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## COLLEGE WOMEN'S INTEREST IN AN OVER-THE-COUNTER ORAL CONTRACEPTIVE

By Haley Dougherty

Senior Honors Thesis Public Policy and Law Department Trinity College, Hartford, CT Fall 2017-Spring 2018

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#### **INTRODUCTION**

Among college women<sup>1</sup> using a method of contraception, more than half use an oral contraceptive pill (OC).<sup>2</sup> According to a 2012 report, nearly ten million people use oral contraceptives in the United States.<sup>3</sup> College women are also more than twice as likely to take an OC as compared to other contraceptive users—25 percent of whom choose an OC as their preferred method.<sup>4</sup> Despite its popularity, about half of women that initiate oral contraceptive use discontinue within the first year.<sup>5</sup> While some have attributed this high discontinuation rate to side effects, more recent studies argue that focusing on deterrent side effects ignores the larger problem of barriers to OC accessibility. The pill remains a prescription-only drug in the United States, although the associated restrictions pose an obstacle. For at least the past 30 years, researchers and reproductive rights advocates have suggested that oral contraceptives be available over-the-counter to increase accessibility and subsequently reduce rates of unplanned pregnancy. But for a drug to transition from prescription-only to over-the-counter in the United States (an "Rx-to-OTC switch"), a pharmaceutical company first needs to conduct research to prove its safety and apply to the U.S. Food and Drug Administration (FDA) who then evaluates its safety profile and determines whether proper labeling can ensure safe and efficient use by consumers.<sup>6</sup>

<sup>&</sup>lt;sup>1</sup> Transgender healthcare remains under-researched. All participants identified as women, and this thesis will refer to contraceptive pill users using female pronouns and the terms "women" and "females". However, it should be noted that not everyone taking an oral contraceptive pill identifies as a woman.

<sup>&</sup>lt;sup>2</sup> American College Health Association, *Undergraduate Student Reference Group Executive Summary*, Spring 2016, <u>http://www.acha-ncha.org/docs/NCHA-</u> II%20SPRING%202016%20UNDERGRADUATE%20REFERENCE%20GROUP%20EXECUTIVE%20SUMMA

<sup>&</sup>lt;u>RY.pdf.</u> <sup>3</sup> Guttmacher Institute, *Contraceptive Use in the United States*, September 2016, <u>https://www.guttmacher.org/fact-sheet/contraceptive-use-united-states</u>.

<sup>&</sup>lt;sup>4</sup> Ibid.

<sup>&</sup>lt;sup>5</sup> Barbara Vaughan, James Trussell, Kathryn Kost, Susheela Singh, Rachel Jones, "Discontinuation and resumption of contraceptive use: results from the 2002 National Survey of Family Growth," *Contraception* 78 (October 2008): 271-283.

<sup>&</sup>lt;sup>6</sup> "FAQs about Rx-to-OTC Switch," Consumer Healthcare Products Association, <u>https://www.chpa.org/switchfaqs.aspx</u>.

Since the 1990s, researchers interested in the potential of an Rx-to-OTC switch for OCs have sought to determine whether women would be interested in purchasing their pills OTC.<sup>7</sup> In part, the answer to this policy question would help make the case to pharmaceutical companies that OTC OCs were worth the investment in research and development for the FDA application.<sup>8</sup> Surveys and interviews with women asked about their opinions, likelihood of use, and the amount they would be willing to pay for the convenience of an OTC OC. Several studies found that different populations of women support OTC access to OCs.<sup>9</sup> Yet while specific studies have focused on teenagers, low-income women, and minority women, only one study has attempted to capture the opinion of college women in particular.

In 1997, a survey of 290 undergraduate women found that 65 percent believed OCs should not be available without a prescription.<sup>10</sup> Now, twenty years later, in light of the Affordable Care Act (ACA) and increasing public acceptance of birth control,<sup>11</sup> and considering the specific barriers to OCs college women face, I sought to examine and update these findings through semi-structured interviews with college students.<sup>12</sup> In doing so, I sought to capture the nuance of their opinion on this issue and speak openly and candidly with my peers about their OC initiation, OC accessibility, OC use, and finally, their

<sup>&</sup>lt;sup>7</sup> Britt Wahlin, Kate Grindlay, Daniel Grossman, "Should oral contraceptives be available over the counter?" *Food and Drug Policy Forum* (March 2014): 4.

<sup>&</sup>lt;sup>8</sup> Ibid.

<sup>&</sup>lt;sup>9</sup> Daniel Grossman, Kate Grindlay, Rick Li, Joseph E. Potter, James Trussell, and Kelly Blanchard, "Interest in over-the-counter access to oral contraceptives among women in the United States," *Contraception* 88, no. 4 (2013): 544-552; Kate Grindlay, Diana Greene Foster, and Daniel Grossman, "Attitudes Toward Over-the-Counter Access To Oral Contraceptives Among a Sample Of Abortion Clients in the United States," *Perspectives on Sexual and Reproductive Health* 46, no. 2 (2014): 83-89; Ruth Manski and Melissa Kottke, "A survey of teenagers" attitudes toward moving oral contraceptives over the counter," *Perspectives on Sexual and Reproductive Health* 47, no. 3 (2015): 123-129; Amanda Dennis and Daniel Grossman, "Barriers to Contraception and Interest in Over-the-Counter Access Among Low-Income Women: A Qualitative Study," *Perspectives on Sexual and Reproductive health* 44, no. 2 (2012): 84-91.

<sup>&</sup>lt;sup>10</sup> Diana G. Foster, M. Antonia Biggs, Kathryn A. Phillips, Kate Grindlay, and Daniel Grossman, "Potential public sector cost-savings from over-the-counter access to oral contraceptives," *Contraception* 91, no. 5 (2015): 373-379.

<sup>&</sup>lt;sup>11</sup> Pew Research Center, *Where the Public Stands on Religious Liberty Versus Nondiscrimination*, September 28, 2016, <u>http://www.pewforum.org/2016/09/28/1-most-say-birth-control-should-be-covered-by-employers-regardless-of-religious-objections/</u>.

<sup>&</sup>lt;sup>12</sup> The original research proposal included conducting three focus groups of students. However, after conducting one focus group of four Trinity College students, it became clear that the dynamic of the group setting hindered the extent to which participants shared personal details with me. These missing details from the focus group would have been crucial to answering my research questions. For this reason, future focus groups were cancelled. Only the sixteen individual interviews will be analyzed in this thesis.

opinions on an over-the-counter OC. This thesis asks whether college students think OCs should be available OTC, but it also seeks to understand if college women would take advantage of an OTC pill, and the scenarios in which it would be useful. Based on interviews and discussions with a diverse range of college age women, I make policy recommendations about the value of an over-the-counter oral contraceptive.

Twenty years of research has overwhelmingly substantiated the safety and effectiveness of an over-the-counter oral contraceptive. In addition, professional organizations such as the American College of Obstetrics and Gynecology have recommended OCs be available OTC.<sup>13</sup> The majority of the world's population has access to OTC OCs.<sup>14</sup> In 2013, the first study on global OTC access since 1974 found that of the 147 countries surveyed, 70 percent offered OCs either formally as a recognized OTC product or informally in practice.<sup>15</sup> However, the United States is not an outlier among OECD countries as the pill remains prescription-only in Canada, Australia, and most of Europe.<sup>16</sup> Though the Affordable Care Act's mandated insurance coverage of birth control expanded access to OCs without a copay, removing the prescription requirement may eliminate other remaining barriers to access.<sup>17</sup> OCs are not addictive, have no significant toxicity if overdosed, and women "self-diagnose the condition" of being at-risk of pregnancy.<sup>18</sup> Even so, before approving OCs for OTC use, the FDA will need to verify their safety by checking that women can take OCs without a clinician's screening and take the medication as indicated.<sup>19</sup>

For these reasons, this thesis accepts as its premise that OCs ought to be available OTC. As a policy solution to increase access to birth control for college women, however, I find that over-the-

<sup>&</sup>lt;sup>13</sup> The American College of Obstetricians and Gynecologists, *Committee Opinion: Over-the-counter oral contraceptives*, December 2012, <u>https://www.acog.org/Clinical-Guidance-and-Publications/Committee-Opinions/Committee-Opinions/Committee-Oper-the-Counter-Access-to-Oral-Contraceptives</u>.

<sup>&</sup>lt;sup>14</sup> Kate Grindlay, Bridgit Burns, and Daniel Grossman, "Prescription requirements and over-the-counter access to oral contraceptives: A global review," *Contraception* 88, no. 1 (2013): 93.

<sup>&</sup>lt;sup>15</sup> *Ibid*.

<sup>&</sup>lt;sup>16</sup> "Where on Earth?," Free the Pill, <u>http://freethepill.org/where-on-earth/</u>.

<sup>&</sup>lt;sup>17</sup> Daniel Grossman, "Over-the-counter access to oral contraceptives," *Obstetrics and Gynecology Clinics* 42, no. 4 (2015): 620.

<sup>&</sup>lt;sup>19</sup> Ibid.

counter oral contraceptives would have a limited effect. As it stands, the FDA application for an OTC OC will likely result in a single progestin-only pill (POP) offered without insurance coverage. A costly POP offers an incongruent solution to the access issues college women face. For example, consistent with previous studies,<sup>20</sup> I found that college students struggle with the limited number of packs covered by insurance and unexpected changes in the types covered. Additionally, for those without insurance or with inconsistent coverage, out-of-pocket costs pose yet another challenge. An over-the-counter pill would not ameliorate cost concerns without insurance coverage, nor would it offer enough types to make it an attractive choice for existing OC users.

In addition to the impending FDA application submitted for an OTC pill from HRA Pharma, college women's OC-accessibility would likely benefit from thorough and accessible education on birth control methods, particularly on options such as long-acting reversible contraceptives (LARCs). Based on my finding that college students find it difficult to take an OC at the same time every day, LARCs might offer a more effective method of pregnancy prevention, although they might not offer the other medicinal benefits of an oral contraceptive.

If it follows a similar timeline to emergency contraception's (EC) Rx-to-OTC switch, an OTC OC would likely not be available on shelves for years. In the interim, and considering the priorities of the current administration, I recommend more states take initiative by adopting measures already implemented in other states. First, more states should join the eleven states already requiring insurance companies provide extended supply options to allow users to pick up more packs. I also recommend more states begin allowing pharmacy access to OCs in which pharmacists can write prescriptions for OCs, as is now the case in eight states and the District of Columbia. Lastly, mobile apps now offer users the ability to request a prescription from a doctor through instant messages. However, state law requirements limit the ease with which customers can access these services. I recommend states both accommodate these apps as well as put in place regulations to protect consumers.

<sup>&</sup>lt;sup>20</sup> Dennis and Grossman, "Barriers to Contraception."

#### **ARGUMENTS FOR AND AGAINST OTC OCs**

Both unwanted side effects and barriers to access cause women to discontinue oral contraceptive use. Several studies have attempted to attribute discontinuation to one reason or the other. By defining and framing the problem of discontinuation from opposing viewpoints, researchers have advocated different policy solutions. For those arguing that side effects primarily cause OC discontinuation, the logical solution is to encourage other, more effective methods of birth control. But for those arguing barriers to access are the primary deterrent to continuation, one solution put forth has been an OTC OC. In response, some argue that an OTC pill would only actively encourage a less effective method of birth control, thereby discouraging more effective long-acting reversible contraceptives (LARCs).

#### The discontinuation debate: barriers to access or side effects?

About half of women who initiate oral contraceptives discontinue within the first year.<sup>21</sup> While women's reasons for discontinuing vary, studies investigating the primary reason have come to opposing conclusions. Some find women cease due to side effects, while others conclude that more women simply cannot access their pills. A 1998 survey of women who had recently initiated OC-use found that of those discontinuing after six months, forty-six percent<sup>22</sup> did so due to side effects—the most common being bleeding irregularities.<sup>23</sup> Of this forty-six percent, thirty-seven percent of women cite a side effect as the specific reason they discontinued use, but nine percent cited a doctor's recommendation to discontinue, which researchers assumed also referred to side effects.<sup>24</sup> By contrast, a 2004 study of a nationally

<sup>&</sup>lt;sup>21</sup> Vaughan et al., "Discontinuation and resumption of contraceptive use."

<sup>&</sup>lt;sup>22</sup> Michael J. Rosenberg and Michael S. Waugh, "Oral contraceptive discontinuation: a prospective evaluation of frequency and reasons," *American Journal of Obstetrics and Gynecology* 179, no. 3 (1998): 577-582., Rosenberg and Waugh provide the list of options given to participants to explain why they stopped taking the pill. The options include three major reasons further broken down into specific options. 1) *Side effects*: bleeding irregularities, nausea, weight gain, mood changes, breast tenderness, headaches, clinician recommended discontinuation, 2) *No further need for contraception*: became pregnant/desired pregnancy, sexual relationship ended, and 3) *Method related*: too hard to use, concern about hormones, too expensive, other.<sup>22</sup> While half of the allotted reasons pertain to side effects, there is no mention of access difficulties such as transportation to the doctor or pharmacy, time required to make an appointment, or issues with insurance companies.

<sup>&</sup>lt;sup>23</sup> *Ibid*.

<sup>&</sup>lt;sup>24</sup> Ibid.

representative sample of adult women found inconsistent pill use associated with using the method for less than two years, not being satisfied with the method or the provider, and not usually seeing the same clinician.<sup>25</sup>

More recent studies have also found discontinuation primarily the fault of access issues.<sup>26</sup> A 2007 study examined women initiating OCs at a publicly-funded family planning clinic, following up with them to conduct structured interviews months later.<sup>27</sup> Most of these young, low-income, urban-resident discontinuers stopped taking OC for access reasons rather than side effect-related reasons.<sup>28</sup> The study found that issues such as running out of pills, being unable to return to the clinic, and forgetting to take the pill prohibit people from obtaining the pill or using it correctly.<sup>29</sup> On this basis, they assert that "very little OC discontinuation can be attributed to OC side effects."<sup>30</sup> A previous study had found that ten percent of pill users surveyed reported having access problems, such as not having their pills with them at the time they need to take it.<sup>31</sup>

The desired effect of an over-the-counter pill is often assumed to be lower rates of unintended pregnancy. Studies on OC continuation find that improving access will improve continuation. A 2006 study found that women given a year's supply of OCs were more likely to continue using OCs after fifteen months than women given three packs at once.<sup>32</sup> The Border Contraceptive Access Study (BCAS), based at the University of Texas-Austin, saw the opportunity for a natural experiment to test the impact of an over-the-counter oral contraceptive. They studied women in El Paso, Texas receiving their birth control pills from clinics and compared this group to women who travel to Ciudad Juarez, Mexico to

<sup>&</sup>lt;sup>25</sup> Jennifer J. Frost and Jacqueline E. Darroch, "Factors associated with contraceptive choice and inconsistent method use, United States, 2004," *Perspectives on Sexual and Reproductive Health* 40, no. 2 (2008): 94-104.

<sup>&</sup>lt;sup>26</sup> *Ibid*; Carolyn L. Westhoff, Stephen Heartwell, Sharon Edwards, Mimi Zieman, Gretchen Stuart, Carrie Cwiak, Anne Davis, Tina Robilotto, Linda Cushman, and Debra Kalmuss. "Oral contraceptive discontinuation: do side effects matter?," *American Journal of Obstetrics and Gynecology* 196, no. 4 (2007): 412-e1.

<sup>&</sup>lt;sup>27</sup> Westhoff et al., "Oral contraceptive discontinuation."

<sup>&</sup>lt;sup>28</sup> *Ibid*, 412.e4.

<sup>&</sup>lt;sup>29</sup> Ibid.

<sup>&</sup>lt;sup>30</sup> *Ibid*, 412.e6.

<sup>&</sup>lt;sup>31</sup> Frost and Darroch, "Factors associated with contraceptive choice."

<sup>&</sup>lt;sup>32</sup> Foster et al., "Potential public sector cost-savings."

obtain their pills OTC from pharmacies. Two BCAS papers compared continuation of women obtaining pills OTC in a Mexican pharmacy and women obtaining OCs via clinic prescription.<sup>33</sup> Not only did they find higher discontinuation rates among those obtaining pills with a prescription, but they also found that side effects were not a significant contributing factor to discontinuation.<sup>34</sup> Discontinuation for prescription users compared with OTC users was even higher when they were given fewer than six pill packs at one time.<sup>35</sup>

As a supplemental argument for the barriers side of the debate, focus groups and in-depth interviews with low-income women in Boston found that women experience barriers related to cost and prescription regulations.<sup>36</sup> Issues included delays in making appointments, insurance limitations on number of pill packs, and running out of refills.<sup>37</sup> Although most women reported ease obtaining their preferred method of birth control, as the researchers themselves note, they spoke with English-speaking low-income women living in the Boston area—a city with strong public health system, transportation system, and with pharmacies open later than more rural areas.<sup>38</sup> As proponents of the barriers to access argument, Westoff et al. (2007) characterize the focus on side effects as a distraction from more important issues and suggest that improving access to OCs would likely have the biggest impact on method continuation for the young and poor women that participated in their survey.

Would offering oral contraceptives over-the-counter improve continuation rates for those ceasing use due to access issues? Citing the barriers identified in previous studies such as lack of time for medical visits, running out of pills, and not having a pack on hand,<sup>39</sup> OTC advocates argue that OTC access would

<sup>&</sup>lt;sup>33</sup> Joseph E. Potter, Sarah McKinnon, Kristine Hopkins, Jon Amastae, Michele G. Shedlin, Daniel A. Powers, and Daniel Grossman, "Continuation of prescribed compared with over-the-counter oral contraceptives," *Obstetrics and Gynecology* 117, no. 3 (2011): 551-7.

<sup>&</sup>lt;sup>34</sup> *Ibid*; Potter, Joseph E., Kari White, Kristine Hopkins, Jon Amastae, and Daniel Grossman. "Clinic versus over-the-counter access to oral contraception: choices women make along the US–Mexico border." *American Journal of Public Health* 100, no. 6 (2010): 1130-1136.

<sup>&</sup>lt;sup>35</sup> Potter et al., "Continuation of prescribed compared with over-the-counter oral contraceptives."

<sup>&</sup>lt;sup>36</sup> Dennis and Grossman, "Barriers to Contraception."

<sup>&</sup>lt;sup>37</sup> Ibid, 87.

<sup>&</sup>lt;sup>38</sup> *Ibid*, 90.

<sup>&</sup>lt;sup>39</sup> Frost and Darroch, "Factors associated with contraceptive choice."; Janice D. Smith, and Deborah Oakley, "Why Do Women Miss Oral Contraceptive Pills? An Analysis of Women's Self-Described Reasons for Missed Pills," *Journal of Midwifery & Women's Health* 50, no. 5 (2005): 380-385.

eliminate some, if not all of these barriers.<sup>40</sup> A secondary effect of giving OCs OTC status may be that it helps to "demedicalize contraception." In other words, making it more of a consumer product may improve negative perceptions about its safety.<sup>41</sup>

#### Arguments against an OTC OC

Despite the access benefits of OTC OCs, some observers have expressed concerns about the policy implications of an Rx-to-OTC switch. Opponents have argued OTC access would result in women attending fewer gynecological appointments and that it would dissuade women from considering LARC methods of birth control. When the idea of selling OCs OTC first became a possibility in the early 1990s, two clinicians wrote an opinion piece for the LA Times titled "Don't sell the pill over the counter." At the time, and before years of research on an OTC OC, their arguments reflected the type of patronizing undertones present in the OTC debate for decades.<sup>42</sup> For example, they argue that for many of the vulnerable women that visit their clinic (i.e. homeless women, young women, uninsured women, and runaway teens), "getting a prescription for the Pill is their only impetus to see a doctor."<sup>43</sup> In addition to this "coercion" argument, the article suggests that the pill is not effective unless a person visits the doctor for "the necessary knowledge and support."<sup>44</sup> While they recognize that even the "best doctor in the world" cannot show up every morning to make sure women take their pills and be there at night to make sure they wear a condom, at least they try to "address the whole woman."<sup>45</sup> This type of argument is no longer explicitly advanced against OTC OCs, but the same paternalistic concerns remain.

1993. http://articles.latimes.com/1993-09-17/local/me-35938 1 birth-control.

<sup>&</sup>lt;sup>40</sup> Daniel Grossman and Liza Fuentes, "Over-the-counter access to oral contraceptives as a reproductive healthcare strategy," *Current Opinion in Obstetrics and Gynecology* 25, no. 6 (2013): 501.

<sup>&</sup>lt;sup>41</sup> Grossman, "Over-the-counter access," 626.

 <sup>&</sup>lt;sup>42</sup> James Trussell, Felicia Stewart, Malcolm Potts, Felicia Guest, and Charlotte Ellertson, "Should oral contraceptives be available without prescription?," *American Journal of Public Health* 83, no. 8 (1993): 1094-1099.
 <sup>43</sup> Mary Rainwater and Susan Mandel, "Don't sell the pill over the counter," *LA Times*, September 17,

<sup>&</sup>lt;sup>44</sup> Ibid.

<sup>&</sup>lt;sup>45</sup> Ibid.

Though studies as early as the 1970s<sup>46</sup> investigated the safety of non-prescription birth control by examining its use in developing countries, most arguments by researchers and reproductive health advocates in the United States did not start until the early 1990s. Trussell et al. (1993), for example, attack the "broadest" argument against OTC status for OCs—that prescriptions ensure regular health examinations, including Papanicolaou tests—by arguing that it is "unacceptably paternalistic" to coerce women to attend regular doctors' appointments for their birth control.<sup>47</sup> At one point, they write: "Men face no comparable coercion. Should men be required to obtain an annual prescription for condoms to promote the early detection of testicular and prostate cancer?"<sup>48</sup> At the time, this was one of the strongest arguments that could be made based on available evidence. However, in the 24 years since Trussell et al. (1993), multiple studies have been conducted regarding the safety of oral contraceptives and the FDA has approved emergency contraceptive pills for OTC use. When the argument for OTC OCs reemerged in 2004, and then again among politicians in 2015, advocates had more tangible evidence to point to.

