder. 2016. "Provider Bias in Long-Acting Reversible Contraception (LARC) Promotion and Removal: Perceptions of Young Adult Women." *American Journal of Public Health* 106 (11): 1932–1937. doi:10.2105/AJPH.2016.303393.
- Higgins, Jenny A., Kristin Ryder, Grace Skarda, Erica Koepsel, and Eliza A. Bennett. 2015. "The Sexual Acceptability of Intrauterine Contraception: A Qualitative Study of Young Adult Women." *Perspectives on Sexual and Reproductive Health* 47 (3): 115–122. doi:10.1363/47e4515.
- Higgins, Jenny A., Jessica N. Sanders, Mari Palta, and David K. Turok. 2016. "Women's Sexual Function, Satisfaction, and Perceptions After Starting Long-Acting Reversible Contraceptives." *Obstetrics & Gynecology* 128 (5): 1143–1151. doi:10.1097/AOG.0000000000001655.
- Higgins, Jenny A. 2018. "Celebration Meets Caution: LARC's Boons, Potential Busts, and the Benefits of a Reproductive Justice Approach." *Contraception* 89 (4). Elsevier: 237–241. doi:10.1016/j.contraception.2014.01.027.
- Hillard, Paula J. Adams. 2013. "What Is LARC? And Why Does It Matter for Adolescents and Young Adults?" *Journal of Adolescent Health* 52: S1–S5. doi:10.1016/j.jadohealth.2013.02.001.
- Hoggart, Lesley, Victoria Louise Newton, and Jane Dickson. 2013. "'I Think It Depends on the Body, with Mine It Didn't Work': Explaining Young Women's Contraceptive Implant Removal." *Contraception* 88 (5): 636–640. <http://ezproxy.massey.ac.nz/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=aph&AN=90629894&site=eds-live&scope=site>.
- Hoggart, Lesley, and Victoria Louise Newton. 2013. "Young Women's Experiences of Side-Effects from Contraceptive Implants: A Challenge to Bodily Control." *Reproductive Health Matters* 21 (41): 196–204. doi:10.1016/S0968-8080(13)41688-9.
- Holt, Kelsey, Reiley Reed, Joia Crear-Perry, Cherisse Scott, Sarah Wulf, and Christine Dehlendorf. 2020. "Beyond Same-Day Long-Acting Reversible Contraceptive Access: A Person-Centered Framework for Advancing High-Quality, Equitable Contraceptive Care." *American Journal of Obstetrics and Gynecology* 222 (4). Elsevier Inc.: S878.e1-S878.e6. doi:10.1016/j.ajog.2019.11.1279.
- Levac, Danielle, Heather Colquhoun, and Kelly K O'Brien. 2010. "Scoping Studies: Advancing the Methodology." *Implementation Science* 5 (1). BioMed Central: 69.
- Lewis, Dinah A., Summer L. Martins, and Melissa L. Gilliam. 2012. "Partner Roles in Contraceptive Use: What Do Adolescent Mothers Say?" *Journal of Pediatric and Adolescent Gynecology* 25 (6). Elsevier Inc.: 396–400. doi:10.1016/j.jpog.2012.08.003.
- Macleod, Catriona. 2017. "'Adolescent' Sexual and Reproductive Health: Controversies, Rights And Justice." In *An International Handbook on Adolescent Health and Development: The Public Health Response*, edited by A.L. Cherry, L. Baltag, and M.E. Dillon, 169–181. New York: Springer.

- Mann, Emily S., and Patrick R. Grzanka. 2018. "Agency-without-Choice: The Visual Rhetorics of Long-Acting Reversible Contraception Promotion." *Symbolic Interaction* 41 (3): 334–356. doi:10.1002/symb.349.
- Miller, Dawn. 2016. "Equity in Sexual and Reproductive Health - an Ongoing Challenge." *Journal of Primary Health Care (Online)*. <http://ezproxy.massey.ac.nz/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=edsinz&AN=edsinz.877824&site=eds-live&scope=site>.
- Monterro, K., and P. Kelly. 2016. *Young People and the Aesthetics of Health Promotion : Beyond Reason, Rationality and Risk*. New York and London: Routledge.
- Morison, T., A.F. Gibson, B. Wigginton, and S. Crabb. 2015. "Online Research Methods in Psychology: Methodological Opportunities for Critical Qualitative Research." *Qualitative Research in Psychology* 12 (3). doi:10.1080/14780887.2015.1008899.
- Peters, Micah D.J., Christina M. Godfrey, Hanan Khalil, Patricia McInerney, Deborah Parker, and Cassia Baldini Soares. 2015. "Guidance for Conducting Systematic Scoping Reviews." *International Journal of Evidence-Based Healthcare* 13 (3): 141–146. doi:10.1097/XEB.0000000000000050.
- Pickering, Neil, Lynley Anderson, and Helen Paterson. 2015. "Teens and Young Adults Should Be Started on Long-Acting Reversible Contraceptives before Sexual Activity Commences: FOR: An Opt-out Programme Would Avoid Teen Pregnancy and Associated Costs." *BJOG: An International Journal Of Obstetrics And Gynaecology* 122 (8). University of Otago, New Zealand.: Wiley-Blackwell: 1052. doi:10.1111/1471-0528.13465.
- Potter, Julia, Susan E. Rubin, and Peter Sherman. 2014. "Fear of Intrauterine Contraception among Adolescents in New York City." *Contraception* 89 (5). (1)Adolescent Medicine Fellow at Columbia, New York Presbyterian: Elsevier USA: 446–450. doi:10.1016/j.contraception.2014.01.011.
- Roberts, Lynn, Deborah L. Kaplan, Mary T. Bassett, Deborah L. Kaplan, Sarah P. Roberts, Allyna B. Steinberg, Alzen Whitten, et al. 2016. "Locating LARC Within the Context of Sexual and Reproductive Justice." *American Journal of Public Health* 106 (7): e13–e14. doi:10.2105/AJPH.2016.303206.
- Rose, Sally B, Annette J Cooper, Naomi K Baker, and Beverley Lawton. 2011. "Attitudes Toward Long-Acting Reversible Contraception Among Young Women Seeking Abortion." *Journal of Women's Health* 20 (11). New Rochelle, New York: Mary Ann Liebert, Inc.: 1729–1735. doi:10.1089/jwh.2010.2658.
- Ross, Loretta J. 2017a. "Conceptualising Reproductive Justice Theory: A Manifesto for Activism." In *Radical Reproductive Justice: Foundation, Theory, Practice, Critique*. New York, NY, US: Feminist Press.
- Ross, Loretta J. 2017b. "Conceptualizing Reproductive Justice Theory: A Manifesto for Activism." In *Radical Reproductive Justice: Foundation, Theory, Practice, Critique*, edited by L Ross, L Roberts, E Derkas, W Peoples, and P Bridgewater, 170–233. New York, NY: Feminist Press.
- Ross, Loretta J, and Rickie Solinger. 2017. *Reproductive Justice: An Introduction*. Oakland: California University Press.
- Sawyer, Susan M, Peter S Azzopardi, Dakshitha Wickremarathne, and George C Patton. 2018. "The Age of Adolescence." *The Lancet Child & Adolescent Health* 2 (3): 223–228. doi:https://doi.org/10.1016/S2352-4642(18)30022-1.
- Schmidt, Elizabeth O., Aimee James, K. Michele Curran, Jeffrey F. Peipert, and Tessa Madden. 2015. "Adolescent Experiences with Intrauterine Devices: A Qualitative Study." *Journal of Adolescent Health*. 57 (4): 381–386. doi:10.1016/j.jadohealth.2015.05.001.