More recent arguments against OTC access,<sup>49</sup> or even a pharmacist-prescribed OC,<sup>50</sup> posit that an OTC pill would restrict choice because doctors would not be able to offer women long-acting reversible methods (LARCs) such as intra-uterine devices (IUDs), a method more reliable than OCs. In their view, OCs are the wrong method to promote to women because they offer greater chance of noncompliance and resulting ineffectiveness.<sup>51</sup> Offering OCs OTC would eliminate the chances prescribers have for "opportunistic discussion" about LARCs as an alternative to OCs, especially for young women requesting emergency contraception (a group more likely to become pregnant).<sup>52</sup> Again, safety arises as a potential

<sup>&</sup>lt;sup>46</sup> Linda Atkinson, Robert Castadot, Alvaro Cuadros, Allan G. Rosenfield, "Oral contraceptives: Considerations of safety in nonclinical distribution," *Studies in Family Planning* 5, (1974): 242-249.; Timothy Black, "Oral contraceptive prescription requirements and commercial availability in 45 developing countries," *Studies in Family Planning* 5, (1974): 250-254.; Anthony R. Measham, "Self-prescription of oral contraceptives in Bogota, Colombia," *Contraception* 13, (1976): 333-40.

 <sup>&</sup>lt;sup>47</sup> Trussell et al., "Should oral contraceptives be available without prescription?," 1096.
 <sup>48</sup> *Ibid.* 1095.

<sup>&</sup>lt;sup>49</sup> Sarah Jarvis, "Should the contraceptive pill be available without prescription? NO." *BMJ Publishing Group, Clinical Medicine 338*, no. 7688 (2009).

<sup>&</sup>lt;sup>50</sup> Meera Kishen, Kate Guthrie, Christine Robinson, Paul Dewart, and Alyson Elliman, "Over-the-counter access to oral contraceptives," *Lancet (London, England)* 371, no. 9625 (2008), 1663.

<sup>&</sup>lt;sup>51</sup> Jarvis, "Should the contraceptive pill be available without prescription? NO."

<sup>&</sup>lt;sup>52</sup> Ibid.

concern for women taking OCs without a doctor to take a detailed personal and family history, blood pressure, and body-mass index.<sup>53</sup>

In contrast to the misperception of LARCs and specifically IUDs as methods for older women, the American College of Obstetricians and Gynecologists recommend LARCs as the most effective and safest forms of reversible contraception for women of all ages, including adolescents.<sup>54</sup> In addition, a 2014 policy report from the American College of Pediatrics recommends that pediatricians discuss "the most effective contraceptive methods first," referring specifically to LARCs.<sup>55</sup> But in recommending the IUD as the primary method of birth control for adolescents, policymakers and medical professionals should remain cognizant of oral contraceptives history as it related to the population control movement in the 1960s.<sup>56</sup> Margaret Sanger, credited with the creation and spread of the oral contraceptive pill, strategically connected her promotion of the pill to the racist and xenophobic eugenics movement in the United States.<sup>57</sup> Considering these origins of the birth control pill movement, organizations "pushing" IUDs need to situate themselves in the context of this dark history.

#### PREVIOUS RESEARCH ON AN OTC OC

Dr. Daniel Grossman of Ibis Reproductive Health united advocates and researchers through his coordination of the OC OTC Working Group in 2004.<sup>58</sup> The Group is comprised of women's health advocacy and justice groups, non-profit and university based research groups, and clinicians interested in securing safe and accessible birth control for all women. Notably, the group includes Planned Parenthood,

<sup>&</sup>lt;sup>53</sup> Kishen et al., "Over-the-counter access to oral contraceptives," 1663.

<sup>&</sup>lt;sup>54</sup> "ACOG Strengthens LARC Recommendation," *News Releases,* The American College of Obstetricians and Gynecologists, September 22, 2015, <u>https://www.acog.org/About-ACOG/News-Room/News-Releases/2015/ACOG-Strengthens-LARC-Recommendations.</u>

<sup>&</sup>lt;sup>55</sup> American Academy of Pediatrics. *Contraception for Adolescents*. 2014. http://pediatrics.aappublications.org/content/pediatrics/early/2014/09/24/peds.2014-2299.full.pdf.

<sup>&</sup>lt;sup>56</sup> Linda Gordon, "The politics of population: birth control and eugenics movement," *Radical America*, 8 no. 4 (August 1974): 61-98.

<sup>&</sup>lt;sup>57</sup> "Eugenics and Birth Control," *PBS*, <u>http://www.pbs.org/wgbh/americanexperience/features/pill-eugenics-and-birth-control/</u>.

<sup>&</sup>lt;sup>58</sup> OCs OTC Working Group (website), <u>http://ocsotc.org/</u>.

the Guttmacher Institute, NARAL Pro-Choice America, National Women's Law Center, and multiple physicians' professional organizations, among others. Over the past decade, Grossman seems to have assumed a leadership position within the research on OTC access, advocating for the Rx-to-OTC switch through research and through Ibis Reproductive Health's work with HRA Pharma to apply to the FDA.

The Group also consolidates research and news articles on OTC OCs, which usually falls into one of four categories. First, studies on the evidence on the safety and effectiveness of an OTC OC work to aid HRA Pharma in its FDA application as well as provide evidence to further their advocacy efforts. Next, reports from several medical organizations support the Rx-to-OTC switch for oral contraceptives, which lends support to the safety argument as well. Third, studies on public opinion of an OTC pill often find that women express concern over cost. Last, surveys and interviews have attempted to capture the opinions of women on the potential for an OTC OC and whether they would consider purchasing OCs OTC. In sum, the findings from studies conducted over the past twenty years, coupled with support from medical organizations, have built a solid case to defend the safety of—and interest in—an OTC OC.

#### Evidence on the safety and effectiveness of an OTC OC

Studies on women's ability to take OCs "unsupervised" have approached the issue from several angles because an Rx-to-OTC switch for OCs depends on evidence of its safety and effectiveness. The FDA considers five criteria when determining whether a drug can switch from prescription-only to OTC: 1) that the drug not be toxic if overdosed, 2) the drug not be addictive, 3) the user can determine for themselves whether they are eligible to take it, 4) users can self-screen for contraindications, and 5) users can take the medication without a doctors' explanation.<sup>59</sup> OCs are neither toxic nor addictive, and women determine for themselves whether they are at risk of unintended pregnancy. The most recent studies attempt to determine whether OCs meet the fourth and fifth requirements. Considering findings that

<sup>&</sup>lt;sup>59</sup> Grossman and Fuentes, "Over-the-counter access to oral contraceptives."

contraindications to progestin-only pills (POPs) are infrequent and women are successful at identifying them using checklists,<sup>60</sup> it is likely that the first OTC OC will be progestin-only.

One of the few studies to research the prevalence of contraindications to combined oral contraceptives (COCs) found that 39 percent of women in a convenience sample in El Paso, Texas had at least one relative contraindication to COCs.<sup>61</sup> A 2012 paper from the Border Contraceptive Access Study (BCAS), observing women prescribed pills in the US or purchasing pills OTC in Mexico, found about one percent of women obtaining OTC OCs in Mexican pharmacies had a contraindication to POPs.<sup>62</sup> The most common contraindications included smoking at ages older than 35, hypertension, and migraines with aura.<sup>63</sup> When comparing absolute contraindications, or those under which OCs should not be used at all, another BCAS paper found there was no significant difference between contraindication prevalence of OTC users and clinic users.<sup>64</sup> A BCAS study on the prevalence of contraindications to progestin-only pills (POPs) among El Paso women found only 1.7 percent reported at least one contraindication.<sup>65</sup> Other than measuring blood pressure, women themselves can identify most contraindications to OC use. When prescribers assess a woman's eligibility to take an OC, they simply review her health history.<sup>66</sup> Although women can self-identify many contradictions in her health history, some have wondered whether women would do so effectively, especially for less visible conditions such as high blood pressure.

<sup>&</sup>lt;sup>60</sup> Solmaz Shotorbani, Leslie Miller, David K. Blough, and Jacqueline Gardner, "Agreement between women's and providers' assessment of hormonal contraceptive risk factors," *Contraception* 73, no. 5 (2006): 501-506.

<sup>&</sup>lt;sup>61</sup> Daniel Grossman, Leticia Fernandez, Kristine Hopkins, Jon Amastae, Sandra G. Garcia, and Joseph E. Potter. "Accuracy of self-screening for contraindications to combined oral contraceptive use," *Obstetrics and Gynecology* 112, no. 3 (2008): 572.

<sup>&</sup>lt;sup>62</sup> Kari White, Joseph E. Potter, Kristine Hopkins, Leticia Fernández, Jon Amastae, and Daniel Grossman, "Contraindications to progestin-only oral contraceptive pills among reproductive-aged women," *Contraception* 86, no. 3 (2012): 199-203.

<sup>&</sup>lt;sup>63</sup> Grossman et al., "Accuracy of self-screening."

<sup>&</sup>lt;sup>64</sup> Daniel Grossman, Kari White, Kristine Hopkins, Jon Amastae, Michele Shedlin, and Joseph Potter, "Contraindications to combined oral contraceptives among over-the-counter compared with prescription users," *Obstetrics and Gynecology* 117, (2011): 558-565.

<sup>&</sup>lt;sup>65</sup> White et al., "Contraindications to progestin-only oral contraceptive pills."

<sup>&</sup>lt;sup>66</sup> Grindlay et al., "Prescription requirements," 92.

Thus far, however, studies suggest that women do accurately identify contraindications, including hypertension. Studies have also shown that women can accurately self-identify contraindications using a checklist. A 2006 study in Seattle, Washington compared women using checklists against a clinician's assessment of their eligibility for COCs.<sup>67</sup> Having assessed twenty contraindications, in fifteen of them (including hypertension) the women and the clinicians agreed over 95 percent of the time. For the five contraindications of disagreement, women were in fact *more* likely to report severe headaches, smoking cigarettes, and possible pregnancy than clinicians were. In two instances, clinicians were more likely to report contraindications to OCs: smoking more than fifteen cigarettes a day and having irregular periods. A 2008 BCAS study also examined the potential of checklists for women to self-screen for contraindications to COCs and found participants were slightly more likely to think they were ineligible when they were eligible than the reverse.<sup>68</sup> The checklist proved even more successful when women used it to identify contraindications to POPs.<sup>69</sup> In a 2012 study, only 0.4% failed to identify a contraindication of POPs when a clinician did.<sup>70</sup>

In terms of contraindications, OC use for younger women would likely be safer than it would be for older women because older women are more likely to have unrecognized hypertension.<sup>71</sup> Indeed, young women are less likely to have nearly all the contraindications to COC use such as breast or liver cancer, migraine with aura, complicated cardiovascular disease, and lupus.<sup>72</sup> The 2008 BCAS study also found that young women, educated women, and Spanish speakers were more accurate at self-screening.<sup>73</sup> A 2015 study of women ages fourteen to twenty-one found this group capable of self-screening for COCs: other than weighing over 200 pounds and the presence of gallbladder disease, participants were more

<sup>&</sup>lt;sup>67</sup> Shotorbani et al., "Agreement between women's and providers' assessment."

<sup>&</sup>lt;sup>68</sup> Grossman et al., "Accuracy of self-screening."

<sup>&</sup>lt;sup>69</sup> White et al., "Contraindications to progestin-only oral contraceptive pills."

<sup>&</sup>lt;sup>70</sup> *Ibid*.

<sup>&</sup>lt;sup>71</sup> Grossman et al., "Accuracy of self-screening," 572.

<sup>&</sup>lt;sup>72</sup> Foster et al., "Potential public sector cost-savings."

<sup>&</sup>lt;sup>73</sup> Grossman et al., "Accuracy of self-screening."

likely than providers to report contraindications.<sup>74</sup> One of the most recent studies on OTC access focuses on the OTC switch's potential for adolescents, finding that OC use by adolescents is safe and effective and there would be no rationale to imposing an age restriction on OTC OCs.<sup>75</sup>

#### Medical opinion

Crucial to both public trust as well as official approval, the opinion of the medical community weighs in support of an OTC OC. After Ibis Reproductive Health and HRA Pharma have applied, the FDA will likely consult health care providers. If accepted, individual clinicians' support will be crucial in educating women about OTC OCs.<sup>76</sup>

One of the strongest pieces of evidence on the safety of OTC OC is the 2012 statement of support from the American College of Obstetricians and Gynecologists (ACOG).<sup>77</sup> In their report, reaffirmed in 2016, ACOG concluded that OTC OCs could improve women's access to contraception and help reduce unintended pregnancy.<sup>78</sup> In the years since, other professional medical groups have expressed varying levels of support for OTC OCs, including the American College of Clinical Pharmacy Women's Health Practice and Research Network,<sup>79</sup> the American Medical Association,<sup>80</sup> and the American Academy of Family Physicians.<sup>81</sup>

<sup>&</sup>lt;sup>74</sup> R. Williams, D. Hensel, A. Lehmann, Tara Sarin, M. Shew, and M. Ott. "Adolescent self-screening for contraindications to combined oral contraceptive pills," *Contraception* 92, no. 4 (2015): 380.

<sup>&</sup>lt;sup>75</sup> Krishna K. Upadhya, John S. Santelli, Tina R. Raine-Bennett, Melissa J. Kottke, and Daniel Grossman. "Over-the-Counter Access to Oral Contraceptives for Adolescents," *Journal of Adolescent Health* 60 (2016): 634-640.

<sup>&</sup>lt;sup>76</sup> Wahlin et al., "Should oral contraceptives be available over the counter?," 8.

<sup>&</sup>lt;sup>77</sup> The American College of Obstetricians and Gynecologists, *Committee Opinion: Over-the-counter oral contraceptives*.

<sup>&</sup>lt;sup>78</sup> Ibid.

<sup>&</sup>lt;sup>79</sup> Jennifer McIntosh, Sally Rafie, Mitzi Wasik, Sarah McBane, Nicole M. Lodise, Shareen Y. El-Ibiary, Alicia Forinash, Marlowe Djuric Kachlic, Emily Rowe, Kathy Besinque, "Changing oral contraceptives from prescription to over-the-counter status: An opinion statement of the Women's Health Practice and Research Network of the American College of Clinical Pharmacy. *Pharmacotherapy* 31 no. 4 (2011): 424-37.

<sup>&</sup>lt;sup>80</sup> American Medical Association Resolution D-75.995 (Sub. Res. 507, A-13): *Over-the-counter access to oral contraceptives*. American Medical Association. 2013.

<sup>&</sup>lt;sup>81</sup> American Academy of Family Physicians (AAFP) Resolution No 501: *Endorse access without age restriction to over-the-counter oral contraceptive pills*. April 2016.

Although formal data on physician opinion on OTC OCs is lacking,<sup>82</sup> a 2013 electronic survey of Obstetrics/Gynecologist and Family Medicine residents found that 71 percent were against OTC access to both COCs and POPs, with safety concerns cited as the primary reason for opposing an Rx-OTC switch (92.3%).<sup>83</sup> However, the study's design limitations diminish the importance of its findings. As a non-randomized survey, those with strong opinions were more likely to take it, as the researchers themselves note. Subsequently, its low response rate (four percent) meant it captured the opinions of only 574 physicians of the 15,000 who received the survey. It seems unlikely this study surveyed a representative sample of physicians in the United States.

While some doctors express concern that women purchasing OTC OCs will forego preventative screenings, current procedures do not require screenings to determine medical eligibility for oral contraceptive use. To initiate OCs women need not obtain an annual exam nor screenings for STIs or cancer.<sup>84</sup> A 2012 BCAS study compared the preventative health screening tendencies of women obtaining OCs OTC in Mexico and women obtaining OCs in a Texas clinic.<sup>85</sup> The study found that women continue to obtain preventative screenings while purchasing OCs over-the-counter. Although US clinic users had a higher prevalence of screenings, the reasons OTC users did not obtain as many related to cost, convenience, and knowledge, highlighting a gap in care for low-income women.

#### Concern: Cost and Insurance Coverage

A 2010 BCAS study found that low-income women chose their source of birth control based on cost considerations.<sup>86</sup> Focus group and in-depth interviews with low-income women in Boston identified

<sup>&</sup>lt;sup>82</sup> Wahlin et al., "Should oral contraceptives be available over the counter?," 8.

<sup>&</sup>lt;sup>83</sup> David Howard, Jeffrey Wall, Julie L. Strickland, "Physician attitudes toward over the counter availability for oral contraceptives," *Maternal and Child Health Journal* 17 no. 10 (2013):1737-1743.

<sup>&</sup>lt;sup>84</sup> Felicia H. Stewart, Cynthia C. Harper, Charlotte E. Ellertson, David A. Grimes, George F. Sawaya, and James Trussell. "Clinical breast and pelvic examination requirements for hormonal contraception: current practice vs evidence," *Jama* 285 no. 17 (2001): 2232-2239.

<sup>&</sup>lt;sup>85</sup> Kristine Hopkins, Daniel Grossman, Kari White, Jon Amastae, and Joseph E. Potter, "Reproductive health preventive screening among clinic vs. over-the-counter oral contraceptive users," Contraception 86, no. 4 (2012): 376-382.

<sup>&</sup>lt;sup>86</sup> Potter et al., "Clinic versus over-the-counter access to oral contraception."

concerns over potential costs associated with OTC OCs.<sup>87</sup> A series of focus groups with primarily African-American and Asian-American women in 2016 also found cost to be a common concern among its participants.<sup>88</sup> Of course, if OCs became available OTC at a price higher than women could pay, they would be unlikely to reduce unintended pregnancy. Some OTC medications such as antihistamines, nicotine replacement therapy and emergency contraceptives can be covered by insurance.<sup>89</sup> Recent political arguments on an OTC OC hinge on whether insurance would cover the cost. A nationally representative survey of women's opinions of OTC OCs in 2011 found that the average maximum women were willing to pay for an OTC OC was \$20.<sup>90</sup> Notably, this survey was taken before the ACA's contraceptive mandate went into effect. A more recent study attempted to assess the impact of the federal contraceptive guarantee on out-of-pocket payments for OCs and found that 67% of privately insured OC users paid nothing out of pocket.<sup>91</sup> Therefore, the price women would consider paying for an OTC OC has likely changed in the years since.

In reviewing the insurance and access implications of an OTC switch for POPs, a group of researchers conclude that a comprehensive plan for OTC OCs would include an insurance-targeted policy approach to ensuring OTC OCs were accessible to all.<sup>92</sup> One concerning issue raised in McInstosh et al. (2013) was that fewer state Medicaid plans covered emergency contraception following the switch to OTC. At the time, the federal contraceptive mandate had just been announced recently and therefore could not be explored in detail. If OTC pills were covered by insurance, low-income women would utilize

<sup>&</sup>lt;sup>87</sup> Dennis and Grossman, "Barriers to contraception."

<sup>&</sup>lt;sup>88</sup> Sarah Baum, Bridgit Burns, Laura Davis, Miriam Yeung, Cherisse Scott, Kate Grindlay, and Daniel Grossman, "Perspectives among a diverse sample of women on the possibility of obtaining oral contraceptives over the counter: a qualitative study," *Women's Health Issues* 26 no. 2 (2016): 147-152.

<sup>&</sup>lt;sup>89</sup> Daniel Grossman, "Moving oral contraceptives over the counter as a strategy to reduce unintended pregnancy," *Annals of Internal Medicine* 158 no. 11 (2013): 840.

<sup>90</sup> Grossman et al., "Interest in over-the-counter access to oral contraceptives."

<sup>&</sup>lt;sup>91</sup> Adam Sonfield, Athena Tapales, Rachel K. Jones, and Lawrence B. Finer, "Impact of the federal contraceptive coverage guarantee on out-of-pocket payments for contraceptives: 2014 update," *Contraception* 91 no. 1 (2015): 44-48.

<sup>&</sup>lt;sup>92</sup> Jennifer McIntosh, Britt Wahlin, Kate Grindlay, Myra Batchelder, and Daniel Grossman, "Insurance and Access Implications of an Over-the-Counter Switch for a Progestin-Only Pill," *Perspectives on Sexual and Reproductive Health* 45, no. 3 (August 2013): 164-169.

OTC availability, hopefully subsequently reducing unwanted pregnancies.<sup>93</sup> Furthermore, a cost-benefit analysis determined that it would make financial sense for insurance companies to offer full coverage of OTC OCs because they could then avoid the costs related to unwanted births.<sup>94</sup>

#### Public opinion surveys

The 2011 nationally representative survey conducted by Grossman et al. (2013) remains one of the strongest measures of public opinion, having surveyed 2046 women at risk of unintended pregnancy. Overall, 62% of participants were either strongly or somewhat in favor of OTC OCs and 37% claimed they would be interested in using OTC OCs. When broken into age groups, the interest and support from young women becomes apparent. Of women ages 18-24, 65.7 percent supported OTC access as compared to 62.2 percent of 25-34 year-olds and 59.1 percent of 35-44 year-olds. Of women ages 18-24, 47.3 percent claimed they were likely to use an OTC OC, as compared with 37.8 percent of 25-34 year-olds and 27 percent of 35-44 year-olds. Likewise, a survey of women seeking abortions at six clinics found that overall, sixty percent of participants would be likely to use OTC OCs.<sup>95</sup> Nearly half (47%) of respondents between the ages of 15 and 17 reported being likely to use an OC OTC and 62 percent of those aged 18-19.

A 2014 survey sought to measure teenage interest in OTC access and their ability to read a prototype of an OTC label.<sup>96</sup> It found that 73% of their participants (348 females ages 14-17) supported OTC access to OCs and 61% claimed they would be likely to use an OTC OC.<sup>97</sup> Sexually experienced participants were significantly more likely to support OTC access (85% to 63%).<sup>98</sup> A 2015 survey of females aged fourteen to twenty-one found that 62% were interested in OTC OCs.<sup>99</sup>

<sup>&</sup>lt;sup>93</sup> Foster et al., "Potential public sector cost-savings."

<sup>&</sup>lt;sup>94</sup> Ibid.

<sup>&</sup>lt;sup>95</sup> Kate Grindlay, Diana Greene Foster, and Daniel Grossman, "Attitudes Toward Over-the-Counter Access to Oral Contraceptives Among a Sample of Abortion Clients in the United States," *Perspectives on Sexual and Reproductive Health* 46, no. 2 (2014): 83-89.

<sup>&</sup>lt;sup>96</sup> Manski and Kottke, "A survey of teenagers' attitudes."

<sup>&</sup>lt;sup>97</sup> Ibid.

<sup>&</sup>lt;sup>98</sup> Ibid.

<sup>&</sup>lt;sup>99</sup> Williams et al., "Adolescent self-screening for contraindications."

#### **OTC OCs FOR COLLEGE WOMEN**

Young women in the United States might be surprised to learn that the levonorgestrel-based emergency contraception, Plan B One-Step, only became available over-the-counter (OTC) without restrictions as recently as 2013.<sup>100</sup> Though the Food and Drug Administration (FDA) approved the prescription use of emergency contraceptives (ECs) as early as 1999, years of court battles delayed its non-prescription use to 2006 when the FDA allowed it to be sold from behind pharmacy counters to women over 18.<sup>101</sup> Recently, a similar switch from prescription to OTC looks more likely than ever before for daily-use oral contraceptives (OC). In December 2016, Ibis Reproductive Health announced its partnership with a French pharmaceutical company, HRA Pharma, to conduct the required research and apply to the FDA.<sup>102</sup> This partnership comes after members of the "OC OTC Working Group" had published a decade of research.

Investigating prospects for an OTC OC is particularly important because although rates of adolescent pregnancies have declined in recent years, unintended pregnancy rates among unmarried 20 to 24 year old women have remained high for the past ten years.<sup>103</sup> Early literature on oral contraceptive compliance focused on adolescents.<sup>104</sup> This focus relates to the more severe discontinuation rates for adolescents: one study found that within three months of initiation, 50% of participating adolescents had ceased use of oral contraceptives and this same group missed an average of three pills per cycle.<sup>105</sup> This evidence has led some to conclude that "less user dependent" methods should be considered for teenagers

<sup>&</sup>lt;sup>100</sup> Center for Reproductive Rights, "The fight for emergency contraception: every second counts," <u>https://www.reproductiverights.org/emergency-contraception-timeline</u>.

<sup>&</sup>lt;sup>101</sup> *Ibid*.

<sup>&</sup>lt;sup>102</sup> "Ibis announces groundbreaking partnership with HRA Pharma to move a birth control pill over the counter," December 2016, <u>https://ibisreproductivehealth.org/news/ibis-announces-groundbreaking-partnership-hra-pharma-move-birth-control-pill-over-counter</u>.

<sup>&</sup>lt;sup>103</sup> Leslie F. Morrison, Renee E. Sieving, Sandra L. Pettingell, Wendy L. Hellerstedt, Barbara J. McMorris, and Linda H. Bearinger. "Protective factors, risk indicators, and contraceptive consistency among college women." *Journal of Obstetric, Gynecologic & Neonatal Nursing* 45, no. 2 (2016): 163.

<sup>&</sup>lt;sup>104</sup> Rosenberg and Waugh, "Oral contraceptive discontinuation," 277.

<sup>&</sup>lt;sup>105</sup> Mary Lou Balassone, "Risk of contraceptive discontinuation among adolescents," *Journal of Adolescent Health Care* 10, no. 6 (1989): 527-533.

with low evaluations of personal health, multiple sex partners, and a history of abortion.<sup>106</sup> Though this recommendation was intended for teenagers, considering that eighty percent of college females are sexually active and not seeking to become pregnant,<sup>107</sup> many of the same principles may apply. Women between the ages of 20 and 24 have one of the highest rates of unintended pregnancies as a result of lack of contraceptive use and unsafe sexual practices.<sup>108</sup> While teenage pregnancy is a well-recognized issue, unintended pregnancy among "emerging adult women" receives far less attention.<sup>109</sup> Seventy-three percent of pregnancies among unmarried women aged 20-24 were unintended and this rate did not change from 2001 to 2008.<sup>110</sup>

This thesis is not concerned about the pill solely as a method of birth control. Participants were not screened on the basis of their sexual activity, and no questions directly asked whether they used the pill to protect themselves from pregnancy. Rather, I investigate the value of an expansion of birth control access to everyone who wants it, regardless of whether you take it for pregnancy prevention, medical reasons, dermatological, or reproductive health.

One of the greatest barriers to college women's access has long been the fear of their parents' opinions.<sup>111</sup> College women on their parents' health insurance plans may worry that their doctor's appointments and prescriptions will be found out by their parents. Other contributing factors to birth control use among college students include cost<sup>112, 113</sup> lack of insurance,<sup>114</sup> comfort, convenience, effectiveness, and safety.<sup>115</sup> General studies on women's OC compliance also elucidate potential barriers

<sup>&</sup>lt;sup>106</sup> Rosenberg and Waugh, "Oral contraceptive discontinuation."

<sup>&</sup>lt;sup>107</sup> Kellie Dionne Bryant, "Contraceptive use and attitudes among female college students," *Association of Black Nursing Faculty Journal* 20, no. 1 (2009): 12.

<sup>&</sup>lt;sup>108</sup> Ibid.

<sup>&</sup>lt;sup>109</sup> Morrison et al. "Protective factors."

<sup>&</sup>lt;sup>110</sup> Mia Zolna and Laura Duberstein Lindberg, Unintended pregnancy: Incidence and outcomes among young adult unmarried women in the United States, 2001 and 2008, New York: Alan Guttmacher Institute, 2012.

<sup>&</sup>lt;sup>111</sup> Heinrich, Linda B. "Contraceptive self-efficacy in college women." *Journal of Adolescent Health* 14, no. 4 (1993): 269-276.; Morrison et al. "Protective factors."

<sup>&</sup>lt;sup>112</sup> Morrison et al. "Protective factors."

<sup>&</sup>lt;sup>113</sup> Larissa R. Brunner Huber and Jennifer L. Ersek, "Contraceptive use among sexually active university students," *Journal of Women's Health* 18, no. 7 (2009): 1063-1070.

<sup>&</sup>lt;sup>114</sup> Morrison et al. "Protective factors."

<sup>&</sup>lt;sup>115</sup> Robert J. McDermott, Teri L. Malo, Virginia J. Dodd, and Alyssa B. Mayer, "Factors Associated with Evaluation of Contraception Options among University Undergraduates," *Health Educator* 45, no. 2 (2013): 35-43.

to consistent OC use for the college population. For example, women have commonly explained that missed pills were due to being away from home and not having their pill pack with them, being unable to or forgetting to obtain a new pack of pills in time for the start of the next cycle, and simple forgetfulness.<sup>116</sup> Though this study did not discuss college women specifically, the identified barriers would likely apply to college women living away from home, traveling to-and-from a different town or state to attend college, and keeping irregular daily schedules. For these reasons, I hypothesized that college student's taking oral contraceptives would be an interested market for pharmaceutical companies attempting to sell an OTC. Before HRA Pharma agreed to apply to the FDA to offer OCs OTC, researchers sought to measure women's interest in OTC OCs using surveys, interviews, and focus groups. To know whether this issue is one worth pursuing and then to attract a pharmaceutical company, researchers first determined that women were generally supportive of the switch and how many would be likely to use it. However, with the exception of two studies since 2015,<sup>117</sup> most studies on public opinion and potential use of an OTC OC took place before the Affordable Care Act's contraceptive mandate.<sup>118</sup> Since the federal contraceptive mandate, 87% of insured women pay nothing for their birth control pills.<sup>119</sup>

Any plan to sell OCs OTC for more than \$0—the cost many women now pay—might be seen as a threat to the low-cost and increased accessibility that the mandate has provided. In October 2017, the announcement of the Trump administration's attempted rollback of the contraceptive mandate chipped away at this guarantee. If the Affordable Care Act is repealed, as many lawmakers have promised their constituents, the price of birth control may no longer be covered by insurance companies. Therefore, predictions that women would be willing to pay about \$20 per pack<sup>120</sup> for an OTC OC may no longer

<sup>&</sup>lt;sup>116</sup> Smith and Oakley, "Why Do Women Miss Oral Contraceptive Pills?," 383.

<sup>&</sup>lt;sup>117</sup> Manski and Kottke, "A survey of teenagers' attitudes."; Baum et al. "Perspectives among a diverse sample of women."

<sup>&</sup>lt;sup>119</sup> National Women's Law Center, "The Affordable Care Act's Birth Control Benefit Is Working for Women," December 16, 2016, <u>https://nwlc.org/resources/the-affordable-care-acts-birth-control-benefit-is-working-for-women/</u>.

<sup>&</sup>lt;sup>120</sup> Grossman et al., "Interest in over-the-counter access to oral contraceptives."

apply. Although a woman already paying \$15 per pack might pay \$20 for an OTC pack, she may not be willing to pay a \$20 convenience charge for an OTC pack if she could obtain it for free with a prescription. But for other people, such as undocumented women, uninsured women, or young women seeking to avoid using a parent's insurance, the federal mandate would have had minimal effects. Barriers unrelated to cost remain, and current threats to the ACA and rollback of the contraceptive mandate threaten the future of access to OCs.

The federal mandate may also have had less of an impact for college women. A college student may depend on a parent's healthcare plan, with in-network prescribers only available in her hometown. While away at school, she might depend on Planned Parenthood or other health clinics, such as their college or university's health center. A college woman might have initiated OC-use while away at school and prefers to keep this information from her parents. She may only be able to pick up one pack at a given time, making coordinating difficult if she uses a pharmacy from home. If she forgets to order a new pack, or cannot make time to visit her gynecologist over the winter break, she may run out of pills before obtaining her next pack. For college students living on campuses, barriers to OC access might include cost, but the nature of their lives invites further complications as well.

One of the most often cited surveys on OTC opinions took place twenty years ago on a college campus with a relatively small number of participants in comparison to other studies on OTC opinions.<sup>121</sup> This survey done at a small, liberal arts college found that 65% of female college students thought OCs should not be available OTC. To gage participants' opinions, the survey asked that students read a list of reasons OCs *should* be available OTC and a list of why OCs should *not* be available OTC before ranking the most important considerations for them. Methodologically, this survey is problematic in that respondents may simply check boxes they do not necessarily agree with in an order they do not feel particularly strongly about. In addition, by providing participants with the reasons *for* and *against* an OTC

<sup>&</sup>lt;sup>121</sup> S. F. Forman, S. J. Emans, L. Kelly, J. Beal, and E. Goodman, "Attitudes of female college students toward over-the-counter availability of oral contraceptives," *Journal of Pediatric and Adolescent Gynecology* 10, no. 4 (1997): 203-207.

OC, the survey imposes ideas on the students rather than capturing opinions originating from the students themselves.

Although younger women and adolescents have been the subjects of much of OTC research, this relates to the age group and their risk of unintended pregnancy. Within the OTC literature, and in advance of HRA Pharma's application to the FDA, many are voicing concerns that minors may be excluded from OTC OC access as they had been from Plan B for years. Unlike the college women in 1997 filling out survey cards found in their mailboxes, college women today have grown up with Plan B on pharmacy shelves. The only signal of the opinions of today's college students comes from a seemingly unscientific project by the website Her Campus. Under the title "Our bodies, our rules," graphics illustrate the results of an online survey completed by 2,000 "college-aged women and recent grads."<sup>122</sup> Although the methods used are unclear,<sup>123</sup> Her Campus seemed to recruit participants from its existing subscribers. Fifty-nine percent responded that birth control pills should be available OTC.<sup>124</sup>

A BCAS paper surveyed El Paso clinic users and pharmacy users (OTC users that would travel to Mexico from El Paso) on their motivations for choosing this source for their OCs and their satisfaction with that choice.<sup>125</sup> This study offered insight into the decision-making processes of oral contraceptive users, including psychological and economic motivations. For OTC users, bypassing the requirement to visit the doctor and obtain a prescription proved to be the most important motivation. Would college women similarly value the availability to pick up pills without a doctor's appointment? Would they value this ability to the extent that they would pay for the convenience even at present when insurance companies often cover prescription contraceptives? More broadly, should reproductive health policymakers prioritize advocating for OTC OCs given college women's contraceptive habits and needs?

<sup>&</sup>lt;sup>122</sup> "Our bodies, our rules." Her Campus. <u>https://ourbodies.hercampus.com/home</u>.

 <sup>&</sup>lt;sup>123</sup> Neither the author nor Her Campus responded to my request for additional information on this project.
 <sup>124</sup> "College women and birth control: the real deal," *Her Campus*.
 <u>https://ourbodies.hercampus.com/college-women-and-birth-control</u>.

<sup>&</sup>lt;sup>125</sup> Potter et al., "Clinic versus over-the-counter access to oral contraception."

#### **METHODS**

To find out, I conducted sixteen semi-structured interviews with college students in Hartford, Connecticut.<sup>126</sup> To obtain a more diverse sample, participants were recruited from both Trinity College, a selective liberal arts school, and Capital Community College, a two-year college located in downtown Hartford. Recruitment consisted of flyers posted at Trinity College with my contact information, as well as in-person recruiting over the course of several weeks in the Capital Community College cafeteria. Participants were eligible to participate in the interview if they were a currently enrolled college student, part-time or full-time, and either currently take or have taken oral contraceptives. There were no gender or age requirements. Each interview lasted approximately thirty to forty-five minutes, and was recorded and then transcribed. Questions centered around their initiation of the pill, access to the pill, and opinions on selling OCs over-the-counter.<sup>127</sup> Transcriptions were coded and analyzed using ATLAS.ti, a qualitative coding software. Participants received a \$10 Amazon gift card for their time. Table 1 compares demographic information of the sixteen participants. As the table indicates, I refer to my informants by pseudonyms to protect their identity. If her pseudonym starts with a letter between A and L, she attends Capital Community College. Pseudonyms starting with M through Z refer to participants who attend Trinity College.

To provide some background on each institution, the student body of Trinity College differs drastically from that of Capital Community College. Trinity College has 2,259 undergraduates enrolled. The median family income of a Trinity College student is \$257,100. When compared to all colleges in the country, Trinity College has the largest share of students from the top 1 percent of incomes in the country: twenty-six percent of students come from the top 1 percent of incomes. In the Academic Year 2016-2017, 65.6 percent of Trinity students were white, and 69.1 percent were from the Northeast region of the

<sup>&</sup>lt;sup>126</sup> The Trinity College Institutional Review Board approved my interview questions, recruiting methods, and analysis plan.

<sup>&</sup>lt;sup>127</sup> Interview instrument can be found in the appendix.

United States.<sup>128</sup> The College's estimated total cost of attendance for the year 2017-2018 was \$70,970.<sup>129</sup> Capital Community College had 3,517 students enrolled in Spring 2016, 1,367 of whom are Hartford residents, 71.6 percent of whom are either black or Hispanic.<sup>130</sup> Eighty-four percent of full-time students at Capital are eligible for a Federal Pell Grant. This convenience sample of college students does not demographically reflect the wider population of college students in the United States.

Importantly, because only people with experience taking oral contraceptives could participate in the study, I also did not hear from people for whom the barriers to access might have been insurmountable. The reason I spoke only to people with experience taking oral contraceptives was because my questions revolved around their initiation process and access to pills as a college student. Because my sample includes only student who successfully initiated OC use, my findings may actually understate college students' challenges in accessing contraceptives. As I will discuss later, it is conceivable that students not yet taking OCs may have even greater desire for an OTC OC.

Pseudonym	Age	Race/ethnicity	College	Family income	Birth Control Method
Noelle	23	African-American or Black	Trinity	\$50,000-\$74,999	Pill
Maya	20	White	Trinity	DK	Pill
Ruby	19	White	Trinity	\$150,000 or more	Pill
Olivia	22	White	Trinity	\$150,000 or more	Pill
Sam	21	White	Trinity	\$150,000 or more	Pill
Taylor	20	White	Trinity	\$150,000 or more	Pill
Violet	23	White	Trinity	\$150,000 or more	N/A
Whitney	22	White	Trinity	\$15,000-\$29,999	Pill
Zoe	22	White	Trinity	\$30,000-\$49,999	Implant
Angela	22	African-American or Black	Capital	\$30,000-\$49,999	Pill

Table 1. Par	ticipants'	demographics
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<sup>&</sup>lt;sup>128</sup> "All Traditional Undergraduates: Selected Demographic Characteristics," Office of Institutional Research," June 6, 2017,

http://www.trincoll.edu/AboutTrinity/offices/InstitutionalResearchPlanning/Documents/Demographics.pdf. <sup>129</sup> "Fees and packages," Trinity College,

http://www.trincoll.edu/Admissions/finaid/prospective/firstyear/Pages/Fees.aspx.

<sup>&</sup>lt;sup>130</sup> "Capital Community College Demographics," Capital Community College, Spring 2016, <u>http://www.capitalcc.edu/hhp/hhpstatssp16.pdf</u>.

Grace	29	African-American or Black	Capital	\$30,000-\$49,999	N/A
Kim	21	Hispanic	Capital	DK	Pill
Joy	19	Hispanic	Capital	\$15,000-\$29,999	Pill
Isabel	22	Hispanic	Capital	Less than \$15,000	Implant
Christina	23	White and Asian	Capital	\$50,000-\$69,999	N/A
Brittany	21	White	Capital	\$70,000-\$99,999	Implant

Twenty years of research has presented an overwhelming amount of support for the safety and effectiveness of an over-the-counter oral contraceptive. In addition, professional organizations such as the American College of Obstetrics and Gynecology have recommended OCs be available OTC. This thesis accepts as a premise that OCs ought to be available OTC. As a policy solution to increase access to birth control for college women, however, over-the-counter oral contraceptives would have a limited effect. In addition to the impending FDA application submitted for an OTC pill from HRA Pharma, college women's OC-accessibility would likely benefit from thorough and accessible education on birth control methods, particularly options such as long-acting reversible contraceptives (LARCs).

Thanks in part to the Affordable Care Act, as well as various state regulations, most insurance plans have covered the copay of an oral contraceptive for years. Other than the uninsured population, OCusers are only confronted with a cost when their insurance no longer covers their type of pill, or they need more than the allotted number of packs and need to pay out-of-pocket. The primary access complications, experienced across SES groups, included insurance covering only a limited number of packs at a time, and insurance covering only certain types of oral contraceptives. Socioeconomic status (SES) differences did emerge in specific ways, such as restricted access to prescribers or self-reliance from a young age in acquiring pills.

Would college women benefit from an OTC OC? To answer this question, the thesis is organized into five chapters. Chapter 1 examines the reasons college students first initiated OCs and the extent to which parents were involved in—and supportive of—this choice. Chapter 2 analyzes the logistical and financial barriers college women face when attempting to obtain their OCs and the impact of low-SES

status on ease of access. Chapter 3 outlines the reasons college students might choose OCs as their preferred method, and their aversion to LARC methods of birth control. In addition, this chapter explains why most participants struggle to maintain strict compliance to a daily pill while in college. Chapter 4 evaluates college students' opinions on an OTC OC, and the participants for whom OTC access would prove most beneficial, namely those without consistent insurance coverage and those wanting to avoid parental engagement. I conclude by outlining nine policy recommendations informed by the findings organized in the preceding chapters. My interviews with college women illuminated the limits and potential of an OTC OC for their population. In addition, our conversations prompted recommendations for other ways to improve access to OCs for college students.

#### **CHAPTER 1: CHALLENGES OF ORAL CONTRACEPTIVE INITIATION**

Interviews with 16 college women across a range of socioeconomic statuses indicate that young women are uncomfortable discussing birth control with their parents and other adults. Therefore, they often begin taking oral contraceptives under the guise of secondary reasons, with pregnancy prevention as an ulterior motive. Conversations with medical professionals are often no more comfortable, with more than one-third of the women reporting feeling negatively about their prescribers for reasons including offensive, unprofessional behavior, intimidating demeanors, and unsupportive attitudes. The extent of the communication barrier between patient and prescribing physician may depend on the socioeconomic status (SES) of the individual's family. Low SES students are less likely to have access to regularly scheduled appointments or the stability to remain with the same physician for several years. Students from wealthier families routinely visited the same physician, and were able to amass a level of social capital through developing a trusted contact in their prescriber. Moreover, among affluent students, mothers played a central role in OC initiation and ongoing access, serving as a crucial resource often unavailable to lower SES students.

#### Reasons for initiating the pill

Of the sixteen women interviewed, eleven began taking oral contraceptives (OCs, "the pill") under the age of eighteen, with one participant starting at age eleven. Fewer than half identified preventing pregnancy as the primary purpose for starting to take OCs, and ten identified reasons other than pregnancy why they initiated the pill (Table 2), although some attributed their desire to start the pill to more than one reason.

Reason other than pregnancy	Number of participants
Painful/heavy period	4
Irregular period	3
Acne	2
Anemia	1
Grand total	10

Table 2.	<b>Reasons for</b>	initiating the	pill, other than	pregnancy prevention
			<b>P</b> , • ••-	

Three women described experiencing such excruciating periods that it interfered with their daily lives. For example, one participant, Joy, remembered a time in high school when—after requesting the teacher's permission—she "literally laid down" during a class to subdue the pain. Likewise, Zoe often found herself visiting the high school nurse's office with severe period cramps, to the point she would turn green and nearly faint. For both women, their high school physicians were the first to recommend they treat their symptoms with oral contraceptives.

#### "Convenient excuses"

The contraceptive purpose of birth control pills served a secondary role for some women who started using OCs for other reasons. Of these women, six pretended their OC use was for reasons other than sex, often to make conversations with parents or doctors less fraught or simply to avoid embarrassment. For several participants, starting on birth control pills served a dual role: medicinal, in its treatment of painful periods, as well as a birth control method.

*HD*: [Were your painful periods] the only reason you were taking the pills, or were there other reasons that you thought it might be a good idea to be on birth control?

*Joy*: No, it was mainly just the pain that I had. Because I did have a boyfriend at the time and I did have sexual relations with that person, but um, I never thought about birth control pills. It had always just been condoms. And even when I was on birth control pills, I still ended up using condoms anyways because I felt like the birth control was mainly just for my pain so I never really needed it for anything else.

The conceptualization of OCs as medicine was reflected in other interviews as well, where women who initiated the pill for reasons other than sex would distinguish themselves from those taking it for pregnancy prevention.

The multipurpose nature of oral contraceptives offered a convenient explanation as to why they required the pill, while avoiding a potentially uncomfortable conversation about sex with their parents or physicians. For example, Zoe, who had experienced severe cramps during her periods, told me she did not identify sex as a reason for OCs to her mother or pediatrician. Sixteen years old when she started OCs, Zoe told me "it was just easier to talk about the cramps and everything. And they were a big factor, so it also was like, 'Ok, just gonna mention that and not talk about the, like, sex part of it." Now twenty-one

years old, Zoe laughed as she told me that her mother had recently asked: "So, you're really just on birth control for, like, the cramps, then? Like, not for sex?" Zoe thought to herself, "*Why* would you ask me that?! Like, I'm 21. Yeah, it's like the most awkward thing to ask but, yeah we don't go in detail about my sex life at all...But, yeah it's like absolutely one reason that I am on [birth control]."

#### OCs for medicinal purposes

When asked about her parents' reaction to her dermatologist's recommendation of OCs, Taylor said "I think my dad just says it's for acne in his head. So...that's probably why it's not awkward." Multiple participants suggested they omit this secondary reason in conversations with parents, preferring instead to focus on the medicinal properties of oral contraceptives. Following a pregnancy scare at age eighteen, Noelle decided for herself it was time to start taking birth control. Yet she told her gynecologist she wanted OCs because she suffered severe cramps during her period, and she told her mother the same thing, explaining to me that "obviously I'm not going to be like, 'Oh, yeah! It's because I'm having sex!""