- SE, Rubin, and I Winrob. 2010. "Urban Female Family Medicine Patients' Perceptions about Intrauterine Contraception." *Journal of Women's Health (15409996)* 19 (4). Department of Family and Social Medicine, Montefiore Medical Center/Albert Einstein College of Medicine, Bronx, New York 10461, USA. surubin@montefiore.org; Mary Ann Liebert, Inc.: 735–740. doi:10.1089/jwh.2009.1549.
- Senderowicz, Leigh. 2019. "'I Was Obligated to Accept': A Qualitative Exploration of Contraceptive Coercion." *Social Science and Medicine* 239 (September). Elsevier: 112531. doi:10.1016/j.socscimed.2019.112531.
- Shoupe, Donna. 2016. "LARC Methods: Entering a New Age of Contraception and Reproductive Health." *Contraception and Reproductive Medicine (2016)*, 1–9. doi:10.1186/s40834-016-0011-8.
- Spies, Erica L, Natoshia M Askelson, Emma Gelman, and Mary Losch. 2010. "Young Women's Knowledge, Attitudes, and Behaviors Related to Long-Acting Reversible Contraceptives." *Womens Health Issues* 20 (6): 394–399. doi:10.1016/j.whi.2010.07.005.
- Stevens, Lindsay M. 2015. "Planning Parenthood: Health Care Providers' Perspectives on Pregnancy Intention, Readiness, and Family Planning." *Social Science and Medicine* 139 (August). Elsevier Ltd: 44–52. doi:10.1016/j.socscimed.2015.06.027.
- Stevens, Lindsay M. 2018. "'We Have to Be Mythbusters': Clinician Attitudes about the Legitimacy of Patient Concerns and Dissatisfaction with Contraception." *Social Science & Medicine* 212 (September). Pergamon: 145–152. doi:10.1016/J.SOCSCIMED.2018.07.020.
- Sundstrom, Beth, Merissa Ferrara, Andrea L DeMaria, Annalise Baker-Whitcomb, and Jackelyn B Payne. 2017. "Integrating Pregnancy Ambivalence and Effectiveness in Contraceptive Choice." *Health Communication* 32 (7): 820–827.
- Tricco, Andrea C, Erin Lillie, Wasifa Zarin, Kelly K O'Brien, Heather Colquhoun, Danielle Levac, David Moher, Micah D J Peters, Tanya Horsley, and Laura Weeks. 2018. "PRISMA Extension for Scoping Reviews (PRISMA-ScR): Checklist and Explanation." *Annals of Internal Medicine* 169 (7). Am Coll Physicians: 467–473.
- Walker, Susan, Victoria Louise Newton, Lesley Hoggart, and Michael Parker. 2018. "'I Think Maybe 10 Years Seems a Bit Long.' Beliefs and Attitudes of Women Who Had Never Used Intrauterine Contraception." *BMJ Sexual and Reproductive Health* 44 (2): 90–96. doi:10.1136/bmjsex-2017-101798.
- Wigginton, Britta, Melissa L. Harris, Deborah Loxton, Danielle L. Herbert, and Jayne Lucke. 2014. "The Feminisation of Contraceptive Use: Australian Women's Accounts of Accessing Contraception." *Feminism & Psychology* 25 (2): 178–198. doi:10.1177/0959353514562802.
- Williamson, Lisa M, Alison Parkes, Daniel Wight, Mark Petticrew, and Graham J Hart. 2009. "Limits to Modern Contraceptive Use among Young Women in Developing Countries : A Systematic Review of Qualitative Research." *Reproductive Health* 6 (3): 1–12. doi:10.1186/1742-4755-6-3.
- Zeal, C, J Higgins, and S Newton. 2016. "The Role of Patient-Perceived Autonomy in Regard to Long-Acting Reversible Contraceptive Methods." *Contraception* 94 (4): 413–414. doi:10.1016/j.contraception.2016.07.115.
- Zeal, Carley, Jenny A Higgins, and Shaunna R Newton. 2018. "Patient-Perceived Autonomy and Long-Acting Reversible Contraceptive Use: A Qualitative Assessment in a Midwestern, University Community." *BioResearch Open Access, Vol 7, Iss 1, Pp 25-32 (2018) VO - 7*, no. 1. Mary Ann Liebert, Inc. publishers: 25. doi:10.1089/biores.2017.0037.

Appendix 1

Protocol for a scoping review of qualitative research on women's perspectives on Long-Acting Reversible Contraception

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Background and purpose of the scoping review

Over the last decade Long-Acting Reversible Contraceptives (LARC), such as sub-dermal implants, intrauterine devices, and injectable, have emerged as popular methods for the long-term prevention of pregnancy (Walker et al. 2018; Higgins 2018). These methods have been met with a great deal of enthusiasm by those working in sexual and reproductive health because of their efficacy and reliability (Mann and Grzanka 2018). LARCs are viewed as particularly effective contraceptive method for women who have been identified as being 'at risk' of unintended or unwanted pregnancies, such as teenagers, poor women, ethnic minorities, and those whose reproductive decision-making is limited by power relations (Miller, 2016).

Despite the clear promise that LARCs offer as effective and affordable contraceptive methods, feminist scholars have cautioned that, as with other public health interventions targeted at 'at risk populations', these contraceptives may be used to control the fertility of women identified as "socially undesirable reproducers" (Gomez et al., 2018, p.191). It is therefore important that the use of these contraceptive methods is evaluated critically, especially given their promotion as a first line option (Higgins, 2017). In this scoping review, we will seek to explore the extent to which the qualitative research on LARC addresses women's reproductive decision making from a reproductive justice perspective. That is, to what extent does the emerging body of qualitative research on LARCs account for women's own priorities and agency to control their own reproductive decision-making.

The purpose of a scoping review is to map emerging bodies of empirical research on a broad topic. The process of mapping the research on a broad topic is to identify how the topic is being studied, for what purpose and by whom. Importantly, scoping reviews differ from systematic literature reviews in that their purpose is to elucidate a body of research rather than collate evidence from a smaller more focused topic or area of study (Arskey and O'Malley, 2005).

Research questions

The five questions to be answered by our review include:

1. What populations are being studied in the empirical qualitative literature on LARC?
2. What are the phenomena of interest (e.g. uptake, preference, etc.) being addressed in the studies on LARC?
3. What qualitative methods are being used to study LARC?
4. What types of theories are being used to interpret findings and explain phenomena of interest relating to LARC?

5. In what settings are qualitative studies of LARCs being conducted (e.g. clinical, within the population, etc.)?

Materials and Methods

Our review will use Levac, Colquhoun, and O'Brien's (2010) adaption of Arksey & O'Malley's (2005) six stage framework for scoping reviews to structure our examination of the extent and range of research of qualitative research on LARC using Reproductive Justice as a central concept. The purpose of using this framework is to ensure that there is a high degree of rigor and transparency in our approach.

This framework can be summarized as follows:

- *Stage 1:* Identify a research question that allows for breadth in coverage of literature on the topic of interest
- *Stage 2:* Identifying relevant studies by systematically searching various electronic databases using delineated search terms, citation searches of key papers, and consulting with experts in the field
- *Stage 3:* Selecting studies for inclusion in the review using clearly defined inclusion and exclusion criteria
- *Stage 4:* Charting the data, which involves systematically extracting and sorting pieces of information from selected studies into key themes and categories
- *Stage 5:* Collating, summarizing, and reporting the results with the aim of providing a content analysis and/or narrative account of the literature
- *Stage 6:* Consultation

Although the conceptual model we use is given as a staged process, in practice scoping reviews are seldom linear (Arksey & O'Malley, 2005; Levac et al., 2010). The purpose of scoping reviews is to explore the breadth of literature and its focus may develop as researchers become more familiar with the extent of literature on their topic. The process of undertaking the scoping review is therefore likely to be an iterative process, with research questions, search criteria, analysis and reporting continually being refined.

The framework summarized above will be applied with PRISMA Extension for Scoping Reviews (PRISMA-ScR) checklist in mind to ensure that the reporting of our review findings is comprehensive and consistent with established best practice for scoping reviews (Tricco et al., 2018).

Stage 1: identifying the research question

Scoping reviews tend to cover the breadth of literature from a broadly defined topic of interest and would necessarily encompass a diverse range of research topics using various study designs. Consequently, our research question must be defined broadly enough to account for the diversity in the literature, while simultaneously providing sufficient guidance in the identification of inclusionary/exclusionary criteria. Balancing these two needs at the outset of the review can be tricky, and in many instances the research questions for these reviews are refined as the literature is explored (Arksey & O'Malley, 2005).

While an iterative approach to the development of research questions for our review will be useful in ensuring we cover the breadth of literature, we will not go as far as developing the research questions post hoc. Some degree of specificity in our research questions is needed to guide our literature search and mapping strategies. Therefore, instead of providing a single focused

research question, our review includes a set of broad research questions that will guide or approach to study selection, data extraction, analysis and reporting.