Angela described her mother as supportive and credits her with keeping her organized regarding paperwork and doctors' appointments, but also believed her mother's support depended on the fact she took OCs to mitigate her anemia.

And because of what I was going through [referring to her anemia], um, I feel like that's why my mom was so accepting of it. Cause I feel like people do have the ignorance of assuming that if you're on it, you're having sex. I mean obviously I was, but she's not thinking about that. (laughing)...So I feel like that's because of what I was going through, that's the only reason why she was—well not the only reason, but the main reason why she was so supportive.

For Angela, the pill's dual purpose offered her both a way to mitigate her anemic symptoms, but also a convenient excuse to start using a birth control method with her mother's approval. Two participants who had both started OCs at seventeen specifically said they wanted to be on the pill "before going to college," though they were prescribed the pill to treat a painful period and acne. Others secondary reasons for starting the pill included anticipating having sex for the first time, or having recently become sexually active.

#### Medically advised initiation as a means to parental approval

Two participants attributed their mother's approval of OC-use to the fact it had been

recommended by a doctor. Joy said that although her mother knew she was taking OCs for "her pain," her mother also knew she had a long-term boyfriend, so "she was kind of iffy about [her starting to take OCs]." But in the end her mother allowed it because "it was a doctor that was stating it." Similarly, Zoe's school nurse introduced the idea to her mother, and Zoe was "glad about that cause [she] wanted someone in the health field to tell [her] mom that it [was] ok…" because her mother was skeptical about what she perceived to be a lack of long-term studies on oral contraceptives. Though the nurse failed to convince Zoe's mother, Zoe eventually started the pill despite her mother's disproval.

Sam described her parents as devout Catholics, and recalled asking her mother about birth control

pills as part of an assignment in high school:

In sex ed. in high school, like, [they] told us to go home and ask our parents this list of questions to, like, see what they would say. Um, and I asked my mom, "When is it appropriate to have sex for the first time?" and she said, "The day that you get married." And then I asked her, "When is it appropriate to go on birth control?" and she said, "three months before you get married." So it was like a really big struggle for me to get on birth control.

Sam went on to explain that she was not sexually active at the time, and instead needed the pills to help alleviate painful period symptoms that had kept her out of school at least three days a month. To obtain the pill, now knowing her mother's stance, required her to "kind of [trick] my mom into letting me, in a way." This is how she described her plan:

So basically, I just said to her like "Mom, I'm getting these awful symptoms all the time. Like, I can't go to school. I'm missing school." Like, "is there any medicine that I can take that's specifically for these symptoms?" And I knew she was going to say, "birth control" so I kind of, she warmed up to the idea a little bit more cause she saw how sick I felt all the time. And so, then when we went to my pediatrician for the next visit, um, she asked her "you know, she's getting really bad symptoms, is there anything we can do?" And my pediatrician, luckily, was like, "birth control" cause I really wanted to be on it before going to college. And like be used to being on it. So I was really glad about that. So that's that's why, and that's kinda how my family reacted. And then I don't even know if my dad knows honestly. Um cause he's really--he and my brother are both very like "don't want to hear about girl stuff" so um so yeah, I don't even know if he knows. He gets uncomfortable if its ever brought up.

Sam's family reflected the reactions of several interviewee's families: most never spoke about their OC-

use with their father, and suspected he either did not know or felt too uncomfortable to speak about it.

Most participants, if their fathers were mentioned at all, assumed they either did not know about it or refused to talk about it because they were never involved in the process of initiating or obtaining OCs.

#### Interactions with prescribers

College women's conversations with medical professionals were often no more comfortable than conversations with their parents. Participants received prescriptions for oral contraceptives from an array of clinicians, including primary care doctors, gynecologists, pediatricians, dermatologists, and a high school physician. Table 3 enumerates the types of prescribers that participants visit, totaling 21 participants because participants often started with one doctor as the prescriber, like a pediatrician, but eventually moved to a new prescriber, like a gynecologist.

In most cases, prescribers require women to schedule an appointment at least annually and call regularly to obtain prescription refills. In reality, participants rarely visited their prescriber for the sole reason to obtain a refill. If they did, the short appointments only consisted of the doctor asking them a few questions. This finding suggests that OC users would likely continue seeking regular check-ups even if they purchased their pills OTC. The descriptions of short, superficial follow-up visits reflect almost a blasé attitude among prescribers, giving the sense that they are simply going through the motions. For those with longer-term or more personal relationships with their prescribers, as was common among high SES students, exceptions might be made to the required follow-up visits. In other words, if a student ran out of refills while away at school, she might be able to simply explain this over the phone and schedule an appointment to fit her college schedule. Herein lies another disparity between students of low- and high-SES: the benefits of consistent insurance coverage allow you to develop this type of relationship with your prescriber.

For several students, regardless of SES, negative experiences with prescribers have left them feeling uncomfortable or judged and unwilling to share details about sexual relationships. Perhaps indicative of generational differences in attitudes about sex, this finding suggests students in this situation might appreciate an OTC pill because it would allow them to limit the amount of time they interact with their doctor.

Prescribers	Number of participants
Gynecologist/OB-GYN	11
Primary Care Physician	5
Planned Parenthood	2
Dermatologist	1
High School Doctor	1
Pediatrician	1
Grand total	21

Table 3.	Types	of ph	vsicians	prescribing	oral	contraceptives
Lubic J.	Types	or ph	ysicians	preserioning	orai	contraceptives

#### Infrequent visits to prescriber

According to the Center for Disease Control's 2016 US Selected Practice Recommendations for Contraceptive Use, no routine follow-up visits are required after initiating a combined hormonal contraceptive.<sup>131</sup> However, the CDC also acknowledges that specific populations might benefit from frequent follow-ups, including adolescents. Generally, no evidence exists to claim that routine follow-ups would improve correct or continued use of oral contraceptives.<sup>132</sup> If a patient calls requesting a refill of oral contraceptives, The Center for Excellency in Primary Care recommends physicians review their record for compliance. To refill the medication, the patient should either adhere to a follow-up plan or be seen annually.<sup>133</sup> Patients are encouraged to come in if they notice any side effects. During visits, physicians are advised to monitor blood pressure and any changes in weight.

Several participants reported infrequent visits to their prescribers, and nearly all visits were for reasons other than oral contraceptives such as annual exams, pap smears, or STD shots. Angela, age 21,

<sup>&</sup>lt;sup>131</sup> Centers for Disease Control and Prevention, U.S. Selected Practice Recommendations for Contraceptive Use 2016, July 29, 2016, <u>https://www.cdc.gov/mmwr/volumes/65/rr/pdfs/rr6504.pdf</u>.

<sup>&</sup>lt;sup>132</sup> *Ibid*.

<sup>&</sup>lt;sup>133</sup> Department for Family and Community Medicine: Center for Excellence in Primary Care, "Medication refill," July 2010, <u>https://cepc.ucsf.edu/sites/cepc.ucsf.edu/files/Standing%20Order%20-%20Med%20Refill.pdf</u>.

said she had not gone in to her gynecologist's office since she had been originally prescribed OCs at age 19, other than once for an HPV vaccination. Similarly, three participants claimed they would obtain more refills of their prescription while already in the office for other reasons. Two participants said that since being originally prescribed about two years ago, they had never been required to make an appointment with their gynecologists to obtain more refills.

### Short prescriber visit

For the few women required to make an appointment to obtain a refill, all gave nearly identical depictions of a few minutes of conversation with their prescriber. Here are two descriptions of an appointment for the sole purpose of an OC follow-up to obtain more refills:

*Noelle:* It was more like, "do you have any new symptoms?" No. Um, "is there anything you need to ask?" No, and then, "are you happy with it?" Yes. "Ok, so, here you go. You can leave." Probably, like, literally, my last visit probably took like 15 minutes and five of those minutes was waiting for the doctor to come into the room.

*Olivia:* Probably, like, three minutes. They just ask you a few questions. Um, they just ask you like "Is it working ok? When did you get your last period? Like, blah blah blah" and they review and they're like "everything looks good, I'll just renew it" then they do it on the computer. So not too long.

Olivia's most recent appointment with her gynecologist was set up over Thanksgiving break and for the purpose of obtaining more refills of her pills, having been refused by the pharmacy when she tried to pick up her next packs. As demonstrated by the quotes above, follow-up visits for OC refills entail basic questions about any recent changes to their health and how the pill has been working for them.

### Prescriber making exceptions

Six of the participants either stated or implied that their prescribers would make exceptions to their follow-up policies when the women were going away to college or on a long vacation. For example, Sam explained that she has never needed renewals of her prescription, but "if I did run out, since I'm in college and [my doctor] knows that, I can't exactly go see her easily. So she would just refill it." Olivia remembered a time when she was on Trinity's campus but unable to pick up another prescription until she had been back to her gynecologist located more than 2,000 miles away. After calling her gynecologist's office, they agreed to prescribe her two more packs, under the condition that she made an appointment for when she came home next. A participant from a country in the European Union, Whitney, was able to have her gynecologist at home prescribe her a year's worth of pills, although the current policy only allows for six months' worth. To do this, she "really had to promise him, like, 'yeah, the minute I get home, I'm going to make an appointment with him.'" For some participants, having a familiarity or personal relationship with their prescribers allowed them some leniency when it came to refill protocol within the office. The participants describing this type of relationship with their prescribers, Olivia and Sam, come from families with annual incomes over \$150,000.

### Students' negative opinions of prescribers

Participants' relationships with—and opinions of—their prescribing doctor ranged from not knowing the doctor's name to growing up with her pediatrician's children as friends. The doctor's personality and the prescriber-patient relationship influenced the comfort level of several participants and their subsequent willingness to speak openly about their sexual activity and reasons for starting birth control. Six participants—more than one-third of those interviewed—reported feeling negatively towards their prescribers. Three of the six described paternalistic or unprofessional behavior from their prescriber. Violet told me she thinks her gynecologist "has opinions about things that she shouldn't have opinions about." For instance, when her gynecologist asked whether she ever had sex without a condom, Violet responded honestly that she had done so, occasionally, with her long-term boyfriend. To this, her gynecologist "just gave me a very, um, opinionated response about—it was kind of lecturing me as if she were my mother, not my doctor. I felt like the way she was speaking to me, the way she was addressing me sounded as if she was a blood relative of mine." Two of the participants felt a lack of support or understanding from their prescribers, and one simply found her prescriber insulting and rude.

Kim felt as though her doctor "would just consistently doubt every single thing that [she] would say," and that it was always "difficult to get her to understand the severity of the issue." Two additional participants echoed this sentiment, feeling as though their prescribers tended to discredit their opinions or feelings. For Ruby, having witnessed the "weird vibes" her pediatrician had given her older sister when she asked to start the pill, she anticipated a judgmental reaction from her. Describing her pediatrician as "a very scary person," Ruby decided not to reveal that she planned to become sexually active, but instead only told her about intense cramps. Ruby's mother was in the room when she raised the issue, and her mother knew she planned to become sexually active. Zoe did not report a negative relationship with her pediatrician, but like Ruby, avoided discussing sex with her pediatrician, and told him that the pill was "not specifically for sex. Like, I never would, um....really say that."

In sum, college OC users were uncomfortable discussing birth control with both their parents and prescribers, often leading to a focus on alternate medical uses for the pill. While these experiences were common among both low-and high-SES women, on the whole, high-SES women enjoyed far more support in accessing OCs through the active participation of their mothers.

## Support from mothers as a crucial resource for high SES students

Without fail, each interviewee mentioned her mother's involvement in either the original initiation of OCs or her prescription and pick-up routine, even though no interview questions directly asked about parental participation. For some women, their mother's involvement went as far as their being present in the examination room for the discussion of initiating the pill. Other women were more self-reliant in accessing and taking the pill. Altogether, seven informants were largely reliant on their mothers in accessing OCs, three were self-reliant but received support from their mothers to some degree, and four were entirely self-reliant. After grouping my sixteen individual interview participants into these three categories, a pattern emerges. As demonstrated in Table 4, the more self-reliant individuals primarily come from families on the lower end of the annual incomes, and those relying heavily on their mothers were primarily those from families with the highest annual incomes.

Pseudonym	Family Annual Income	Classification
Joy	\$15,000-\$29,999	Self-reliant
Zoe	\$30,000-\$49,999	Self-reliant
Grace	\$30,000-\$49,999	Self-reliant
Noelle	\$50,000-\$74,999	Self-reliant
Isabel	Less than \$15,000	Self-reliant, mother support
Angela	\$30,000-\$49,999	Self-reliant, mother support
Kim	DK	Self-reliant, mother support
Maya	DK	Reliance on mother
Whitney	\$15,000-\$29,999	Reliance on mother
Christina	\$50,000-\$69,999	Reliance on mother
Brittany	\$70,000-\$99,999	Reliance on mother
Ruby	\$150,000 or more	Reliance on mother
Olivia	\$150,000 or more	Reliance on mother
Taylor	\$150,000 or more	Reliance on mother
Violet	\$150,000 or more	Reliance on mother

## Table 4. Family annual income and reliance on mother

## **Reliance on their mothers**

I classified eight of my sixteen interview participants as reliant on their mothers to help them start taking OCs or to manage their pick-up routine. For each student, her mother's involvement came in a different form. For Maya, a white Trinity College student from across the country, having her OB-GYN mother occasionally sign off on OC prescriptions proved helpful, especially when she spent months travelling the country on a gap year. When Maya ran into trouble picking up a prescription while travelling in a new city, "the first thing [she] did was call [her] mother and then she told [her] what to do." Of course, in situations like this, having an OB-GYN as a mother simplified the process. Maya's mother would also call to re-order her daughter's OC prescription while she was in high school, and would also pick it up from the pharmacy because Maya could not yet drive.

For Violet, a white Trinity College student whose family income exceeds \$150,000 per year, her mother was involved with her OC use since she started taking them during college. Violet told me that when she initially decided she wanted to start on the pill, "[she] thought the easiest way to go about doing it was to just start by texting [her] mom...and said, 'hey, can we schedule an appointment for when I come home from winter break...'" Violet's mother arranged her initial consultation with the gynecologist. While Violet was taking OCs, her mother would pick up her packs from the pharmacy and mail them to her at Trinity. When asked whether birth control pills were easily accessible, in her experience, Violet said this:

Um...yes, because my mother was so cooperative. But I feel like, um, had she not been—if, for whatever reason, she did not want me to be on birth control, that would've been a little more difficult to acquire them...

[Answering a different question]: ...to repeat myself, I think that it was that convenient because of my mom. Because my insurance is my mother's insurance and I don't have my own independent insurance...I imagine if I were to go against my mom to acquire birth control that I would probably be paying out-of-pocket for it, I'm assuming.

Violet recognized and appreciated her mother's assumption of the responsibility to pick up and send her OCs. From our conversation, it seemed she kept her mother involved throughout the process mainly because she had to use her insurance and because she had been seeing a gynecologist and using a pharmacy from her home state. She mentioned that if she had gone straight to the gynecologist for OCs, she would have "...[felt] like in a way [she'd] be going behind [her] mom's back, and [she] also wanted to get [her] mom's opinion on what birth control [she] should take..." Violet was twenty years old when she started taking OCs, and already away at college.

A few participants went to their mother's gynecologists or saw a different doctor within the same gynecological practice. For example, Brittany, a white woman and part-time student at Capital Community College, comes from a family with an annual income between \$70,000 and \$99,999. Having started the pill at age 16 for irregular periods and painful cramps, Brittany talked to her mother about it, who then brought her to the same gynecological practice she visits for the initial appointment. When I asked whether it was her idea or her mom's idea for her to start OCs, Brittany said "both." When asked whether her pills were easily accessible, she said, "For me, yes. Just cause I had the help of my mom and, um, their insurance." As far as routine pick-ups, Brittany's family insurance offered prescriptions for less if they would use Express Scripts, a mail-order service which delivers pills directly to your home. When

and that when her mother forgot to order one, it came two weeks late and she had to wait a full month to start the next pack.

Christina, the uninsured 22-year-old Capital Community College student from a country within the OECD, remembered her mother taking her to the General Practitioner (GP) when she started the pill at age fifteen. As mentioned previously, Christina came to the United States with a year's supply of OCs from her home country. When she ran out of this supply, her mother brought another year's worth of OCs when she visited the United States. Whitney, the 21-year-old student from a European Union member state, explained that she felt comfortable sharing her desire to start on OCs with her mother because "[her] family is really open about this thing...they know everything about my life so this was, like, really natural." Whitney's mother also brought her to the same gynecologist she visits herself.

For the remaining three participants, their mothers were physically present in the room when they initially consulted a doctor about OCs. First, consider Ruby's experience. Ruby is a white, 19-year-old Trinity College student from a Massachusetts family making more than \$150,000 per year and covered by a parent's private insurance. Recall that Ruby initiated her pills due to both period complications but also impending first sex, something she felt comfortable sharing with her mother, but not her "scary" pediatrician. Ruby's mother was in the room with her when she brought it up to the doctor. According to Ruby, her mother "understood, like, that [she] had a boyfriend and that it was an inevitable type of thing." Ruby's mother and Ruby's sister were already taking OCs, so it "wasn't like a foreign concept" in her family. Ruby's parents pay for her birth control pills, or, as she told me: "I just, like, pay with my credit, which is linked to my parent's account." When I asked Ruby whether she thought her OCs were easily accessible, she said this:

Um, so....I think under my circumstances, it was pretty accessible. Just because I have a mom that I feel relatively comfortable with talking to, like I have doctors that I go to normally, so in that sense, I guess it was easy to go to get. Um, cost-wise, I'm also privileged in the sense that, like, I don't pay for them, even if I did have to pay [meaning, she has a zero-dollar copay] so that's all more on my parent's end.

In the same way, several participants left issues of cost to their parents. For example, in my focus group with four Trinity College students, I asked each participant to tell me her copay at the pharmacy. One student told me, "I don't know if there's a copay. I saw my doctor once and then my mom handled getting them." This student's annual family income is between \$100,000 and \$124,999.

Sam and Taylor represent the two most acute cases of a heavily involved mother. Both are white Trinity College students, 20 and 21, respectively, and both come from families in which the annual income exceeds \$250,000 per year. Both started the pill at 17 years old. Sam's pediatrician continues prescribing her OCs today, and her mother was in the room with her for their first discussion of OCs. When Sam experienced negative side effects from her pills, Sam first called her mom who then called the pediatrician to learn that different types of OCs affect people differently and that she should switch her type. Though Sam picks up her prescription herself at a local Hartford pharmacy, if she ran into issues with the doctor's office and trying to get a refill, she told me she would "just call [her] mom cause she works part-time so she can easily call people whenever."

Taylor's initiation process originated at her dermatologist's office where they initially recommended her use of OCs but wanted a primary care physician to prescribe it to her. After texting her mother with this news, it was her mother who made the appointment for Taylor with a nurse practitioner in her primary care physician's office. Her mother also accompanied her to the appointment because she had concerns about her daughter having health complications similar to her own that might impact her eligibility to start on the pill, namely high blood pressure. Taylor's mother wanted the opportunity to speak directly with the physician about her concerns. In addition, as far as picking up her pills, Taylor's mother "usually goes in [to the pharmacy] and does it for [her]...." To obtain her pills, Taylor typically picks up a few while at home, but in the past, her mother has brought her some during Parent's Weekend and mailed her one in a care package.

## Self-reliant with mother's support

The next group of students represents those participants for whom their mothers helped them initiate or maintain an OC routine, though the participants themselves assumed primary responsibility. For Kim, a Hispanic Capital Community College student, it was her mother who first told her to try OCs in middle school due to Kim's severe bleeding. Though her mother would accompany her to doctor's appointments, her doctor wanted Kim to "hold off on [initiating OCs]" when her mother first suggested it. When Kim did run into insurance coverage issues with her pills, she would pay thirty dollars per pack. Like Noelle, Kim was taken off her father's insurance and had to get her own. Throughout our discussion, Kim responded in first person to any questions about insurance coverage and accessing OCs, suggesting that she manages this responsibility. By contrast, students with more assistance from their mothers would often talk about obtaining OCs in terms of "we would" and "our insurance."

Similar to Kim's mother, Isabel's mother was the one who suggested she start on OCs at age eleven to regulate her period. Isabel, also a Hispanic student from Capital Community College, comes from a family whose income is less than \$15,000 per year. As an eleven-year old, Isabel was accompanied by her mother into her mother's gynecologist's office. In fact, her mother told the gynecologist directly that she wanted her daughter on birth control. When the gynecologist asked her opinion, Isabel said yes, but told me that "of course I was gonna agree with my mom, so I said yeah." At the time we spoke, Isabel no longer took OCs having switched to the Nexplanon due to inconsistent insurance coverage of the pill. When she was taking the pill, Isabel was also moving frequently and told me the following:

I started moving around a lot and no one, like, adult-wise was keeping up with my appointments, so I was trying to figure it out. *I need to go here, I need to go there*. So I went to one in, uh—like, it just ended up—I lived in [CT Town #1] so I ended up going to one in [CT Town #2] and that's where the second [gynecologist] started prescribing me birth control.

A significant barrier for Isabel seemed to be her default assumption of the responsibility, but being unable to execute this responsibility due to the lack of agency she could exhibit at a young age. For example, in explaining why she found obtaining her OCs to be difficult, she said this:

Cause I would always have to, like, get rides [to the pharmacy], you know? Cause I didn't drive. Or, I would have to, like, have my grandma or someone, like an adult talk for me until I was like 15, 16, and able to speak for myself. And I wouldn't, you know, always get the right representation with someone speaking for me, so. That's, like, mostly what I meant by "difficult."

[In response to a follow-up question]: I was asking, well, I wanted them to call. Yeah, my mom would sometimes help me out. Or I would have to have someone sit there and tell me what to say, what to do, you know, kind of—'cause I wouldn't know, like had no idea how to make appointments, all of that. Most kids don't do that until they're twenty and they're like out of the home. You know what I mean? So that's what was difficult. You know, socializing, getting like the-- asking for the help. Rather than just having a parent do it and give it to me. You know what I mean?

In the end, the decision to switch from OCs to the arm implant came down to a combination of Isabel's inconsistent insurance coverage of OCs along with her struggle to find a ride to the pharmacy on a regular basis. In fact, Isabel told me there were gaps in her continuation of OCs because she could not get a ride to pick up her next pack.