Since our scoping review covers the breadth of research and is likely to include various theoretical frameworks and study designs in assessing qualitative studies on LARC, conventional approaches to developing research questions—such as the Population, Intervention, Comparison, Outcome (PICO) tool (Richardson, Wilson, Nishikawa, & Hayward, 1995)—are not adequate. Instead, we will use an adapted version of the SPIDER (Sample, Phenomenon of Interest, Design, Evaluation, Research type) tool (Cooke, Smith, & Booth, 2012) to the develop five broad questions for our review (above).

Stage 2: identifying relevant studies

The identification of relevant studies to include in our scoping review will be a systematic process that involves searching electronic databases and citations for literature that meet defined eligibility criteria (below). This will be achieved by searching electronic databases of the published literature, which will include *EBSCO Discovery service*, which searches the University library's entire catalogue, and selected electronic databases including *PsyInfo*, *PubMed*, *ScienceDirect* and *Scopus*. The search terms to be used will be determined by a preliminary search of literature using the above databases to develop effective search strings that capture the articles sought. Searches of all databases will use the same Boolean search terms.

Terms will be searched as both keywords in the title and/or abstract and subject headings as appropriate. We will also hand-search reference lists of included studies to identify additional studies of relevance. The search will be limited to English language publications published within the decade 2008 to 2018. (See inclusion criteria further below.) Search results will be downloaded and imported into a *Mendeley*, which will function as our primary literature management tool.

Search databases

- *EBSCO Discovery service*
- PsycINFO
- Scopus
- PubMed
- ScienceDirect

Inclusion Criteria

Our systematic search for literature will start with the following predefined eligibility criteria based on our research questions. However, the iterative nature of the review means that as we become familiar with the literature these criteria may be narrowed or broadened as needed.

- Limited to qualitative studies or mixed methods studies with a qualitative component
- Reporting on user perspectives of LARC (i.e., includes contraceptive users as participants)
- Published in English
- Peer reviewed journal articles
- Published in the decade between 2008-2018

Stage 3: study selection

The review process will consist of two phases of screening, namely, (1) a title and abstract review and (2) full-text review. For the first phase of screening, one investigator will independently screen the title and abstract of all citations retrieved for inclusion against a set of minimum inclusion

criteria. The criteria will be tested on a sample of abstracts before beginning the abstract review to confirm that they are robust enough to capture any articles that may relate to the research topic. Any articles that are deemed relevant will be included in the full-text review. In the second phase, the two investigators will then each independently assess the full-text articles to establish if they meet the inclusion criteria. Any discordant full-text articles will be reviewed a second time and further disagreements about eligibility at the full-text review stage will be resolved through discussion until full consensus is obtained.

Relevant studies will be included if they are qualitative or mixed method studies focused on any LARC method (or several long-term methods) and include contraceptive users as participants. Based on the above inclusion criteria, publications will be rejected if the study uses a quantitative methodology only, includes healthcare providers as participants (as opposed to contraceptive users), or does not substantially focus on one or more LARC method (e.g., focus on contraception generally).

Stage 4: charting the data

The next stage of the review involves identifying and extracting key pieces of information from each study for the purposes of analysis and reporting. This ‘charting’ of the data involves the extracting data from studies based on predetermined criteria and sorting material into themes for analysis/review (Arksey & O’Malley, 2005). To assist in this process of extraction (coding of records) and to provide a framework for organizing data we will use a charting form in *MS Excel*, comprising relevant categories and sub-categories related to the study context, issues being addressed, theoretical underpinnings, and, importantly, the participant characteristics.

We have developed a charting form and the categories and sub-categories are provided in Table 1 (below). These categories were determined based on each researcher’s initial review of a sample of studies captured during the preliminary literature search (described above) and our knowledge of the LARC literature. Each researcher proposed categories, these were then discussed, and agreed upon. We then pilot tested and refined the form, which may be further refined at the extraction stage. The form will be updated with additional categories and sub-categories should any of relevance be identified during the data extraction phase. In Line with Arksey and O’Malley’s (2005) approach, charting the results will be an iterative process whereby the charting table is continually updated.

Using the data charting form, data extraction will be conducted in tandem by two reviewers who will independently extract data from all included studies. To ensure accurate data collection, each reviewer's independent extracted data will be compared, and any discrepancies will be discussed to ensure consistency between the reviewers. The data will be compiled in a single charting form for analysis.

Table 1: Categories for data extraction/coding of records

Category	Sub-category	Description
Study details	Country	Relative wealth and development of the country where the study took place as determined by national income. We will use the World Bank’s (2018) Country Classification by Income, which is commonly used by the World Health Organization (2018) to classify countries for analysis purposes.
	Publication year	The year the study was published (2008-2018)

	Study location	The setting where the study/data collection took place (e.g. clinic, hospital, women’s health center, school)?
	Data collection method	What qualitative methods were used to collect data (e.g. focus groups, interviews, surveys)?
	Theory used	What social theory was used, if any, to analyze data?
	Type of LARC	What type of LARCs were the focus of the study (e.g. IUD, injectable, subdermal, more than one)?
	Participants	Who was the focus of the study (e.g. women or providers)?
	Focus	What aspect of LARC was the focus of the study (e.g. uptake, barriers, preferences, timing)?
Participant details	Age	What age group of women were the focus of the study (e.g. teens, young adults, all women of childbearing age)?
	Sexuality	What participant sexualities are identified in the study (e.g. heterosexual women, sexual minorities, inferred heterosexual)?
	Class	How does the study, if it does, identify the class of the women being studied, possibly using income as a proxy for class (e.g. low-income, working class, middle class, wealthy)?
	Race and ethnicity	How do studies identify the race or ethnicity, if they do, of participants (e.g., European, ethnic minority, undefined)?
	Relationship status	If and how studies use relationship status as part of the analysis (e.g. single, in a relationship, married)

Stage 5: collating, analyzing and reporting the results

This stage tends to be the most extensive part of the review and involves analysis of extracted data, reporting the results of analysis, and interpretation of those results (Levac et al., 2010). While this approach in many respects follows the same process as systematic literature reviews, the primary difference is that scoping reviews do not synthesize the results/outcomes of included sources of evidence (Peters et al., 2020) there is no attempt to systematically assess the quality of methods and evidence in the literature (Arksey & O’Malley, 2005).

It is well established that there are many ways in which data can be analyzed and presented in scoping reviews. Once again, the aim is *not* to synthesize the results/outcomes of the included studies; as this would be more appropriately done within the conduct of a systematic review (Peters et al., 2020). We will conduct a descriptive content analysis, including basic coding of data. This will produce a summary of data coded to a particular category (e.g., study focus, study population). The results will be reported using basic descriptive statistics (e.g., frequency tables and cross tabulations) and graphs. We will then undertake a more advanced interpretative qualitative analysis comprising a thematic narrative appraisal of the scope and nature of literature on LARC, using our research questions and a Reproductive Justice lens to guide the development and interpretation of themes.

Stage 6: Consultation

To be determined.

Discussion

The purpose of scoping the qualitative literature on LARC is to understand the gaps in this emerging area of research with a view to identifying opportunities for further research. Of particular importance in this regard is the identification of the need for research that uses critical social theory and takes a reproductive justice perspective.

In addition to the publication of the review, the scoping of the literature will be used to inform a program of research on the use of LARC in South Africa and Aotearoa New Zealand

References:

- Arksey, Hilary, and Lisa O'Malley. 2005. "Scoping Studies: Towards a Methodological Framework." *International Journal of Social Research Methodology* 8 (1). Routledge: 19–32. doi:10.1080/1364557032000119616.
- Cooke, A., Smith, D., & Booth, A. 2012. Beyond PICO: the SPIDER tool for qualitative evidence synthesis. *Qualitative health research*, 22(10), 1435-1443.
- Gomez, Anu Manchikanti, and Mikaela Wapman. 2017. "Under (Implicit) Pressure: Young Black and Latina Women's Perceptions of Contraceptive Care." *Contraception* 96 (4). Elsevier: 221–226. doi:10.1016/j.contraception.2017.07.007.
- Grzanka, Patrick R., and Elena Schuch. 2020. "Reproductive Anxiety and Conditional Agency at the Intersections of Privilege: A Focus Group Study of Emerging Adults' Perception of Long-Acting Reversible Contraception." *Journal of Social Issues* 76 (2): 270–313. doi:10.1111/josi.12363.
- Higgins, Jenny A. 2017. "Pregnancy Ambivalence and Long-Acting Reversible Contraceptive (LARC) Use Among Young Adult Women: A Qualitative Study." *Perspectives on Sexual and Reproductive Health*. doi:10.1363/psrh.12025.
- Higgins, Jenny A. 2018. "Celebration Meets Caution: LARC's Boons, Potential Busts, and the Benefits of a Reproductive Justice Approach." *Contraception* 89 (4). Elsevier: 237–241. doi:10.1016/j.contraception.2014.01.027.
- Levac, Danielle, Heather Colquhoun, and Kelly K O'Brien. 2010. "Scoping Studies: Advancing the Methodology." *Implementation Science* 5 (1). BioMed Central: 69.
- Miller, Dawn. 2016. "Equity in Sexual and Reproductive Health - an Ongoing Challenge." *Journal of Primary Health Care (Online)*. <http://ezproxy.massey.ac.nz/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=edsinz&AN=edsinz.877824&site=eds-live&scope=site>.
- Richardson, W. S., Wilson, M. C., Nishikawa, J., & Hayward, R. S. 1995. The well-built clinical question: a key to evidence-based decisions. *Acp j club*, 123(3), A12-3.
- Peters MDJ, Godfrey C, Mclnerney P, Munn Z, Tricco AC, Khalil, H. 2020. "Scoping Reviews". In *JBI Manual for Evidence Synthesis*, edited by E Aromataris & Z Munn. Joanna Briggs Institute. Available from <https://synthesismanual.jbi.global>. <https://doi.org/10.46658/JBIMES-20-12>
- Tricco, Andrea C, Erin Lillie, Wasifa Zarin, Kelly K O'Brien, Heather Colquhoun, Danielle Levac, David Moher, Micah D J Peters, Tanya Horsley, and Laura Weeks. 2018. "PRISMA Extension for Scoping Reviews (PRISMA-ScR): Checklist and Explanation." *Annals of Internal Medicine* 169 (7). Am Coll Physicians: 467–473.
- Walker, Susan, Victoria Louise Newton, Lesley Hoggart, and Michael Parker. 2018. "'I Think Maybe 10 Years Seems a Bit Long.' Beliefs and Attitudes of Women Who Had Never Used Intrauterine Contraception." *BMJ Sexual and Reproductive Health* 44 (2): 90–96. doi:10.1136/bmjshr-2017-101798.