Lastly, Angela, a black Capital student from a family with an annual income between \$30,000 and \$50,000, felt strongly that her parents, specifically her mother, provided a crucial support system for her throughout her OC initiation and continued access process. When asked for examples of her mother's help, Angela told me that during the first few weeks when she experienced unexpected spotting, her mother calmed her down and told her that they could call the gynecologist to make sure everything was okay. Angela's mother was present in the room for her appointments, and aware that she was starting OCs—though not for pregnancy prevention purposes. Angela paid for her own OCs out of her savings, but "every now and then" she would "have to" ask her mother for the \$30 she paid per pack.

Though Angela seems relatively independent compared to the more affluent students reliant on their mothers, she identifies support from a parent as a critical resource in her OC access. From Angela's perspective, her mother reminding her to sign up for Medicaid and fill out her Medicaid paperwork demonstrated her support throughout the process. Angela told me she thought it crucial that anyone starting on OCs have someone like this in their life: "if it's your mom, dad, some guardian, somebody to be there with you to help you decide—just to talk about it," referring to questions she had about OC side effects.

## Self-reliant

Other students' narratives demonstrated higher levels of self-reliance to either initiate OC-use or maintain their refill routine. As compared with students such as Taylor, Sam, or my focus group participant, other students are tasked with greater responsibility in obtaining their OCs. For example, consider Zoe, a white Trinity College student whose family income is between \$30,000 and \$50,000. Recall that Zoe experienced severe period symptoms, to the point she often had to visit the high school nurse. On one occasion, described in Zoe's words below, her mother expressed her disapproval of Zoe starting OCs, despite a direct recommendation from a medical professional.

...when I was at the Nurse's Office in like my high school, she like—my mom had to come in one day cause I had really low iron...So my mom came in and the nurse was like "Yeah, your daughter should really consider birth control pills. It would really help her with her cramps and just, like, losing less blood...." So my mom was like, "No! Absolutely not." Like, she was like "I don't want my daughter's body being altered by birth control and blah blah."

At the time, Zoe was 16 years old and would go into the pediatrician's examination room alone, with her mom in the waiting room. However, on one visit, Zoe told the pediatrician that she wanted birth control pills, though she did not mention it was for sex, specifically.

And, um, my mom kind of knew that this discussion was taking place so she came in and asked to talk to my doctor, like, by herself. So like, I left the room (laughs) and I can hear her through the door, being like "I don't think my daughter should have sex, or, like, get birth control pills, cause she'll have sex sooner." Um, and so, I didn't care because first of all, I had already lost my virginity and second of all, like, you know, so many people had told me, like, so many doctors, people from my experience that birth control pills were helpful for them in the regard of like cramps and everything that I was like, "I'm going against what my mom says"...So [that pediatrician] gave me my first birth control pills.

In Zoe's case, though her mother did not go as far as to stop her from obtaining the pills, she clearly

articulated her opinion to both Zoe herself as well as her doctors.

Noelle recently switched to her own private insurance plan after a period on Connecticut state insurance after leaving her parent's private plan. During periods when she had no insurance coverage, Noelle would pay for her own pills out-of-pocket. She also assumed responsibility for finding a new private insurance plan and paying for the plan herself. Next, consider Joy, an uninsured, Hispanic student from Capital. At seventeen years old, when she had first been prescribed the pill from the high school clinic, she had to translate for her mother when asking for the required parental permission. Based on our conversation, Joy seemed to be attempting to secure a clinic appointment to have her OCs refilled entirely independently.

Overall, more than one-third of the participants admitted to misleading their parents or prescribers regarding their true purpose for initiating an oral contraceptive. Again, this finding only represents the experiences of my sample, or those able to overcome their parents' hesitation or disproval of their OC use. Consider the other college students unable to bypass this obstacle. Prescriber interactions may pose yet another insurmountable obstacle to others attempting to obtain a prescription for an oral contraceptive. Unrelated to economic status, six participants reported having negative opinions of prescribers. Aversion to one's prescribing physician might provide an impetus for existing OC users to consider an OTC option to avoid uncomfortable interactions.

Most participants simply request a refill while visiting their prescribers for other reasons. But for those required to return for regular follow-up visits to refill their OC prescription, they describe the appointments as short and superficial. For an uninsured student like Joy, scheduling a follow-up proved so challenging that she has discontinued her OCs. For other, typically wealthier students, having a longterm relationship with their prescribers afforded them certain benefits, such as allowing college students to schedule the follow-ups later in the year to accommodate their schedules. Again, this illustrates the ease with which initiating an OC somewhat correlates with a student's family income. College students continue to rely on their mothers to help acquire their pills, however, another SES pattern emerged after sorting participants into three tiers of dependence. Students of higher SES tend to rely heavily on their mothers to obtain their OCs for them. For students with involved parents willing and able to pay out-ofpocket for their daughter's OC, complications that arise represent relatively minor inconveniences. But for those without these resources, barriers can either delay access or result in discontinuation.

#### **CHAPTER 2: BARRIERS TO ACCESS FOR COLLEGE WOMEN**

Although half of participants report "easy access" to OCs, complications stemming from prescriber disorganization, unreliable insurance coverage, and travel issues all work to restrict access to the pill. The degree to which participants experienced challenged access tends to reflect their family's annual income. This chapter will closely examine the regulatory and logistical barriers in place and how these barriers have a more devastating impact on lower-SES women.

Prescriptions for OCs can be obtained from private doctors or nurses, including primary care doctors, OB-GYNs, nurse practitioners, dermatologists, health clinics, or Planned Parenthood. The prescribing physician will usually talk to patients about their medical history and measure their blood pressure. A pelvic exam is not required to obtain a prescription for oral contraceptives. In some states, women have recently started requesting prescriptions online via mobile apps which connect users to doctors capable of writing them a prescription through their service. Recall that no routine follow-up visits are required for people using combined hormonal oral contraceptives, though they might be advised for adolescents.<sup>134</sup>

Among the Trinity students who were living away from home for college, all but one received their prescriptions for OCs from a physician back home. Students usually schedule any appointments with this physician around their breaks from school. Per federal guidelines, most prescribers require patients to visit at least once a year to obtain a refill for additional packs. In some cases, they might require appointments at more frequent intervals; yet some students had not seen their prescriber in years and were able to continue picking up pill packs without an issue.

The price of OCs depends on whether a person is covered by health insurance, and the types of birth control that insurance company chooses to cover. The Patient Protection and Affordable Care Act mandated coverage of female contraceptives for all employers and educational institutions on the federal level. Before the mandate, standard private health plans covered contraceptive methods, and 28 states

<sup>&</sup>lt;sup>134</sup> CDC, U.S. Selected Practice Recommendations for Contraceptive Use 2016.

already had a similar mandate in place.<sup>135</sup> The ACA mandate prohibited copayments or any type of costsharing, allowing women to choose a method of birth control without cost as a deterrent.<sup>136</sup> Without insurance coverage, a pack of pills, equivalent to about one month's worth, could cost between \$0 and \$50. The copayment for the appointment to obtain a prescription for OCs might cost between \$35 and \$250, but the ACA now requires most insurance plans cover appointments about birth control.<sup>137</sup> Today, although most insurance plans will cover birth control pills at no cost for the user, a plan will usually only cover certain types of OCs, or only the generic version of a pill. As described in this section, the participants in this study often did not know which types and brands of OCs were covered by their plan until they arrived at the pharmacy and were told the price. To figure out which type of pill is covered, people need to either contact their insurance company directly or consult their prescriber.

First, building on the finding that close relationships with prescribers allow for easier access, comparative anecdotes demonstrate the importance of income in determining one's ability to develop such a relationship. Further, carelessness on the part of prescribers can result in delayed access to OCs, as two participants recently experienced. Second, insurance complications include their covering only one to three packs at a time, as well as their frequent and unpredictable switching types of OCs covered. Third, for low-SES students as well as Trinity students without a car on campus, travelling to the pharmacy proved challenging and could delay pickup. Insurance restrictions on the number of packs also affects several Trinity students' long-term travel plans such as holidays and study abroad.

# Accessibility of OCs

To get a sense of how college students currently obtain their OCs, the first half of the interview centered on the logistics of pill pickup. Participants were asked, "In your experience, would you say birth control pills are easily accessible?" "Accessibility" in this context was defined as cost and time expended.

<sup>&</sup>lt;sup>135</sup> Adam Sonfield, "Implementing the federal contraceptive coverage guarantee: Progress and prospects," *Guttmacher Policy Review*, *16* no. 4 (2013): 8-12.

<sup>&</sup>lt;sup>136</sup> Ibid.

<sup>&</sup>lt;sup>137</sup> "How do I get birth control pills?," *Planned Parenthood*,

https://www.plannedparenthood.org/learn/birth-control/birth-control-pill/how-do-i-get-birth-control-pills.

The students' answers to this question, coupled with their respective descriptions of the process it takes for them to obtain OCs, reveal a level of access inequality depending on their insurance coverage and annual family income. In response to the question, eight participants reported easy access to OCs and Table 5 shows that most of these participants come from high-SES families. Those describing "easy access" cite reasons such as zero-dollar copays, reliable insurance coverage, help from a parent, automatic refills, and friendly relationships with their prescribing physicians. The two participants reporting the greatest challenges to access were those from families with the lowest annual incomes in the group.

Annual family income	Number of participants with ''easy access''
Does not know	1
\$30,000-\$50,000	1
\$50,000-\$70,000	1
\$150,000 or more	5
Grand total	8

Table 5. Incomes of participants with self-described "easy access"

# Impact of Socioeconomic Status (SES) on access to prescriber

Students from high-SES families more often reported consistent access to the same prescriber. Recall that close relationships with prescribers sometimes led to easier access to pill as doctors were more willing to relax their follow-up visit protocol to accommodate college schedules. But patient's ability to develop those relationships correlated with their family income level and stability of health insurance coverage as these factors influence one's regular access to a doctor. The excerpts below demonstrate the stark contrast in accessibility between two students: Sam, a white woman from Trinity College, and Joy, a Hispanic woman from Capital Community College. Sam comes from a family with an annual income of more than \$250,000. Joy comes from a family with an annual income somewhere between \$15,000 and \$29,999.

### Trinity College student, Sam:

I went to school with [my pediatrician's] kids...she's very nice. I mean I've been with her since I was born. I've never moved, so, um, I know her super well and she knows me really well...I think she's able to relate with me...so I've been pretty comfortable with her and she's always really good if I have to call and get a new prescription. She'll just send it over and it's very easy.

[Answering the question, "What would you do if you ran out of pills today without a refill?]: "So I'd probably call my pediatrician and see if she could refill it, which I'm pretty sure she would be able to do since it's just an electronic thing she sends...So it's a pretty easy process. The only issues I've ever had is sometimes um I'll be in class when I have to call someone and then the doctor's office is closed or whatever but then I'll just call my mom cause she works part-time so she can easily call people whenever.

### Capital Community College student, Joy:

*HD:* And how much total time would you guess it takes if you were to go to [*the health clinic*] right now, before you would leave with a prescription?

Joy: It would take weeks honestly.

HD: Oh, really? Just to schedule the appointment?

Joy: Just to schedule the, yeah, just to schedule—but a minimum of about 2 weeks because once you go there, um, first I personally had a lot of trouble trying to schedule an interview or like um a meeting with somebody who could put me in a [clinic's sliding scale payment] class to start with, right? And first...they said "you could walk in" and just um find the person that's available and they can help you. But when I went there the person that I went to go see said..."you have to call in for it, to set a meeting."

HD: And what would be-the meetings for the class? Determining your class?

Joy: Yeah, to determine your, like, eligibility for health insurance. Um, and then, that was like a big set-off for me. And then I, um, would call again and the person said that "No, its walk-ins, maybe the person that you spoke to was wrong"...[On the class determination interview process:] And um so you have to know your income, all of that, have to bring two pay stubs, identity, two forms of identity, and that takes um a while and then after that they tell you then that um what class you're in, but then you have to wait a couple of um days or about a week and they send you a form and that form states that you are in that class.

Joy first received her prescription for OCs from a representative of a health clinic working in her high

school's nurse's office. At some point after graduating high school, Joy once missed the window to pick

up her next pack from the pharmacy. When she attempted to pick it up, the pharmacy told her she had to

visit her prescriber to obtain a refill. Surprised, Joy was suddenly left without access. The only time she

met this doctor was the day she prescribed her OCs during a mandatory physical exam required for

college applications. She did not know the doctor by name or a phone number at which she could contact

her. So instead, she contacted the health clinic itself. This health clinic had a sliding scale payment system

in which they first determine a patient's ability to pay for services, and this is the class determination

process she spoke about in the excerpt above. After scheduling an interview and bringing the necessary documents, she would then have to wait for a form to come through the mail, designating her class and the amount she would be charged for a doctor's appointment. After that, she could schedule a doctor's appointment to go in and request a refill on her OCs. When I spoke to her, she had ceased taking birth control pills as a result of this onerous process. On top of the hurdles already explained, she told me she could not find the time to acquire more pills because she does not have a car, and remains busy with her job and taking the bus to school as a full-time student. As compared to Sam's comfortable, friendly relationship with her childhood doctor, Joy's uninsured status only compounds challenges to her accessing OCs, by preventing her from developing a patient-physician relationship.

### Prescriber delaying access to OCs

As a prescription-only drug, users are forced to rely on prescribing physicians, insurance companies, and pharmacies to execute their responsibilities in a timely manner. If an OC-user takes a progestin-only pill, its effectiveness as a birth control method relies on her taking it around the same time every day.<sup>138</sup> Although the effectiveness of combined-hormone pills is less influenced by the time they are taken, doctors sometimes recommend taking it at the same time to form a habit. Although I did not collect information about the type of pill participants take, every participant thought she should be taking her pill at the same time every day. When talking about missed or delayed pills, participants often reported feeling uneasy, panicked, or stressed, seemingly aware of its impact on the effectiveness of the pill. Therefore, when external forces inhibit them from taking their pill, it might impact the pill's effectiveness as a birth control method.

Four participants reflected on memories of their prescribers unnecessarily delaying their pill pickups. Kim received conflicting advice from her primary doctor and a nurse practitioner from the OB-

<sup>&</sup>lt;sup>138</sup> "How important is it to take your pill at the same time every day?," *Planned Parenthood*, September 6, 2010, <u>https://www.plannedparenthood.org/learn/teens/ask-experts/how-important-is-it-to-take-the-pill-at-the-exact-same-time-every-day-i-take-it-every-night-but-sometimes-theres-a-difference-in-3-hours-at-the-time-i-take-it-from-night-to-night-will-it-still-be.</u>

GYN's office. For now, her doctor prescribes her oral contraceptives, but does not give refills for more than one month at a time so Kim needs to call her for every new pack. After a nurse practitioner in the OB-GYN's office "[pushed] for the [Depo-Provera] shot,"<sup>139</sup> her doctor told her that the Depo-Provera shot would only worsen her already excessive bleeding. Instead, the doctor wanted her to get an Intrauterine Device (IUD),<sup>140</sup> only confusing Kim further. She told me, "I just didn't know who to listen to because you have a resident versus, like, a nurse practitioner who's been there for years." At one point, Kim told me she stopped taking the pill altogether because the doctor that wanted her to get an IUD stopped prescribing them to her and urged her to see a gynecologist instead. Kim's access to OCs had been delayed by her prescriber without cause and against her wishes.

Similarly, Noelle had previously switched from her parent's plan to state insurance, which only covered a generic brand of OCs. After having a negative reaction to the new pills, she attempted to secure her usual pills. She was then told that if her gynecologist wrote a letter explaining that the state-provided generic pills caused these side effects, they would cover her preferred type. Though the gynecologist originally said he would contact the state about this, he never called and she never heard from him again. She later learned he no longer worked at her OB-GYN office. After finding a new gynecologist, she told him about the situation and lack of insurance coverage for the type of pill she prefers and he contacted the state insurance and had the other pills approved for coverage. "It was *that* simple." The day her new gynecologist sent the letter to the state, she could pick up her preferred pills. Like Kim, Noelle had been unfairly stymied by her prescriber's disorganization.

## **Insurance complications**

My sample included participants from a range of insurance types, as Table 6 demonstrates. Insurance coverage of oral contraceptives limits access in two ways. First, the number of pill packs<sup>141</sup>

<sup>&</sup>lt;sup>139</sup> The Depo-Provera shot is a method of birth control injected every three months.

<sup>&</sup>lt;sup>140</sup> An intrauterine device (IUD) is a T-shaped device inserted into a woman's uterus to prevent pregnancy.

<sup>&</sup>lt;sup>141</sup> One pill pack lasts approximately one month.

someone can pick up from the pharmacy without a copay can range between one and three packs. Usually, when first starting on the pill, prescribers restrict pickups to one pack at a time, without refills, so that patients are forced to check-in again. The ability to pick up several packs remains of crucial importance to OC-users. Not only does having several packs allow them to travel without worrying about switching pharmacies several times, but the fewer trips to the pharmacy, the more convenient the process. Second, five participants had to switch the type of pill they had been taking because their insurance company no longer covered their brand. If your insurance refuses to cover your preferred or prescribed pill, logically, it makes economic sense to switch types of pill. But as the seven participants who switched types due to side effects can attest, type of OC and brand has an important impact on comfort with OCs and therefore continuation.

	Table 6.	Source of	of health	insurance <sup>142</sup>
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Source of health insurance	Number of participants
Parent's insurance plan	7
HUSKY, Medicaid, CHIP or some other type of government assistance program for those with low incomes or disability	3
College or university plan	2
Individual's insurance plan	2
No insurance	2
Grand total	16

# Limited refills

Most participants are able to pick up three packs of pills, or a three-month supply, at the pharmacy, though Table 7 shows that several participants were restricted to just one month at a time. Usually, the restriction on the number of packs available has to do with the number of packs insurance

<sup>&</sup>lt;sup>142</sup> The question was "What is your main source of health insurance?".

will cover, though prescribers may also impose a month-to-month refill at the start as a sort of trial run. One Trinity student arrived on campus her first year with a month-to-month plan for birth control pills, in which she could pick up one pack per month at a nearby CVS Pharmacy, for a limited number of months. After a few months on what she described as a "checkmark" plan, she ran out of "checks" and was no longer be able to pick up more pills. With her doctor located across the country, the student realized this plan was not convenient. Frustrated, her mother intervened to change the plan and she can now pick up three packs at one time. Several participants mentioned they were only given prescriptions for one month at a time when they first started on the pill, but after this initial period, imposed by their prescribers, they were able to pick up more packs at once. For example, another Trinity student had started taking birth control during college and could pick up one pack at a time in the beginning. Finding this process inconvenient, the student asked her gynecologist to start prescribing three packs so she could keep them on campus with her rather than having her mother mail them to her as she had been doing previously.

Table 7. Number of monthly-supplies covered by insurance or allowed by prescriber

Month-supply packs covered/given	Number of Participants
One month (pack)	5
Two months (packs)	1
Three months (packs)	9
More than three months (packs)	1
Grand Total	16

Taylor's insurance covers one pack per month, allowing her to pick up only one pack with a zerodollar copay at any time. But when she went away to college, she decided to take several packs so as not to worry about obtaining a new pack while away at school in another state. To do this, her mother would need to pay for the extra months out-of-pocket and then send their insurance company a receipt immediately for a reimbursement. The student admitted she was not exactly sure how it worked, but noted that her mother justifies the cost by saying "'OK, you need this. I don't care what price.' Whereas my dad's the opposite, but he doesn't deal with it." At the time of speaking, she knew she had about three packs in her dorm room, because, as she put it, her mother was somehow able to "finagle" several packs at once for her. For Taylor, whose family's annual income exceeds \$250,000, addressing prescriber and insurance restrictions is inconvenient, but navigable. For the moderate- to low-SES women discussed above, addressing these restrictions is more challenging, potentially contributing to less consistent contraceptive use.

## Uncertainty of insurance coverage

Despite the state and federally required coverage of OCs, five participants expressed uncertainty regarding the cost of their next pack of pills. Again, while unreliable coverage might mean a minor inconvenience for a high-SES student, for others, it might determine whether or not she can pick up her pills for that month. All the students with uncertain coverage were either covered by Connecticut's Medicaid program, HUSKY, or were from a different country. For Isabel, whose family income is less than \$15,000, her insurance coverage had been so unpredictable that she would not know month-to-month whether they would continue covering the type of pill she had been taking, or continue covering it at all. After mentioning this uncertainty to her doctor, she was instructed to consider the Nexplanon arm implant, if her insurance would cover it, because it would be a steady rate of hormones for three years, irrespective of the whims of her insurance.

Similarly, for Noelle, an African-American Trinity student with a family income at around the national median, insurance instability affects her contraceptive consistency. She has been covered by three different insurance plans in the past year. First, under her parent's private insurance, she remembered paying a copay for her prescription. Next, under the state insurance, she did not have a copay for the generic type they covered, and after her gynecologist contacted the state, she also had no copayment for her preferred type of pills. I asked her what she expects to pay for her OC prescription next month. Having recently switched to an individual plan with a private insurance company, Noelle told me

"I'll see how that goes." She seemed certain there would be a copayment, though unclear on the price, telling me, "next month, when I need it, I'm going to go swipe my card and be like 'here's my insurance,' and they're going to be like, 'well, here's your copay' because I know there's a copay. I definitely know there's going to be one."

Likewise, Kim, a Hispanic Capital Community College student, had recently switched insurance plans to Connecticut's HUSKY plan, under which she should not have a copay for her oral contraceptives. After the switch, she had been required to continue paying the \$30 copay she had been while uninsured, but attributed this to a mix-up and had since contacted HUSKY to clarify. When asked whether she expected a zero-dollar copay next month, she responded "Yeah…hopefully." Angela, an African-American Capital student, recalled something similar happening to her when she went from being uninsured to covered by state insurance. She recalled having to pay a \$19 copay, despite her already having coverage for two months, and figured this was a period of waiting for the insurance to "kick in." Finally, the two students from outside the United States anticipated high prices for OCs here, and thus arrived to the country with a year's supply of their OCs.

Joy, an uninsured Hispanic student at Capital, comes from a family with an annual income between \$15,000 and \$29,999. When we spoke, Joy had stopped taking her pills due to access issues. When I asked Joy to identify the main issue keeping her from her OCs, she said:

Just being able to get them through a prescription. Because I feel like there might not be a lot of people who don't have health insurance, but the people who don't have health insurance, especially the women, um, they struggle with some things like I do. Like maybe they have other struggles like acne, or like, you know, hormonal imbalances and I have like extreme pain and they're not able to get their hands on [OCs]. Um, they only have to go through, a prescription which means that they have to find some way to get health insurance first. So that's definitely been my personal obstacle.

Joy makes the point that her personal barriers to accessing OCs are systematic, and beyond her individual experience. Joy ran into complications at every step of the way, unlike more affluent participants for whom complications tended to be more localized or easily navigable with the help of involved mothers.

## Out-of-pocket costs: an inconvenience or an obstacle?

If a participant had ever paid out-of-pocket for their OC, it meant either they did not have insurance coverage that month, or that they needed more packs than their plan covers and were able to pay for them. Whereas limited pack coverage might serve as a minor deterrent for wealthier students, it essentially forbids less affluent users from obtaining more than their allotted one to three packs. Four participants had experience paying for their pills out-of-pocket while uninsured. Kim had to pay \$30 per pack since she went off her parent's insurance three months ago. Joy, the uninsured student whose family income is between \$15,000 and \$29,999, remembered paying \$18 for the two packs of pills that she could pick up at once from the drugstore. When she had originally been prescribed the pill, Joy said the clinician was "definitely conscious of the fact that I didn't have health insurance" and explained "[she knew] that I had a copay so she didn't want me to pay as much as I would for other, like, high-end type of birth control pills…" According to Joy's memory of the event, her prescriber chose the type of pill based on her ability to pay for it out-of-pocket.

To illuminate further the disparate impact of insurance restrictions, consider the comparison between Taylor and Angela. Taylor, a white Trinity College student, comes from a family with an income of more than \$250,000 a year. Taylor's insurance coverage is provided by her parent's employer. Taylor started taking birth control pills at seventeen to help control her acne. A black Capital Community College student, Angela, comes from a family with an income between \$30,000 and \$50,000. Angela's insurance coverage is currently provided by Medicaid. Angela started taking OCs at age nineteen due to uncontrollable bleeding related to her severe anemia.

When we spoke, Angela told me she no longer paid out-of-pocket for her birth control pills. But she recalled a time "where [she] didn't have insurance at all so [she] had to pay out-of-pocket for it again." When she did not have her prescription card, she remembers paying thirty dollars per pack. Angela's inconsistent insurance coverage and constantly fluctuating copays led to a financial strain on her.

Like every now and then I'd have to ask my mom: "Can I have thirty dollars to pay for [birth control pills]? Cause I don't think I was really working at the time and it was money coming out of my

savings to pay for it. And she's like, "I have to find your prescription card. We have to find it." But it was luckily—because it was toward the end of the year and I was, um—the next year I was getting my new prescription card so I just knew I had to wait a couple months. I'm pretty sure if I didn't have to take it [for her anemia] I wouldn't do it, because I would have to pay thirty dollars out of pocket knowing I don't have the money to do it.

Currently 21 years old, the multiple changes in price for Angela have all occurred in the last 2 years and likely as a result of her switching from her father's insurance to Medicaid. For Taylor, a Trinity student from Massachusetts, her insurance will only cover one pack to be picked up at a time. But because she continues to use her Massachusetts pharmacy to pick up her pills, rather than one in Hartford, she told me that usually before heading back to Trinity for the semester, she and her mother would pick up three or four packs, "but they charge us for that." Her parents are later able to send the receipts of that payment to the insurance company for reimbursement, but Taylor was not sure how it worked. When I asked Taylor whether her mother usually picks up her pills, she told me:

Um, yeah. During the school year. Because every time I come home, usually there's a prescription on the counter for me to bring back to school. So right now, I think I have like three months in my drawer at school, somehow.

As mentioned in Chapter 1, Taylor is able to have multiple packs on hand at a given time because, to use her word, her mother is able to "finagle" that for her at the pharmacy. While Angela paid out-of-pocket for her pills from her own savings, Taylor knew her pills would "somehow" appear at home when she needed them because her mother had been able to pay the copay. Later in the interview, Taylor mentioned that paying for the extra packs out-of-pocket for her to go to college "was like ninety dollars, or something, for that. And, um, [her] mom was like 'It's fine,' like 'it'll be worth it.'" As part of a family with sufficient financial resources, Taylor's insurance restricting her to only one pack was not more than an inconvenience. Meanwhile, Angela said that if she had not needed OCs for medicinal purposes, she would not continue to take OCs because she has had to pay for them out-of-pocket.

# Type switching because of insurance

Ten of the sixteen participants reported switching their type of OC, whether it be a brand switch due to insurance complications, a type switch due to side effects, or some combination of both. Table 8 breaks down the reasons participants switched their types of OC. To give an example of this intersection of issues, when Noelle's parents took her off their health insurance, she was covered by state insurance which no longer covered the type she had been taking. The state insurance would only cover a generic brand of her type, which she reported having a negative physical reaction to, including seeing spots in her vision. As mentioned above, to have her original pill type covered by the state she had to request a letter from her gynecologist. Another participant reported having to switch to a generic brand because insurance refused to cover her existing type. This student's health insurance coverage is also provided by HUSKY, Connecticut's health insurance program. A third student, Zoe, who is on a college plan, recalled her copayment dropping from about twenty dollars per month to a copay of zero dollars when she switched her pill type two years ago. It should be noted, however, that she did not switch her type for the purpose of getting insurance coverage, but she simply noticed the price drop to nothing when she started on a new pill of a different dosage.

Reason for type switch	Number of participants
Insurance coverage	3
Side effects	5
Both insurance coverage and side effects	2
No type switch	6
Grand total	16

*Table 8.* Reasons for switching type of oral contraceptive

For Isabel, her HUSKY insurance proved inconsistent on a month-to-month basis, telling me that "…one month [her insurance] would cover a certain generic brand and they would drop it, so they would put me on something else…every few months I would be on a new brand of birth control." She explained this spotty coverage by telling me that HUSKY has a list of things they cover and every year they would revisit this list and get rid of the OC brand she had been using. Though she remembered receiving a new brand every time she picked up her pills, she assumed it was the same *type*, meaning makeup of pill, with

each new pack. As a relatively self-reliant teenager when it came to managing her OCs, this student followed the instructions of pharmacists and went back to the doctor to ask what she could do to get coverage of her OCs, to which they would find a type covered by HUSKY and prescribe it to her. As a result of constantly switching pill types, this student began to notice mood swings and irregular periods.

After switching types for side effects reasons, Ruby recalled the pharmacy giving her the old type of pill on two or three consecutive visits. She realized the mistake before taking the incorrect pill, but reported feeling frustrated because she had "go in and just, like, fight with them" to convince the pharmacists that she had switched types. Ruby would then have to wait for the pharmacy to call both her physician and OB-GYN to verify the switch. Ruby ascribed the error to the old type of pill remaining in the computer system under her name, and their failure to delete it. To prevent this mistake from delaying her again, Ruby would call a week in advance to allow for time to correct any mistakes.

## **Travel complications**

Transportation to obtain oral contraceptives proved another barrier to access. For some, often of lower SES, or Trinity students without a car on campus, simply getting a ride to the pharmacy posed a challenge. For others, travelling for the summer, gap year, study abroad, or holidays meant they either needed to consider switching pharmacies or pay out-of-pocket for several pill packs at once so they would have their next pack on hand.

## Getting to the pharmacy

Five participants reported obstacles to physically getting to the pharmacy to pick up their next pack. Two of the five students no longer take the pill; both stopped due to difficulties accessing their pills. For example, when asked what would have made it easier to get her pills, when she was taking them, Isabel told me both consistency in insurance keeping her brand as well as "getting a ride to the Walgreens." While this may seem an easily surmountable feat, if no one in her family is able to drive her, after a while "[she] would just stop asking to go." Of course, this resulted in gaps between her pill packs and to her eventual decision to use the Nexplanon implant instead. Joy, quoted earlier talking about her issues scheduling an appointment with the health clinic also faced challenges travelling to simply obtain the pack, telling me "I just couldn't—I couldn't find the time because I don't have a car and I have to walk there. And, um, considering the distance there—I also had a job that I had to take the bus to school." She simply could not find the time to travel to pick up her pills, considering barriers such as lack of a car, and time restraints due to her job, in addition to her lack of health insurance.

Angela had her prescriptions for oral contraceptives sent to a downtown CVS located near her campus. Originally, she thought, "it's convenient because any other CVS I'd have to, like, travel further to get it...But it's not really that convenient." After taking a semester off from school, and during the summer, she found the limited hours of operation a challenge. She recalled two occasions when she could not make it to the downtown CVS between its operational hours, 8:00 AM and 6:00 PM only on weekdays; sometimes, this resulted in her missing Sunday's pill and having to wait until Monday to start a new pack.

Three Trinity College students expressed difficulties in obtaining their pills from the pharmacy while away at school. One Trinity student transferred her prescription from her home in a different state to the CVS near the college. Before she could have her car on campus, the student would order a car from Uber to drive her to the pharmacy to pick it up. When this plan began to feel cumbersome, the student switched to the Walgreens delivery system her family had used in the past, which could deliver pills directly to campus, though it required she take a new type of pill. Though the mail order proved more convenient than her Uber, she began feeling painful period symptoms from the new type of pill. She then learned only CVS sold the brand she had been taking and her body did not respond well to the type Walgreens had been mailing her, so she had to switch back to CVS pickups.

For the Trinity students opting to have their prescriptions picked up through the College's health center, most described this process as straightforward and convenient. For two students choosing not to utilize this service, one would ask her mother to pick them up at the pharmacy located thirty minutes away from their home and ship them to her, so she would have access to her packs three days after initially calling for a refill. For another student, it had been more common for her to pick up her prescription when she went home for breaks—or have her mother bring them to her when she visited but in the past, her mother has mailed her a pack to Trinity, disguised in a care package. When asked if anything would make it easier for her to obtain her pills, she answered that moving her pick-up location to Hartford would likely be easier, rather than her home pharmacy located an hour and a half away. Why had she not done so already? She explained that she has not run into the issue of running out yet, and she feels that because she spends "short periods of time" on the Trinity campus, she did not want to switch her pick-up location back and forth constantly to accommodate for breaks. Besides, she figures she could always drive home if need be. Similarly, Zoe was aware of the Trinity College Health Center prescription service, but said she "didn't know how to set that up," and never felt it was "enough of a hassle for [her] to go to CVS" to pick them up herself. She would either jog there, ask a friend for a ride, or have a campus safety officer drive her.

### Personal travel complications

For some participants, short-term or long-term travel plans can also complicate their access to oral contraceptives. One student recalled a time when she had travelled out-of-state during the summer, and had mistakenly left her pill pack at home. She had to skip a pill and wait until she returned home to take it. Other students travelled on longer term trips. For example, Noelle would spend summers in a different state. Another student travelled around the United States during a gap year, and recalled not having a pill pack for at least two weeks of the trip because she would forget to contact CVS to change her pick-up location in time for her next pack. Though she was able to call the CVS in her hometown to sort out her new location, she described to me a momentary panic when the pharmacy initially told her they had no "medicine" for her, as she referred to her pills. This same participant explained to me that she had been on an automatic monthly refill plan in Connecticut while at Trinity and that if she had forgotten to switch her pick-up location in time, the prescription would be sent to Connecticut and the pharmacists in her home state would be unable to fill it for her.

Other than one Trinity student visiting a Planned Parenthood in Hartford, students continued to see prescribers from their home states rather than transfer to a Hartford-based gynecologist or go through the Trinity College Health Center. Part of the explanation for this is that insurance plans would likely not cover out-of-network prescribers. One student, from New York State, explained that while she could have found a gynecologist in Hartford, she found it much easier to be able to arrange her OCs at her yearly check-up back home. In addition, she was obtaining her OCs using her mother's insurance, which is not accepted by the Trinity College Health Center, and she assumed it would come with some sort of expense. To justify her decision to use a prescriber from home, she explained, "my mom is approving and I have it for free and my gynecologist is approving and I see her once a year anyway, so why not just get it from her?"

## Travelling abroad

As mentioned previously, the two interviewees originally from outside the United States both managed to obtain a year's supply of birth control pills before they left, partly because they did not know what OCs would cost here and the extent to which their insurance plans would cover it. For example, when preparing to travel to the United States for a new job, Christina thought: "'I have no idea how I'm going to get [OCs] [in the US] because I don't, like, know that my health insurance covers for here and, um, I don't know where to go. I don't know how much it's going to cost. So I heard it cost like 80 dollars so I was like, 'you know what? I can't afford that."' After staying for one year, and having depleted the pills she brought, her mother brought her another year's supply when she came to visit her. Nationally, although recent trends show the portion of college students studying abroad has increased, only 10 percent of U.S. graduates studied abroad.<sup>143</sup> In this way, the Trinity College student experience does not reflect the experiences of the rest of the country. Trinity College offers a wide array of study abroad opportunities around the world, and more than 60 percent of students decide to study away. Although Olivia only planned to be abroad for one semester, she wanted to obtain more than her allotted three packs of pills before leaving. After frantically calling both the pharmacy and her insurance company three days before she departed, she obtained coverage of a fourth pack.

Zoe's study abroad plans served as an impetus for her to switch to the Nexplanon arm implant because her insurance refused to pay for additional packs. Partly due to insurance restrictions limiting the number of covered packs, partly due to health contraindications, Zoe's clinicians at Planned Parenthood recommended she try a long-acting reversible contraceptive method instead.

Zoe's insurance restricting her coverage provides one example of a way in which OC compliance can sometimes be out of one's hands. Similar to how high-SES students' mothers serve as an informal resource to aiding their access, familiar and consistent relationships with prescribers can also serve as a resource to college students seeking exceptions to follow-up visits. For this reason, as well as the general insurance limitations outlined in this chapter, LARC methods might be a more effective option for college students concerned about preventing pregnancy. In addition, and as Chapter 3 will demonstrate, college students struggling to take their OC every day also reduces the pill's effectiveness as a method of birth control.

<sup>&</sup>lt;sup>143</sup> "Trends in U.S. Study Abroad," National Association for Foreign Student Affairs, <u>https://www.nafsa.org/Policy and Advocacy/Policy Resources/Policy Trends and Data/Trends in U S Study</u> <u>Abroad/</u>.

#### **CHAPTER 3: CHOOSING A BIRTH CONTROL METHOD**

One implication of an over-the-counter oral contraceptive might be that it encourages women to continue using a method that does not fit their lifestyle. Without consulting their doctors prior to initiating the pill as their method of choice, women and girls might not have the opportunity to learn about other options better suited to them. Furthermore, prior research has found that being introduced to the IUD by a healthcare provider is associated with a woman's interest in the method.<sup>144</sup> Sarah Jarvis, a women's health spokesperson of the Royal College of General Practitioners in London, argues that OTC OCs encourages the wrong method of birth control; therefore, an Rx-to-OTC switch for OCs is a poor plan to combat unplanned pregnancy.<sup>145</sup> Citing a study finding that 47 percent of OC-users missed one or more pills per cycle, Jarvis asserts that LARCs are more reliable and effective. This chapter offers evidence to support the finding that college students struggle to maintain strict compliance to oral contraceptives. Reasons for non-compliance differed by each college and by SES: while some students cite partying or sleeping as the reason they miss their pills, others cite changing shifts at work. Perhaps for students in both situations, a LARC might offer a more effective form of birth control. Of the nine participants currently taking oral contraceptives, four expressed interest in a long-acting reversible contraceptive (LARC). For the others, their aversion to LARCs seems to stem from a lack of familiarity or education about the method.

Although OCs remain the most popular form of birth control in the United States,<sup>146</sup> the proportion of contraceptive users on a long-acting reversible contraceptive method (LARC) has risen in recent years. In 2002, only 2 percent of contraceptive users had a LARC, as compared to the 12 percent in 2012.<sup>147</sup> Because participants were recruited with the stipulation that they either currently take OCs or had experience taking OCs in the past, this sampling bias may have influenced the discussions I had comparing OCs to other methods of birth control. As demonstrated by Table 9, participants in this study

<sup>&</sup>lt;sup>144</sup> Kendra L. Fleming, Abby Sokoloff, and Tina R. Raine, "Attitudes and beliefs about the intrauterine device among teenagers and young women," *Contraception*, 82 no. 2 (2010): 178-182.

<sup>&</sup>lt;sup>145</sup> Jarvis, "Should the contraceptive pill be available without prescription? NO."

<sup>&</sup>lt;sup>146</sup> Guttmacher Institute, *Contraceptive Use in the United States*.

<sup>&</sup>lt;sup>147</sup> *Ibid*.

were either currently taking oral contraceptives or had a Nexplanon implant. Otherwise, they reported methods such as condoms or the "pull-out method" in lieu of a prescribed method.

When participants first started on oral contraceptives, most either sought out the pill for specific desired effects such as reducing acne or alleviating intense period symptoms, or were recommended the pill and not presented with other options. Otherwise, most cited the pill's popularity and reputation as the "easiest" method for choosing to take it over another method. More recently, a few participants noticed their prescribers began "pushing" the IUD as another option. This may be in part due to recent research findings that LARCs have higher continuation rates for young contraceptive users,<sup>148</sup> and subsequent recommendations by groups such as the American Academy of Pediatrics to encourage LARCs as the "first-line" in contraceptive planning for adolescents.<sup>149</sup>

Several participants expressed attitudes about the IUD similar to those already found in previous research on young women's beliefs about IUDs, namely, fear of the invasive nature of the device or concerns about potential health risks.<sup>150</sup> Eight participants of the twelve not currently using a LARC were unwilling to switch to a LARC; they chose to remain on the pill though oral contraceptives seemed ill-suited for their lifestyle as college students. Although some students were more strict about their OC-compliance, than others every participant revealed at least some level of inconsistent use or forgetting to take the pill on time.

<sup>&</sup>lt;sup>148</sup> Elizabeth I. Deans and David A. Grimes, "Intrauterine devices for adolescents: a systematic review," *Contraception* 79 no. 6 (2009): 418-423.

<sup>&</sup>lt;sup>149</sup> K.E. MacGregor and S.N. Khadr "Contraception for adolescents (American Academy of Pediatrics). Archives of Disease in Childhood-Education and Practice, 101 No. 2 (2016): 61-64.

<sup>&</sup>lt;sup>150</sup> Julia Potter, Susan E. Rubin, and Peter Sherman, "Fear of intrauterine contraception among adolescents in New York City," *Contraception*, 89 no. 5 (2014): 446-450.

Current method of birth control*	Number of participants
Oral Contraceptive	9
Nexplanon Implant	3
No method	4
Grand total	16

# Table 9. Current methods of birth control used by participants<sup>151</sup>

### Why oral contraceptives?

During the interview, participants were asked why they decided to take OCs, rather than another method of birth control. The most popular responses had to do with the pill's reputation as the "easiest" method—defining "easy" as the least invasive method—or most familiar method. Participants also chose oral contraceptives to treat period complications or acne.

#### OCs as "easiest" method of birth control

Seven participants explicitly described the pill as "easy," though they defined it in slightly different ways. For example, Maya claimed the pill was recommended to her because it is "the easiest [birth control method] to control hormones," but that the pill also felt familiar to her because, as she said, "...I knew, like, what I was getting into [with the pill]." Similarly, Violet told me she chose the pill after telling her mother she planned to start having sex and her mother recommended it to her. In our exchange about OCs as her method of choice, Violet describes more fully the meaning of OCs as the "easiest" method:

#### HD: ...Why did you pick the pill over a different method at that time?

*Violet:* It seemed like the easiest thing to do. Um, especially cause it was only one hormone, so I was like "yeah sure this sounds fine." Cause—mainly because I was kind of ignorant to the world of birth control and, um, the pill sounded fine to me, so I was like "yeah sure."

HD: And when you say "easiest," like, what are you thinking of?

<sup>&</sup>lt;sup>151</sup> This chart does not include condom use. Some participants used condoms as their only method, or as a supplemental method; they were listed as "no method."

*Violet:* Uh, well like an IUD to have to be like this sort of mini procedure and then it would be something that would be inside of my body long-term and, um, but the thought of the pill is like, you know, you pick it up and you just have to take a pill once a day. So I think it sounded easy in that sense. Like something that I could start or stop whenever I felt like it. I didn't have to go to a doctor to have it removed. I could kind of just, if I wanted to try it out for a month, I could try it out for a month. If I wanted to do it for a few months or a year, I could do that as well. So yeah it just seemed easy in that sense.

As demonstrated by my conversation with Violet, part of the appeal of OCs is their almost immediately reversible nature. Because pills do not ask users to make a commitment longer than one day, people like Violet may feel more in control of it than they would a long-acting reversible contraceptive (LARC).

Others seemed to choose the pill to avoid any unfamiliar processes, perceiving IUD insertion as a "mini procedure," as Violet described it. For example, Angela told me she just wanted to take the pill "because that's what [she's] used to, the form [she's] used to taking, like Advil...I don't wanna get a shot every—I didn't feel comfortable with that, or putting something in me." Examined in further detail below, many participants expressed either disgust, unease, or fear about the idea of an IUD or other LARC, such as the arm implant, being inside of them all the time. Instead, it felt easier just to swallow a pill, an act they are well-accustomed to. For Sam, taking a birth control pill fit into her existing routine of other daily pills, telling me it was "pretty easy" for her to "just kinda swallow a pill with all of [her] other pills."

## OCs as the most familiar method of birth control

For Olivia, the pill seemed "easy" because it was "what everyone else was on" and because "...you don't have to do the shot..." Christina, one of my participants who started OCs outside of the United States, told me she "just thought the pills was like, most easy..." and that it was the method "...that everybody had been using." Christina's friends were taking OCs, as well as her mother. Noelle's older sister takes OCs, so "the pill has always been what [she's] known..." The same was true for Ruby: both her mother and her sister had already been taking the pill, so it "wasn't, like, a foreign concept" to her family. Whitney specifically asked for the pill at the gynecologist. OCs were "an obvious choice for [her]," because her mother was also on the pill. To Zoe, using the pill as her birth control method made the most sense because "It just really seemed like the norm. Um, and like, the easiest way."

## Monthly, regular periods confirm they are not pregnant

Though this question did not play a major role in most interviews, two participants mentioned a sense of psychological relief of having a regulated period. As already covered, several participants started OCs at a young age to help regulate irregular, painful periods, so having a more controlled period would likely help explain their preference for the pill as well. But the psychological relief aspect relates to the monthly confirmation that the pills are serving their contraceptive mission and that the women are not pregnant. For example, Angela enjoyed knowing the timing and duration of her periods. Prior to starting OCs, she would wait for two months and not see her period, though she was not pregnant. Understandably, for people actively trying to avoid pregnancy, not having your period for two months would cause unnecessary stress.