Appendix II: Articles included in review

- Alemayehu, M., Belachew, T., Tilahun, T., 2012. Factors associated with utilization of long acting and permanent contraceptive methods among married women of reproductive age in Mekelle town, Tigray region, north Ethiopia. *BMC Pregnancy Childbirth* 12. <https://doi.org/10.1186/1471-2393-12-6>
- Amico, J.R., Bennett, A.H., Karasz, A., Gold, M., 2016. “She just told me to leave it”: Women’s experiences discussing early elective IUD removal. *Contraception* 94, 357–361. <https://doi.org/10.1016/j.contraception.2016.04.012>
- Bell, K. N., Meyn, L. A., & Chen, B. A. (2018, October). Long-Acting Reversible Contraceptive Uptake before and after the Affordable Care Act Contraceptive Mandate in Women Undergoing First Trimester Surgical Abortion. *Women’s Health Issues*, pp. 412–413. <https://doi.org/10.1016/j.whi.2018.04.007>
- Bharadwaj, P., Saxton, J.C., Mann, S.N., Jungmann, E.M.A., Stephenson, J.M., 2011. What influences young women to choose between the emergency contraceptive pill and an intrauterine device? A qualitative study. *Eur. J. Contracept. Reprod. Heal. Care* 16, 201–209. <https://doi.org/10.3109/13625187.2011.565891>
- Brandi, K., Woodhams, E., White, K.O., Mehta, P.K., 2018. An exploration of perceived contraceptive coercion at the time of abortion. *Contraception* 97, 329–334. <https://doi.org/10.1016/j.contraception.2017.12.009>
- Brown, M.K., Auerswald, C., Eyre, S.L., Deardorff, J., Dehlendorf, C., 2013. Identifying counseling needs of nulliparous adolescent intrauterine contraceptive users: A qualitative approach. *J. Adolesc. Heal.* 52, 293–300. <https://doi.org/10.1016/j.jadohealth.2012.07.004>
- Bryant, A.G., Hamela, G., Gottert, A., Stuart, G.S., Kamanga, G., 2015. Reasons for Intrauterine Device Use, Discontinuation and Non-Use in Malawi: A Qualitative Study of Women and their Partners. *African J. Reprod. Heal. / La Rev. Africaine la Santé Reprod.* 50.
- Cameron, S.T., Craig, A., Sim, J., Gallimore, A., Cowan, S., Dundas, K., Heller, R., Milne, D., Lakha, F., 2017. Feasibility and acceptability of introducing routine antenatal contraceptive counselling and provision of contraception after delivery: the APPLES pilot evaluation. *BJOG An Int. J. Obstet. Gynaecol.* 124, 2009–2015. <https://doi.org/10.1111/1471-0528.14674>
- Coates, C., Gordon, C.M., Simpson, T., 2018. A Qualitative Study Exploring Contraceptive Practices And Barriers To Long-Acting Reversible Contraceptive Use In A Sample Of Adolescents Living In The Southern United States. *J. Pediatr. Adolesc. Gynecol.* <https://doi.org/10.1016/j.jpjg.2018.07.006>
- Dasari, M., Borrero, S., Akers, A.Y., Sucato, G.S., Dick, R., Hicks, A., Miller, E., 2016. Barriers to Long-Acting Reversible Contraceptive Uptake Among Homeless Young Women. *J. Pediatr. Adolesc. Gynecol.* 29, 104–110. <https://doi.org/10.1016/j.jpjg.2015.07.003>
- Davidson, A.S., Fabiyi, C., Demissie, S., Getachew, H., 2017. Is LARC for Everyone? A Qualitative Study of Sociocultural Perceptions of Family Planning and Contraception Among Refugees in Ethiopia. *Matern. Child Health J.* 21, 1699–1705. <https://doi.org/10.1007/s10995-016-2018-9>
- Downey, M.M., Arteaga, S., Villaseñor, E., Gomez, A.M., 2017. Family Planning: More Than a Destination: Contraceptive Decision Making as a Journey. *Women’s Heal. Issues* 27, 539–545.
- Gedeon, J., Hsue, S.N., Walsh, M., Sietstra, C., MarSan, H., Foster, A.M., 2015. Assessing the experiences of intra-uterine device users in a long-term conflict setting: a qualitative study on the Thailand-Burma border. *Confl. Heal.* 9, 1–7.
- Glasier, A., Scorer, J., Bigrigg, A., Glasier, A., Scorer, J., Bigrigg, A., 2008. Attitudes of women in Scotland to contraception: a qualitative study to explore the acceptability of long-acting methods. *J. Fam. Plan. Reprod. Heal. Care* 34, 213–217. <https://doi.org/10.1783/147118908786000497>
- Gomez, A.M., Freihart, B., 2017. Motivations for Interest, Disinterest and Uncertainty in Intrauterine Device Use Among Young Women. *Matern. Child Health J.* 21, 1753–1762. <https://doi.org/10.1007/s10995-017-2297-9>
- Gomez, A. M., Mann, E. S., & Torres, V. (2018). ‘It would have control over me instead of me having control’: intrauterine devices and the meaning of reproductive freedom. *Critical Public Health*, 28(2), 190–200. <https://doi.org/10.1080/09581596.2017.1343935>
- Gomez, A. M., & Wapman, M. (2017). Under (implicit) pressure: young Black and Latina women’s perceptions of contraceptive care. *Contraception*, 96(4), 221–226. <https://doi.org/10.1016/j.contraception.2017.07.00>
- Greenberg, K.B., Jenks, S.C., Piazza, N., Malibiran, B.R., Aligne, C.A., 2017. A Snapshot of Urban Adolescent Women’s Contraceptive Knowledge at the Onset of a Community Long-Acting Reversible Contraceptive Promotion Initiative. *J. Pediatr. Adolesc. Gynecol.* 30, 474–478. <https://doi.org/10.1016/j.jpjg.2017.01.003>
- Higgins, J.A., 2017. Pregnancy Ambivalence and Long-Acting Reversible Contraceptive (LARC) Use Among Young Adult Women: A Qualitative Study. *Perspect. Sex. Reprod. Health.* <https://doi.org/10.1363/psrh.12025>
- Higgins, J.A., Kramer, R.D., Ryder, K.M., 2016. Provider bias in long-Acting reversible contraception (LARC) promotion and removal: Perceptions of young adult women. *Am. J. Public Health* 106, 1932–1937. <https://doi.org/10.2105/AJPH.2016.303393>

- Higgins, J.A., Ryder, K., Skarda, G., Koepsel, E., Bennett, E.A., 2015. The Sexual Acceptability of Intrauterine Contraception: A Qualitative Study of Young Adult Women. *Perspect. Sex. Reprod. Health* 47, 115–122. <https://doi.org/10.1363/47e4515>
- Hoggart, L., Louise Newton, V., Dickson, J., 2013. “I think it depends on the body, with mine it didn’t work”: explaining young women’s contraceptive implant removal. *Contraception* 88, 636–640.
- Hoggart, L., Newton, V.L., 2013. Young women’s experiences of side-effects from contraceptive implants: a challenge to bodily control. *Reprod. Health Matters* 21, 196–204. [https://doi.org/10.1016/S0968-8080\(13\)41688-9](https://doi.org/10.1016/S0968-8080(13)41688-9)
- Inoue, K., Kelly, M., Barratt, A., Bateson, D., Rutherford, A., Black, K.I., Stewart, M., Richters, J., 2016. Australian women’s experiences of the subdermal contraceptive implant: A qualitative perspective. *Aust. Fam. Physician* 45, 734–739. <https://doi.org/10.1136/jfprhc-2014-101132>
- Kavanaugh, M.L., Frohwirth, L., Jerman, J., Popkin, R., Ethier, K., 2013. Long-acting Reversible Contraception for Adolescents and Young Adults: Patient and Provider Perspectives. *J. Pediatr. Adolesc. Gynecol.* 26, 86–95. <https://doi.org/10.1016/j.jpap.2012.10.006>
- Lemoine, J., Peters, M., Guiahi, M., 2016. Motivating Factors for Dual Method Contraception Use Amongst Adolescents and Young Women: A Qualitative Investigation. *J. Pediatr. Adolesc. Gynecol.* 29, 160–161. <https://doi.org/10.1016/j.jpap.2016.01.007>
- Lewis, D.A., Martins, S.L., Gilliam, M.L., 2012. Partner Roles in Contraceptive Use: What Do Adolescent Mothers Say? *J. Pediatr. Adolesc. Gynecol.* 25, 396–400. <https://doi.org/10.1016/j.jpap.2012.08.003>
- Mishra, N., Panda, M., Pyne, S., Srinivas, N., Pati, S., Pati, S., 2017. Barriers and enablers to adoption of intrauterine device as a contraceptive method: A multi-stakeholder perspective. *J. Fam. Med. Prim. Care* 6, 616–621.
- Murphy, M.K., Burke, P.J., Haider, S., 2017. A Qualitative Application of Diffusion of Innovations to Adolescents’ Perceptions of Long-Acting Reversible Contraception’s Attributes. *J. Pediatr. Adolesc. Gynecol.* 30, 484–490. <https://doi.org/10.1016/j.jpap.2016.11.005>
- Okpo, E., Allerton, L., Brechin, S., 2014. “But you can’t reverse a hysterectomy!” Perceptions of long acting reversible contraception (LARC) among young women aged 16–24 years: A qualitative study. *Public Health* 128, 934–939. <https://doi.org/10.1016/j.puhe.2014.08.012>
- Paine, C.W., Harding, J., Hiserodt, E., White, K., Richardson, S., Akers, A., 2018. Understanding Young Women’s Experiences Using Intrauterine Devices: A Qualitative Examination. *J. Pediatr. Adolesc. Gynecol.* 31, 172.
- Potter, J., Rubin, S.E., Sherman, P., 2014. Fear of intrauterine contraception among adolescents in New York City. *Contraception* 89, 446–450. <https://doi.org/10.1016/j.contraception.2014.01.011>
- Purcell, C., Cameron, S., Lawton, J., Glasier, A., Harden, J., 2016. Contraceptive care at the time of medical abortion: Experiences of women and health professionals in a hospital or community sexual and reproductive health context. *Contraception* 93, 170–177. <https://doi.org/10.1016/j.contraception.2015.09.016>
- Robinson, N., Moshabela, M., Owusu-Ansah, L., Kapungu, C., Geller, S., 2016. Barriers to Intrauterine Device Uptake in a Rural Setting in Ghana. *Health Care Women Int.* 37, 197–215. <https://doi.org/10.1080/07399332.2014.946511>
- Rose, S.B., Cooper, A.J., Baker, N.K., Lawton, B., 2011. Attitudes Toward Long-Acting Reversible Contraception Among Young Women Seeking Abortion. *J. Women’s Heal.* 20, 1729–1735. <https://doi.org/10.1089/jwh.2010.2658>
- Rubin, S.E., Winrob, I., 2010. Urban female family medicine patients’ perceptions about intrauterine contraception. *J. Women’s Heal.* 19, 735–740. <https://doi.org/10.1089/jwh.2009.1549>
- Rubin, S.E., Felsher, M., Korich, F., Jacobs, A.M., 2016. Urban Adolescents’ and Young Adults’ Decision-Making Process around Selection of Intrauterine Contraception. *J. Pediatr. Adolesc. Gynecol.* 29, 234–239. <https://doi.org/10.1016/j.jpap.2015.09.001>
- Sangraula, M., Garbers, S., Garth, J., Shakibnia, E.B., Timmons, S., Gold, M.A., 2017. Integrating Long-Acting Reversible Contraception Services into New York City School-Based Health Centers: Quality Improvement to Ensure Provision of Youth-Friendly Services. *J. Pediatr. Adolesc. Gynecol.* 30, 376–382. <https://doi.org/10.1016/j.jpap.2016.11.004>
- Schmidt, E.O., James, A., Curran, K.M., Peipert, J.F., Madden, T., 2015. Adolescent experiences with intrauterine devices: A qualitative study. *J. Adolesc. Heal.* 57, 381–386. <https://doi.org/10.1016/j.jadohealth.2015.05.001>
- Shakibnia, E.B., Timmons, S.E., Gold, M.A., Garbers, S., 2018. “It’s Pretty Hard to Tell Your Mom and Dad That You’re on a Method”: Exploring How an App Could Promote Adolescents’ Communication with Partners and Parent(s) to Increase Self-Efficacy in Long-Acting Reversible Contraception Use. *J. Pediatr. Adolesc. Gynecol.* 31, 116–121. <https://doi.org/10.1016/j.jpap.2017.09.012>
- Sober, S., Shea, J.A., Shaber, A.G., Whittaker, P.G., Schreiber, C.A., 2017. Postpartum adolescents’ contraceptive counselling preferences. *Eur. J. Contracept. Reprod. Heal. Care* 22, 83–87. <https://doi.org/10.1080/13625187.2016.1269161>