Taylor told me that the pill "just adds a bunch of mental calmness for [her]. Cause [she tends] to have a lot of anxiety, so just, like, the idea of [taking the pill] helps [her]..." relieve some of the stress of a potential unintended pregnancy. Since taking the pill, Taylor says her period "comes the exact same day every single month," slightly easing this burden. For Violet, on the other hand, after speaking with friends who have IUDs, and hearing they no longer got their periods, she thought this sounded like "a very attractive aspect of the IUD." Telling me:

I was like "I would love to not have my period!" (Laughing) But also something that did cross my mind about that, is that, um I think mentally that would be very problematic for me because I would be worrying constantly that I'm pregnant. Which is probably the main reason someone takes birth control and then like, you know, the period's supposed to be sort of a relief to you at times as much as it is a pain. Um and without that I feel like I would start to freak out a little bit. Become paranoid.

And, as Whitney points out, having a regular period also helps her to plan and prepare for trips, knowing whether or not you will be on your period while you are away.

## Started on OCs because no other option given

Other students started on OCs, or continued taking them either because no other options were presented to them when they initially asked for birth control or they were specially recommended to take OCs. Some had not heard of the IUD or other LARCs before I mentioned it or up until recently. In Grace's case, when she initiated OC use at age 16, she went to Planned Parenthood for the first time and asked for a birth control *method* for the purpose of preventing pregnancy. The clinicians she saw specifically recommended the pill for her: "They, um, recommended pills at first, because—I guess cause of my age they didn't wanna go into the IUDs and all that." As the oldest participant at 29 years old, Grace would have started OCs in 2005, and doctors may have been less likely to push for a LARC at that time. Christina arrived in the United States several years ago, but spent her adolescence in a member country of the OECD. Compared to the seeming popularity of the pill, it was "only, like, in the last few years that I had heard stories about the Medina [referring to Mirena IUD] or whatever it's called..."

Joy recalled that the high school doctor who originally prescribed her OCs only suggested the pill. No one had mentioned the IUD to her. She said, "I only found out about the other things cause of commercials, there would be commercials about, um, the bar [referring to the Nexplanon arm implant]. And that was basically it. I never heard about the shot but I did read about it when I was just, like, doing research on [OCs and other methods of birth control]." Sam, a white, Roman-Catholic Trinity College student from a family making more than \$250,000 a year, told me about an experience she had working at a summer camp, where she discussed birth control methods with counselors from other countries. She remembers her British friends and French friends telling her about their arm implants. In Sam's words:

*Sam:* I had one friend that was from France, and um, the FDA laws in Europe are not as strict as the US FDA laws. So she actually had this implant in her arm and you could feel it. And, um, she was telling me about how great it was and I wasn't even sure if we [meaning the United States] had that.

# HD: The bar?

*Sam:* Uh, maybe? That might be what it is. But I'd never heard of it. But yeah, it was interesting because she got it, she said, when she was like 14 or something. Like very young. So, I was surprised because I don't know the rules but I know that at 14, getting a birth control implant in the US may not be seen as (pause) safe? I guess? For most people.

Whitney told me she had not heard about the implant until she arrived in the United States last year: "I saw an advert and I was like 'what the hell is that?!' (Laughs)" Based on these anecdotes, the pill's reputation as the most popular birth control option is self-perpetuating. Its popularity reinforces its familiarity, encouraging first-time birth control users to select the option "everyone" takes.

### **Frequency of forgetting to take OCs**

Despite, its popularity, the evidence suggests that college students struggle to maintain strict compliance to a daily oral contraceptive. Participants were asked, "When was the last time you missed a pill or a few pills?" For most participants, across socioeconomic classes, it was common to have missed at least one pill in the past month, though their reactions to their missed pill(s) varied. For example, Angela told me she missed a pill last month and laughed that she was "so upset," primarily because this would trigger her next period to start early. Angela's failure to take her pill last month was not for a lack of effort:

I have, like, six different alarms. I have my phone alarm, I have an app that tells me when to take [the pill], I have a reminder on the app telling me to take it, and I have two calendar things because I forget if I don't have--I will forget. Been doing this for like two, three years now and I still will forget to take it.

The day she missed a pill last month Angela had simply forgotten her wallet containing her pill pack at home one day and had already left the house for the bus. Similarly, during our interview, Taylor remembered she left her pack in her dorm room, but she planned to head straight to the library. When I asked whether she planned to trek back to her room for her pill, she told me her willingness to walk back to her room for a pill depended on whether she had already missed a pill that month. In Taylor's words: "...cause I don't think you can—or, like, in my head you can't miss more than two without—or something, there's some number you can't miss" in a month. If Taylor had already missed one pill in a given month, she told me she would "usually, like, make a big deal about making sure [she didn't] miss any more.

Other participants, such as Zoe, described their compliance as diligent, though Zoe admitted that on weekends she might miss a pill if she was out later than usual. Noelle also described herself as "usually [being] very consistent with it," and setting an alarm to go off every night, though the day we spoke she had forgotten to take it the night before. By contrast, Brittany forgot to take her pill so often, that at one point she forgot to take it for four consecutive days. When we spoke, Brittany no longer took birth control pills and she had switched to the Nexplanon implant. The main reason she decided to switch to the implant was because she "wanted something more permanent so that [she] didn't have to worry about constantly...[remembering] to take the pill..." because she knew her routine was irregular and ineffective.

#### **Reasons for non-compliance differ by SES**

When students specified the reasons why they forgot to take their pills, it often painted a picture of how they spend their time. Perhaps unsurprisingly, low-SES students' work schedules prevented them from taking their pill at the same time every day, whereas higher-SES students cited reasons such as partying or sleeping.

## Trinity College students' reasons for forgetting

Two Trinity students, Violet and Olivia, spoke about the challenges of taking their pill at a consistent time every day, considering their constantly changing schedules. Violet explained that at the beginning, and "as someone who was having sex for the first time," she was "very paranoid about the idea of getting pregnant" and would take the pill every single day at precisely the same time. But as time went on, Violet became less diligent about her pills the longer she took them; eventually, she turned off her alarm and would remember an hour later. When I asked her to explain this further, Violet told me she eventually became strict about it again but that "there was something about that that was kind of annoying" because

...I had the time set for, like, after dinnertime around like eight or something. And when you're with people and your alarm's going off at, like, 8 PM, it's kind of annoying and people are asking questions like "why do you have an alarm at 8PM?" and it's like *do you wanna volunteer the information*? That "Oh it's reminding me to take my pill" or do you wanna say, "Oh it's supposed to wake me up from a nap" that I was taking from 7 to 8 at night. It did get a little frustrating at times...cause especially on a college campus, it's such a unique setting where you're constantly surrounded by people.

Other than reminders constantly alerting those around you it is time to take your pill, four other Trinity students reporting missing pills due to circumstances unique to college. Olivia's major complaint about OCs as a method is that you need to remember to take it every day at the same time, telling me that

"especially in college, you always have stuff going on, it's so easy to forget," which she frequently does, contributing to added stress.

Trinity students mentioned irregular sleep schedules, long hours in the library, and going out to parties as the primary reasons they miss a pill. For Noelle, she might be more likely to miss a pill when [she's] at school and [she's] falling asleep by ten o'clock after studying." Violet also complained that her "sleeping schedule is not consistent." One night, she will stay up late doing homework, or she might go to a party and want to sleep in the next day. Other days, she will be up early at the library to work. The same was true for Taylor who sometimes forgets her wallet in her room while she is studying in the library, which during finals week can be until one or two in the morning. Usually, Taylor finds "it's a lot easier [to remember] at home just because I'm, like, at home every night, whereas, like, at school, especially the weekends or nights, I go out." Ruby found that the two most recent times she forgot to take her pill on time it was because she was "going out and it completely just went over [her] head"; she simply missed the notification on her phone in the "scramble of, like, going out, getting ready type thing." Ruby avoids the morning due to her inconsistent sleep patterns, and the day, because she is a "big napper."

# Capital Community College students' reasons for forgetting

For Capital Community College students, other than simply forgetting, they did not run into the same schedule complications as those living on a campus full-time. Instead, however, three students cited work schedules as conflicting with their ability to take the pill on time. For example, Christina cited her work as a waiter and shifts during the day as complicating the timing of her pill. When she arrived in the United States and began working and going to school part-time, she remembered getting off track and thinking to herself. "I can't remember. *Did I take it?* And then I look at it and then I look at it and I'm like *Oh my god, I've missed three days.*"

When Angela would open as a cashier, she would have to be at work for 6:45 AM. Though her set time to take her pills was 9 in the morning, she would take them earlier on the days she opened

because "being a cashier, I can't just be like, 'Oh, I'm going to the bathroom,' if I have a customer, I can't just leave at 9." Joy encountered a similar problem when she started working for a fast-food restaurant while on the pill. Her shift would start at 3:00 PM and end at 11:00 PM, and "it was really difficult for [her] to find time just to go to the back and take [her] pill because [she] would be really busy taking orders, putting orders in the drive-through." Constantly multitasking at work, Joy rarely had time to go take her pill in privacy. When her employers began switching her shifts constantly, she found it difficult to keep on a regular pill-taking schedule.

## Why not an IUD or other LARC?

Based on the frequency with which most of my participants forget to take their pills, a more effective option for many might be an intra-uterine device (available as hormonal, Mirena, or nonhormonal, Paraguard) or other long-acting reversible contraceptive, such as the Nexplanon implant, or the Depo-Provera hormonal injection. That younger women should consider LARCs as their primary form of birth control is not a new argument. In fact, The American Academy of Pediatrics recommends LARCs as a first-line contraceptive because they have the highest rates of continuation and lowest failure rates of all birth control methods.<sup>152</sup> More recently, others have argued that while health care providers' promoting LARCs may be grounded in evidence of their effectiveness, they may not be the right choice for all girls or women.<sup>153</sup> Specifically, Dr. Maya Michelle Kumar, a pediatrician at UC San Diego, has argued that girls may want to take OCs for reasons other than pregnancy prevention—as exemplified by many of the participants in this study.<sup>154</sup>

 <sup>&</sup>lt;sup>152</sup> M. A. Ott and G. S. Sucato "Contraception for adolescents." *Pediatrics* 134 no. 4 (2014): e1257-e1281.
 <sup>153</sup> M. M. Kumar, "Long-Acting Reversible Contraceptives for Adolescents: More Complex Than "First-Line," *JAMA Pediatrics* 172(1) (2018): 6-7.

<sup>&</sup>lt;sup>154</sup> *Ibid.*, In addition, Dr. Kumar highlights the fact that many young women and girls may have a history of sexual abuse and subsequent feeling of losing their reproductive autonomy. Therefore, Dr. Kumar suggests the perception that LARCs are not easily reversible—meaning they need to visit a doctor to have it removed—would only compound this feeling of dependency and loss of control. As detailed in this section, many participants spoke are averse to the perceived permanence of the IUD, shot, or implant. Furthermore, as Dr. Kumar notes, the pelvic procedure or insertion process required to get a LARC might either feel triggering or invasive. Dr. Kumar also mentions the fact that younger women may not like the idea of a foreign device in their bodies or the inability to start and stop the contraceptive method on their own. Finally, Dr. Kumar points out the fact that health care

# IUD as "scary," "dangerous," or painful

Several studies have examined perceptions of IUDs among American women. One 2014 study<sup>155</sup> conducted interviews with young women ages 14 to 21 years old in New York City who had heard of IUDs but not personally used one. The major finding from these interviews was that fear of the IUD predominated. Participants feared pain, potential expulsion, a foreign body, and potential for physical harm. Each of these fears was relayed to me by the participants of this study as well, though it should be noted once again that all participants had taken oral contraceptives as their first method of birth control, and therefore their opinions may be skewed against other methods.

For those opposed to LARCs generally, but IUDs specifically, a common reason was the perception of these methods as scary, dangerous, or painful. Noelle worried about potential expulsion: "...IUDs kind of scare me because I'm like, 'what if something slips or it moves out of place?' and then you can't have kids." Christina also expressed a concern about the IUD threatening future reproductive capabilities, telling me that she had

...heard bad stories about [the IUD], like it gets stuck and, like, muscles grow over it, or your uterus grows over it...then somebody told me it's harder for you to get pregnant in the future when you're using that one so I was like, "I definitely don't want that one."

Besides the few that had a view of IUDs based mainly on myths, others simply feared the IUD as an object, and the idea of a foreign body inside of them. Ruby said that "IUDs kind of scare [her]," and that she would not want something inside of her all the time. Alternatively, the shot might be a "risky choice" for her due to unrelated medical complications. In addition, she told me, scheduling the shot every few months would be tricky if she were to be travelling. If she decided to go abroad, that would "definitely [be] a reason not to get [the shot]." When I asked Angela whether she would consider a different method of birth control, she said that the idea of using a LARC, such as the shot and the IUD, "just scares [her]"

providers ought to keep in mind the United States' dark history of forced sterilization of women of color, women of lower socioeconomic groups, and people with developmental disorders.

<sup>&</sup>lt;sup>155</sup> Potter et al., "Fear of intrauterine contraception among adolescents."

and that she does not want anything put inside of her. Again, Angela expressed discomfort regarding the IUD as a foreign object.

Though Joy seemed unfamiliar with the IUD, she knew a friend of her mother's who had gotten the arm implant, and had a bruise following insertion. To avoid the pain of insertion, Joy said "It's better for me just to take the pill when I can." To clarify, Joy said "when I can" because her difficulties accessing OCs and inability to schedule an appointment with the clinic to get a refill has led to her discontinuing OCs. Olivia was also generally averse to LARCs: she did not want the IUD because "that scares [her]," and "the shots are just a pain to go get," so the pill seemed the most "accessible" option. She explains further:

Umm, yeah, I have...considered the IUD just because, taking pills, now, after what? Two years, it's like a pain in the ass to take them. Um, and you hear about people getting IUDs and they're like "Oh it's the greatest thing ever, you don't have to take it, you don't have to worry about missing any," stuff like that. So I definitely considered it but then at the same time, it's like, I don't want to go and get that inside me. It still, like, scares me. But just cause it seems painful and I have a low pain tolerance.

Similarly, Zoe had heard negative stories about IUDs, and never had an interest in getting one because it seemed too painful. Instead, Zoe had the Nexplanon arm implant put in before going abroad for several months. Not only did her insurance cover the full cost of it, but she enjoyed the fact that she no longer had to remember to take a pill every day or pick something up every month. In addition to saving time, she found that she saved money because she no longer had to buy tampons.

Ruby compared the flexibility of the pill with the IUD, disliking that it is "more permanent" and that she would be unable to stop immediately. A common perception, Whitney thinks of the IUD and LARCs as being for "older women who don't want to have kids anymore," rather than a popular choice among women her age. Like Ruby, the idea of permanence deterred her from considering the IUD, mainly because, to her, "it just feels really dangerous." Though she acknowledged the presence of hormones in pills, this posed less of a threat because it "gets out of your system if you stop using it." With a LARC or IUD, "there's something permanently in [her] body," and she wondered whether it would affect her reproductive system.

## Prescriber pushing for a LARC

At least two of my participants specifically mentioned that their prescribers had been pushing LARCs during appointments. Recall that Kim had a doctor and nurse practitioner disagreeing about whether she should get an IUD or Depo shots. Without a clear direction from her health care providers, and with no strong preference herself, Kim decided to stay on the pill because, as she said, "I can't take out a shot that's supposed to be there for 3 months, you know?" Kim's comfort with the pill seemed to relate to its transient and temporary nature—it only continues working if you make the decision to take it every day. Taylor also noticed her pediatrician pushing the IUD during her last appointment, telling me, "this past time I saw her in January, she apparently—they're really pushing the IUD, the whole practice is...for like, any kid that's on [the pill]." But after her pediatrician told her the IUD would not help her acne, she decided it would not be worth it as this was one of her primary reasons for taking the pill. Her pediatrician told her that the practice had been "trying to put more people on it," and Taylor has also noticed that "a bunch of [her friends]" have started to switch to the IUD, and "more permanent solutions." Taylor told me she thinks this is the case because

....I feel like they think of college kids as, like, unreliable, especially with, like, taking a pill every single day because that's, I think, how the conversation started. She asked, like, how often I take it and if I miss anything...But I don't know, cause I know when Trump was elected there was a lot of people who were trying to switch over to that just for insurance reasons. So I don't know if the doctor's office picked up on that or what.

Taylor was likely referring to the fact that the Trump administration decided to loosen the restrictions of the contraceptive mandate from the Affordable Care Act, opening the door for more employers and insurance companies to limit coverage of OCs. At the time of the election, some advocated having an IUD inserted while insurance companies still covered it, to avoid potential loss of coverage during a fouryear presidency. Google Trends shows a jump in searches of "IUD" the week after the election, reflecting this moment of anxiety for contraceptive users in the United States.

#### **Comparing method reliability**

Depending on the type of pill used, taking OCs outside a three-hour window every day renders them less effective at preventing pregnancy. For this reason, coupled with the poor compliance described to me in the interviews, LARC options seemed a more reliable choice in terms of birth control effectiveness. In addition to general concerns about IUDs, participants had diverging opinions on the reliability of LARCs as an effective method of birth control. Their use of the word "reliable" differed as well. Often, they used it to reflect their opinion of the method rather than findings of its percentage of effectiveness or success rate in preventing pregnancy.

Noelle worried that an IUD might dislodge, and both Angela and Whitney expressed doubts about the effectiveness of LARCs. Angela told me that the clinic in her high school offered birth control shots but based on conversations with friends, Angela concluded that some people using the shots were getting pregnant anyway. Part of the reason Angela felt that OCs were more reliable and provided more comfort was that she saw herself taking the pills, "so [she knew] it's in [her]. Like, its fine." Whitney lumped together different types of LARCs, telling me that "All those things either sound, like, really drastic, or not that secure, I guess…or they are not that reliable." Most concerns relied on stories from friends or myths the women had heard. This finding, coupled with the low levels of formal education some participants had reported about birth control methods highlights a need for educational campaigns to counter misinformation on LARCs.

By contrast, Brittany, who had very low compliance with the daily OC, had switched to the Nexplanon arm implant. Brittany conveyed high levels of satisfaction with the implant and said she would never go back to using OCs. Not only was she inconsistent and forgetful, but she had since become sexually active and felt it was an unreliable method for her personally. In her words:

*Brittany:* I really don't think [the pill] is that reliable cause if you don't take it the same time every day, you're kind of fucked...I know so many people that take the pill and they still got babies.

#### HD: So, you're done with the pill?

*Brittany:* ...if it was my kid, my friend, [I would tell them that] if you're not sexually active: take the pill. Do it. Go for it. If you wanna, you know, regulate your flow. But as soon as you become (laughs) sexually active, I recommend something more (pause) reliable. Like, you know, something they don't have to worry about.

Compare Brittany's perspective, as someone with low compliance to taking it every day, with Whitney, who specifically mentioned she thought OCs were "really reliable," at least, "so far it has been!" she told me, laughing. So reliable, in fact, that she mentioned one benefit of OCs is that you can easily travel with a pack and not have to bring condoms with you, if you had a permanent partner.

## Interest in LARCs/IUD

Not everyone felt so skeptical about LARC methods. Of the twelve women not currently using a LARC, four expressed interest in using a LARC in the future.<sup>156</sup> Those interested in this option might speak to a wider population of college students interested in LARC methods, but without opportunities or an impetus to pursue them. For Kim and Taylor, their reasons for taking birth control affected their willingness to try a LARC. As long as the LARC did not adversely affect Kim's health—referring to an unrelated medical condition—she would consider it. The only reason Taylor had not considered LARCs more seriously was because her acne was still a concern and the IUD would not help ameliorate this as the OCs had.

Violet, a senior at Trinity, had already expressed interest in an IUD to her gynecologist, though she was told her cervix was too small for an IUD. Skeptical of this advice, Violet told me she intends to seek out a second opinion. At the moment Violet did not feel rushed to decide, but when I asked her whether she was still considering the IUD, she told me:

Yeah, I think so, I think probably after I graduate. Um, I'm not really sure where I'll be living, but probably within the near future, I'll be relocating somewhere, to a new city and its important to me to have a clear sense of like what form of birth control I'll be taking with me cause I think I should have some form of birth control when I'm relocating. So I'm either going to start regularly taking the pill again or maybe consider the IUD or explore a completely different option that I hadn't before.

<sup>&</sup>lt;sup>156</sup> Sam, the white, Roman-Catholic Trinity student told me she did not think she would want children in the future, so she had actually been considering more permanent methods than a LARC: sterilization. However, because she was not completely certain whether she would want children, and because her parents "get very upset any time [she mentions] that [she] doesn't want kids," as devout Catholics who "think we should all have kids," she has not looked further into it. Knowing she would need their care, support, and insurance coverage, this is not a feasible option for her.

As a second semester senior, Violet felt her life was in a sort of transitory state. She had recently ceased taking oral contraceptives. Currently, not having regular sex and anticipating a move to an unknown location both contributed to her inaction in securing a new birth control method.

Recall that women are more receptive to the idea of a LARC when introduced by a health professional. If true, OTC OCs would not only encourage one method, but might actively discourage women from pursuing LARC options and aid them into complacency with a method that might not work with their schedules. In deciding to start on oral contraceptives, participants placed a premium on the fact they knew friends or relatives with experience taking OCs. Without a strong presence in social culture or in advertising, the findings from the interviews suggest LARCs might continue to struggle to gain popularity among young women, despite their struggles to take OCs reliably on a daily basis.

#### **CHAPTER 4: OPINION ON AN OVER-THE-COUNTER ORAL CONTRACEPTIVE**

The critical question this thesis seeks to answer is whether college students would benefit from an over-the-counter oral contraceptive. To find out, I gathered information about how participants first initiated and currently access OCs (Chapters 1 and 2), the reasons participants prefer OCs as a method (Chapter 3), and their opinions on whether OCs should be available OTC and if they would use an OTC OC. In accordance with the consensus reached in previous studies on women's opinions of OTC availability, most participants (81%) thought oral contraceptives should be available over-the-counter. Although nine participants claimed an OTC OC might benefit them personally, only three of those nine would strongly consider purchasing an OTC OC without stipulations. For the other six participants, an OTC OC was only attractive to the extent it could be less expensive, but same type of prescription pill they currently use.