- Spies, E.L., Askelson, N.M., Gelman, E., Losch, M., 2010. Young women's knowledge, attitudes, and behaviors related to long-acting reversible contraceptives. *Womens Heal. Issues* 20, 394–399. <https://doi.org/10.1016/j.whi.2010.07.005>
- Sundstrom, B., Baker-Whitcomb, A., DeMaria, A.L., 2015. A Qualitative Analysis of Long-Acting Reversible Contraception. *Matern. Child Health J.* 19, 1507–1514. <https://doi.org/10.1007/s10995-014-1655-0>
- Sundstrom, B., Billings, D., Zenger, K.E., 2016. Keep Calm and LARC On: A theory-based long-acting reversible contraception (LARC) access campaign. *J. Commun. Healthc.* 9, 49–59. <https://doi.org/10.1080/17538068.2016.1143165>
- Sundstrom, B., Demaria, A.L., Meier, S., Jones, A., Moxley, G.E., 2015. It Makes You Rethink Your Choice of the Pill": Theory-Based Formative Research to Design a Contraceptive Choice Campaign. *J. Health Commun.* 20, 1346–1354. <https://doi.org/10.1080/10810730.2015.1018650>
- Sundstrom, B., Ferrara, M., DeMaria, A.L., Baker-Whitcomb, A., Payne, J.B., 2017. Integrating Pregnancy Ambivalence and Effectiveness in Contraceptive Choice. *Health Commun.* 32, 820–827.
- Sweeney, L.A., Molloy, G.J., Byrne, M., Murphy, A.W., Morgan, K., Hughes, C.M., Ingham, R., 2015. A qualitative study of prescription contraception use: The perspectives of users, general practitioners and pharmacists. *PLoS One* 10, 1–13. <https://doi.org/10.1371/journal.pone.0144074>
- Sweeney, L.-A., Molloy, G.J., Byrne, M., Murphy, A.W., Morgan, K., Hughes, C.M., Ingham, R., 2015. A Qualitative Study of Prescription Contraception Use: The Perspectives of Users, General Practitioners and Pharmacists. *PLoS One*.
- Tibajuka, L., Odongo, R., Welikhe, E., Mukisa, W., Kugonza, L., Busingye, I., Nabukalu, P., Ngonzi, J., Asimwe, S.B., Bajunirwe, F., 2017. Factors influencing use of long-acting versus short-acting contraceptive methods among reproductive-age women in a resource-limited setting. *BMC Womens. Health* 17. <https://doi.org/10.1186/s12905-017-0382-2>
- Timmons, S.E., Shakibnia, E.B., Gold, M.A., Garbers, S., 2018. MyLARC: A Theory-Based Interactive Smartphone App to Support Adolescents' Use of Long-Acting Reversible Contraception. *J. Pediatr. Adolesc. Gynecol.* 31, 285–290. <https://doi.org/10.1016/j.jpap.2017.11.005>
- Williamson, L.M., Buston, K., Sweeting, H., 2009. Young women's continued use of oral contraceptives over other hormonal methods: Findings from a qualitative study. *J. Fam. Plan. Reprod. Heal. Care* 35, 167–172. <https://doi.org/10.1783/147118909788708174>
- Winn-Dix, E.A., Nathan, S.A., Rawstorne, P., 2016. Informing the introduction of contraceptive implants in the Pacific: A mixed methods study of contraceptive beliefs and behaviours in Tonga. *Aust. N. Z. J. Public Health* 40, 115–119. <https://doi.org/10.1111/1753-6405.12494>
- Zeal, C., Higgins, J., Newton, S., 2016. The role of patient-perceived autonomy in regard to long-acting reversible contraceptive methods. *Contraception* 94, 413–414. <https://doi.org/10.1016/j.contraception.2016.07.115>
- Zeal, C., Higgins, J.A., Newton, S.R., 2018. Patient-Perceived Autonomy and Long-Acting Reversible Contraceptive Use: A Qualitative Assessment in a Midwestern, University Community. *BioResearch Open Access*, Vol 7, Iss 1, Pp 25-32 VO - 7 25. <https://doi.org/10.1089/biores.2017.0037>