When OTC research targets the opinions of specific groups, it tends to focus on either specific age groups, racial minorities, or income groups. Other than one 1997 study, researchers have not attempted to measure support for an OTC OC among college students. The findings of the 1997 study found that college women were unsupportive of this idea: sixty-five percent thought OCs should remain a prescription-only medication.<sup>157</sup> Participants ranked their concerns from a list, the two most popular being that side effects might occur that a health care provider could have prevented and that people would not go to their providers for regular check-ups.<sup>158</sup>

More recent studies have found greater support for OTC OCs. Last year, more than 2,000 college women completed an informal, likely non-scientific online survey by Her Campus, a website of content created by college journalists. According to the online report,<sup>159</sup> written in graphics, 59 percent of

<sup>&</sup>lt;sup>157</sup> Forman et al., "Attitudes of female college students."

<sup>&</sup>lt;sup>158</sup> *Ibid*.

<sup>&</sup>lt;sup>159</sup> "College women and birth control: the real deal," *Her Campus*.

respondents said pills should be available over-the-counter, without a prescription. Second, a 2015 survey found that 62 percent of participants ages 14 to 21 were interested in OTC access to the pill.<sup>160</sup>

My findings confirm that young women express concerns about the safety of OTC OCs, as Forman and her coauthors suggested, but I also find that on the whole college women support OTC access. Nearly every participant mentioned that health complications may arise and go unexplained when a young woman obtains OCs OTC without the approval of a doctor. However, very few participants specifically identified infrequent prescriber visits as a concern—likely because many of them visited their prescribers once a year, at most. Few participants referenced the benefit of avoiding unplanned pregnancies, though this may have been a tacit assumption of wider access to OCs.

Eighty-one percent of women in my sample ultimately concluded that OCs should be available OTC. The divergent findings as compared to the 1997 Forman study may be explained by the twenty-year gap between the projects, and/or the different methods used. The 1997 study consisted of a paper survey placed in student mailboxes. Students were then asked to rank what they saw as potential concerns and benefits from provided lists. Instead of replicating these static methods, I chose to conduct semi-structured interviews for two reasons. First, I sought to capture the nuanced opinions and conflicting thoughts of young people on this issue. Second, to avoid bias and distill true opinions, I tried to avoid mentions of existing concerns and benefits participants could then simply adopt as their own.

Perhaps as a result, my findings most closely mirror a 2009 two-year study of low-income women in Boston, which utilized data from focus groups and in-depth interviews.<sup>161</sup> The question structure used in the Boston focus groups guided the development for the interview protocol in this study. Researchers in Boston asked participants both how they obtained their OCs as well as their opinions on making OCs available over-the-counter (OTC). My findings mirror the findings of this 2009 study: participants generally reported ease in obtaining their contraceptives, though barriers such as unaffordable copays and clinic visits, time required for clinic visits, restrictions on the number of packs available, and the limited

<sup>&</sup>lt;sup>160</sup> Williams et al., "Adolescent self-screening for contraindications."

<sup>&</sup>lt;sup>161</sup> Dennis and Grossman, "Barriers to contraception."

time frame within which women could pick up their contraceptives restricted consistent use.<sup>162</sup> When asked about potential OTC availability for OCs, most participants supported the idea, but many raised concerns about cost, safety of access for minors, first-time users and women with contraindications.<sup>163</sup>

While most informants supported OTC access, this thesis also finds that college OC users do not necessarily see themselves as likely to use an OTC OC, especially in view of the lowered cost of OCs through the ACA's contraceptive mandate. Aside from the five participants no longer taking OCs and with no interest in re-initiating, only four out of the remaining eleven informants would consider paying out-of-pocket for an over-the-counter pill. All but one participant typically pay \$0 copays, although several have had to pay out-of-pocket for periods of time between insurance plans or to obtain more than their allotted 1-3 packs. For this reason, they did not see a benefit to spending any amount of money on an over-the-counter pill when they could continue obtaining it at no cost, despite the complications that sometimes arise.

To assess college students' views on OTC OCs and their likelihood of using this contraceptive method, participants were introduced to the OTC proposal at the end of the interview, following discussion of pill initiation and access. To ensure that each person had the opportunity to respond to the same basic set of facts, I read this blurb aloud at the start of the "OTC" portion of the interview (referred to as the "OTC proposal"):

In the past few years, some people have been trying to make birth control pills available over-thecounter. This means that anyone could buy them at a drugstore like Walgreens or CVS, or a grocery store just like you would aspirin or vitamins. You wouldn't need to talk to a doctor, parent, or pharmacist unless you wanted to. You wouldn't need a doctor's appointment or a prescription. Health insurance may or may not cover the cost of pills sold over-the-counter.

I would then immediately ask students, "Based on that description, what are your initial thoughts on the proposal?" This question led to a discussion about their concerns about an OTC pill, the potential benefits, if any, and then whether an OTC pill would personally benefit them. Participants were asked to "vote" on the OTC proposal at the end of the conversation.

<sup>&</sup>lt;sup>162</sup> *Ibid*.

<sup>&</sup>lt;sup>163</sup> *Ibid*.

#### **Concerns about an OTC OC**

To varying degrees, all participants brought attention to a concern about the health risks associated with an OTC OC. Because several participants had experienced type-switching due to side effects, they worried that first-time users might not know the "right type" of pill for her. Other health concerns stemmed from fears that first-time users might not know the proper way to take an OC, or be aware of contraindications. Any identified health risk to OTC OC users extended to adolescents specifically, a group that four participants worried would not have the resources or knowledge to take an OC properly.

## Health risks

That all participants received their pills through a prescribing physician seemed to influence their conceptualization of the pill as a drug. Joy and Olivia's comments illustrate the safety of oral contraceptives as intrinsically connected to their experience with them as a prescription-only medication. OTC medications are generally viewed as non-harmful, because people can assume they are safe enough to take without a doctor's supervision. Prescription-only medication, however, seemed to carry the weight of requiring a doctor's seal of approval. For example, recall that Angela started her OCs to manage uncontrollable bleeding related to her anemia. About the OTC Proposal, Angela told me that "based off of experience [obtaining OCs], [prescribers] don't just mention [initiating OCs] to you, just to mention it. I feel like if they think you should [start OCs], or if it's an option that could be available to you, *they'll* talk to *you* about it." In this way, Angela seems to have internalized the notion that pills are not something that can be self-diagnosed. Perhaps related to her medicinal use of pills, Angela felt that if someone should be on OCs, a doctor likely would have mentioned it to them already.

More specifically, Taylor mentioned a health concern that might arise if OCs were offered OTC. Considering her family history, Taylor has been told to look out for signs of high blood pressure. Knowing that her mother had to stop taking oral contraceptives due to her high blood pressure, Taylor thought this would be the type of contraindications "that, like, a 14-year-old or 15-year-old is really checking or knows about that much...or even past medical conditions." Although Taylor did acknowledge that it would be good for young people with strict, disapproving parents to have easier access, she also told me she thought "birth control, though, is becoming more of an easier topic to talk about," especially because "a lot of my friends blamed it on like irregular period or like acne or whatever, like similar sort of to what I did."

Whitney told me she thought "taking birth control pills without regular checkups....would be not so reasonable." Though she thought it would make them more accessible to people who cannot afford going to the doctor, or people uncomfortable talking about it with a doctor, or young women with disapproving parents, she thought that by taking pills, "you're putting, like, hormones in your body." Therefore, "you should sometimes, like, go to a checkup with a doctor to see if you're okay, or, especially if you're taking birth control pills that means that you will not use condoms, most likely, when you're having sex." Because she thought an increase in pill taking would lead to a decline in condom-use, Whitney thought an OTC OC would make it all the more important to get STD checks from the doctor.

In some interviews such as this, where the participant highlighted health issues as a major concern, I would mention that this issue arises frequently in debates about OTC access to OCs. For example, as a remedy, previous research has found checklists a useful tool for women to use in checking any potential contraindications.<sup>164</sup> When I told Angela about the checklist, she thought "that would be good." Explaining further that

...for myself, I—even to this day—I still Google things about birth control and I'm just like "What happens when this?", "What happens, I feel this?", "Overall, what's the difference between 28-pack and 21-pack"...

Though initially hesitant to consider the possibility that girls and women could "self-diagnose" as someone who should be on the pill, Angela later reflected on her own experience, finding that she has been self-reliant in checking her own health concerns, using the internet as a resource. While Whitney

<sup>&</sup>lt;sup>164</sup> Shotorbani et al., "Agreement between women's and providers' assessment."; Grossman et al., "Accuracy of self-screening for contraindications."; White et al., "Contraindications to progestin-only oral contraceptive pills."

also felt that a checklist "would be good," she feared that if the checklist did not pair with a conversation with an educator or parent, it would not prove of much use. In her home country, she told me "we don't really talk about these things in school" and that if your parents are not willing to talk about it, "you will ask it, like, on the internet and people will tell you really stupid things that are not true."

# Concerns about adolescents<sup>165</sup>

Though ten participants specifically cited an OTC pill's availability to adolescents as a benefit of the proposal, Olivia expressed hesitancy about the OTC proposal due to skepticism about the pill's universality as well as her concern that adolescents would take the pill without parental consent. Olivia's opinion on this was certainly anomalous, and possibly related to the fact she did not personally start taking the pill until age 19 and after her mother's insistence. Olivia wondered, "...why would they need to be taking the pill at such a young age? Like, is it for having heavy periods or having cramps or are they, like, sexually active at a very young age?" When I originally asked her about whether she would set an age limit, she said "Um, oh gosh. I mean, I guess not, cause everyone takes it for other reasons, but maybe, like, fifteen, six--, I would say sixteen, but then there are people who take it for other reasons, like health reasons and stuff. So, I don't know, I guess it depends..." For girls under 15, Olivia thought they should have the approval of a parent, so their parents were aware they were having sex. At the same time, Olivia said that while an OTC pill would not make much of a difference for her personal access of OCs today, she thought an OTC might have been beneficial if she wanted the pill when she was younger. The reason being that "[she] would never talk to [her] parents about, like, wanting to be on birth control or something."

Others expressed concerns that young women and girls may be uninformed about how to use OCs and potential side effects, and that this might pose a health concern. Overall, most either personally

<sup>&</sup>lt;sup>165</sup> Recent studies have explored the issue of adolescents and OTC OCs in depth including, Upadhya et al., "Overthe- Counter Access to Oral Contraceptives for Adolescents." and Manski and Kottke, "A survey of teenagers' attitudes."

identified as someone for whom parental consent to take OCs would be a barrier, or cited friends who had struggled with disapproving parents. Taylor, thinking aloud, worried "not that people are taking it, like, too early, but I wouldn't want people to, like, start taking it really young and—but I guess you can't, like, choose what people do." Her concern was that young people would not understand "the full effects of it" and "all of the science behind it," or "not talk to anyone" and start taking it for pregnancy prevention and relying too heavily on it as a birth control method. At the same time, Taylor said she knew friends with strict parents in high school who were having sex but were not allowed on the pill. While Taylor thought pill initiation should be "an open conversation," she also recognized that in some cases it would be preferable for young women and girls to be on the pill, regardless of parental consent. But still, she was not sure about an OTC OC for adolescents, and said she was "very mixed on it."

Four participants expressed specific concerns that adolescents would unexpectedly experience side effects without warning also acknowledge the importance of access for teenagers. For example, Joy feared that younger girls "don't know the side effects that could happen," and that they might be on it to avoid using condoms or to clear up their acne without knowing "anything that could happen." Simultaneously, Joy thought the OTC proposal would be a good idea, and "beneficial for people like [her]," people for whom making an appointment at the clinic proved a major hurdle. Angela worried that sexually active 13-year-olds would experience negative side effects and not know "what's going on." Although Angela thinks it's "[their] business" to have sex, she also wanted younger girls to have the opportunity to talk to someone that could point to "which birth control was better for [them]," what OCs are, and how they work. Brittany also thought that adolescents would benefit from instruction before starting OCs, telling me that "older people are more likely to go talk to a doctor before they [start a medication]. Whereas, like, a 16-year-old, if she's sexually active and doesn't want to tell her parents," she would simply pick it up from the store. The concern here is not that she wants to restrict girls from access, she thinks "birth control should be accessible to anybody," but instead she worried that "[girls]

would be uneducated about it," because the only reason she knew how OCs worked was because she went to her gynecologist. "I didn't know anything about birth control at sixteen! (Laughing)"

When it comes to contraindications, Isabel worried that "kids are not gonna know what the hell blood pressure is. They're gonna go 'What is this? Blood pressure?' Because Isabel thought that "so many young girls...don't know what they're getting," she advocated for a way to help them understand what they're looking at in the store. "If [girls] had someone guiding them or, like, an explanation, for each group of teenagers...marketed to certain types of groups..." she thought "that'd be perfect, honestly." Grace, who had started the pill at 16 to prevent pregnancy, thought pills should have the same age limit as NyQuil: eighteen. For those under 18, Grace reconciled this restriction with the existing access to condoms. "Cause they can just buy condoms over-the-counter, for now, and use that for protection...if you can't pay for it then go to Planned Parenthood, just grab it off the shelf and walk out, you don't have to make an appointment to pick up condoms." However, Grace did feel comfortable with someone older than 18 purchasing the pills on a girl's behalf.

## **OTC Benefit: Improved access for adolescents**

While concerned about the safety of adolescents taking OTC pills, participants also identified younger girls as a target population for an over-the-counter oral contraceptive. Ten participants explicitly mentioned OC-access for teenagers or younger girls as a benefit of an OTC OC. Participants opinions support previous research: in 2014, a sample of females between fourteen and seventeen found that seventy-three percent supported over-the-counter access and sixty-one percent reported they would likely use OTC OCs.<sup>166</sup> Most interview participants graduated high school in the past four years and thus easily recalled the challenges of navigating OC initiation as teenagers.

Joy also felt instinctually compelled to set some sort of age restriction on OTC OCs. When asked to set a specific age, Joy thought "maybe fourteen would be too young," but also recognized that "around

<sup>&</sup>lt;sup>166</sup> Manski and Kottke, "A survey of teenagers' attitudes.", This study found that females between 14 and 17 would be interested in purchasing an OC OTC, and that adolescents with sexual experience were more likely to be interested in accessing OCs this way.

ages 15 and, like, 18 through 21 would be the high amount of people who would be involved, you know in [accessing pills OTC] (laughs)." Maya also assumed teenagers would be a target market for OTC pills, telling me she "definitely [thinks] it would be beneficial to some women who want to acquire it at an early age" but were not able to due to issues with parents or doctors, or other obstacles. For this reason, she would support the pill "becoming an over-the-counter drug."

Sam and Grace both connected their own personal experiences to their prioritizing young women as potential benefactors of an OTC birth control pill. Sam, the Trinity College student with Catholic

parents, attended a Catholic elementary and middle school, with no sex education whatsoever. From

Sam's perspective, it "would be great" for people to gain access to birth control, especially for "someone

like [her] who has very strict parents," and would avoid sharing with parents when they became sexually

active.

*Sam:* For example, you never know when your child is going to be sexually active and obviously a child or a young adult, like, doesn't usually want to get pregnant. And they definitely don't want to get pregnant, cause then their parents would find out. So, I think [OTC access to oral contraceptives] would help a lot because—especially young kids, if they are trying to have sex, they will do stupid things in order to [have sex] [and] just to avoid getting in trouble. But then, it potentially ends up being even worse. The consequences.

#### HD: When you say "do stupid things," what do you mean?

*Sam:* I guess just because [young people are] not as educated...And if their parents are really against sex, then [they] aren't gonna educate them at all. So I think that, you know, obviously like as college students and at Trinity, everyone knows "use a condom, use a condom, use a condom." It's like shoved down our throats...[but this is not true for all teenagers, especially those in Catholic schools]...So I think that they're just not as educated about it so maybe they wouldn't even think about buying birth control. But I think having that option would help at least some younger people to be able to protect themselves from an unexpected or unwanted pregnancy.

Sam thinks that without clear education about birth control options, coupled with the pressure to hide

one's sexual activity from strict parents, young people will engage in risky behavior such as unprotected

sex out of fear of parents finding out about birth control use.

Grace, the 29-year-old Capital Community College student, explained how OTC pills would have

helped her when she was taking oral contraceptives at sixteen. Not only would Grace have been able to

avoid regular trips to the pharmacy, or scheduling visits with her prescriber every six months to get

another refill, but she also would not have needed to "save up [her] money to pay for the [out-of-network] visit" to get the refill. Grace approves of the OTC proposal because paying for a doctor's visit can be expensive, and "not everybody can actually afford all of that." But as someone with experience obtaining her pills from Planned Parenthood as a teenager, she was aware of the less obvious or tangible barriers standing in the way of a young girl and her OCs:

...it's embarrassing for somebody going in [a sexual health clinic] younger in age. They don't want to be seen or be spotted out by somebody...I feel like if it is offered over-the-counter that would be a smart thing to do because it'll help lower the young kids having babies—"babies having babies" it would lessen that chance because now they have protection they can buy just like they buy Tylenol. You [could] buy [oral contraceptives] on a monthly basis, just going to the store. Nobody's going to question you when you go to the store... You have your privacy when doing it instead. Cause going to a doctor's office, waiting in the waiting room, you go to Planned Parenthood, they don't know what you're there for, somebody could automatically suspect you're there cause you have an STD when you could just be there picking up birth control. And you don't know who's gonna be there that you're gonna see that may bring it back to a family member. So, it's easier just to go to the store and purchase it. So, I would say that's a good idea.

Grace's perceptive point illustrates the point Sam also made, that younger girls' primary concern when trying to obtain birth control is that their parents will find out. Grace's first thought was that teenagers would not need to worry about being seen in a Planned Parenthood, and having this news shared with their families. As someone who chose not to tell her mother when she started the pill, Grace seemed sensitive to anonymity issues and highlighted this as a major benefit of OTC access of oral contraceptives.

## **OTC Benefit: Improved access for all**

More generally, participants thought a benefit of OTC oral contraceptives would be increased access for more people. Ruby summed up the consensus of all participants when she said she thinks, "having easier access for more people is good in general." Christina echoed this remark, telling me she thought it was a good thing that oral contraceptives would be easily accessible if OTC. For Kim, who takes pills to mitigate excessive bleeding, more options to pick up pills could only be a good thing. Reflecting on the experiences of her friends who use pills to prevent pregnancy, she thought "…they should have that option [to buy pills OTC]" because in her view, if you take OCs, "you're just trying to

help yourself." Regardless of their other competing concerns and questions, all participants cited increased access as a benefit of OTC OCs.

To offer pills OTC would make them "obviously more obtainable," in Joy's view, considering it would avoid hurdles such as getting a prescription or health insurance coverage—two issues that prevented her from continuing her OC regimen. In Noelle's experience, insurance companies proved a major obstacle to her OCs. Without this barrier, Noelle thought the pill would be more accessible and that subsequently, "a lot more people would probably use it…" Long term, Noelle thought a benefit of OTC OCs would be a reduction in "pregnancy scares, pregnancies in general." Sam picked up on the fact that the OTC proposal blurb "didn't say anything about cost, specifically." Without knowing how expensive OTC pills would be, Sam guessed it might be easier for people either uninsured or with limited insurance coverage. Like Noelle, Sam also thought better access to pills might help reduce unwanted pregnancies: "I don't want to say [accessing OTC pills would be] safer, 'cause it doesn't protect from, like, STDs or anything, but I guess it would be better for [uninsured people or those with limited insurance] and you know, for someone who doesn't want a child but wants to have sex…"

### Perceived safety of oral contraceptives

Towards the end of the conversation, participants were asked: "In your opinion, do you think oral contraceptives are safe enough to be sold over-the-counter?" Fourteen of sixteen participants answered yes, though many hesitated before answering a question which they seemed to think might already have a medically or scientifically "correct" answer. The other two participants responded, respectively, "yes and no," and "I'm not exactly sure about that." citing potential negative side effects. For example, Maya told me she saw no disadvantages to providing pills OTC, because "to [her] knowledge you cannot overdose on birth control pills." By contrast, Brittany, told me she did not think OCs were safe enough to be sold OTC because she thought users should consult with a pharmacist, if not a doctor. Olivia told me she thought OCs were safe enough to be sold OTC, because she "[hasn't] necessarily heard many things wrong with birth control pills," but she also seemed uncertain because she thought "it messes with your

hormones and, like, it isn't something that typically you [would] find over-the-counter." This comment

suggests that OCs current prescription-only status implies it is a potentially harmful drug.

Other participants rationalized its safety as an over-the-counter drug by comparing it to other products available OTC. Kim said,

I mean, condoms are over-the-counter and those are a preventative measure both for pregnancy and for STDs/STIs, so I don't see why those shouldn't be over-the-counter. And, like, I mean any other medication, you want to look into it. I'm not just gonna say, "Well, I have a cold, so I'm just gonna drink like two whole bottles of NyQuil, because that's what you're supposed to do." No. I know that that can shut down my systems. So, I think, like any other medication, you would have to look into it and see what's best for you. Talk to your doctor if you want.

Kim also mentioned she thought OCs were less dangerous than the emergency contraceptive "Plan B," a

product already sold OTC in the United States. Isabel made the argument that OCs are "just as safe as, uh,

Tylenol, Extra Strength Tylenol, ibuprofen, whatever stuff, cough syrup, and all that stuff you can get

over-the-counter...You always have to talk to somebody about it, you know? Always be informed before

buying anything." Angela made a similar argument, pointing to the fact that those experiencing side

effects could simply cease taking their OCs:

...Like, it's not gonna kill you to take birth control if you just had easier access to it... you wanna stop it, you can just stop. You don't need to, like, finish out a pack. Like, don't know if you paid your money for it or insurance covered it, whatever. If you wanna just like, "You know what? This is not for me. I'm done doing this." Throw it out, ok. Go about your day. It's not gonna really affect anyone or you if it's over-the-counter, its fine with me...

Joy expressed a less resolute opinion on the safety of offering OCs OTC, explaining that "[she's] not exactly sure about [the safety of OTC OCs] because whenever [she] used to get [her] birth control pills it would be, like, a little...pamphlet stating that these are some things that could happen..." Similar to Olivia's comment about OC's safety as related to its prescription-only status, Joy's understanding of OC's dangers related to her receiving a safety pamphlet with her pill pack.

# Cost as a factor in OTC opinion

An OTC OC at any price offers a less appealing option for OC users in 2018 than it might have 20 years ago. All insured participants had an expectation of picking up their pills without a copay, with some occasional, exceptional circumstances. Effective in January 2013, the Affordable Care Act's

contraceptive coverage requirement expanded on existing requirements of coverage for OCs. At the time, more than half of states had a similar guarantee of contraceptive coverage, in addition to the December 2000 ruling by the Equal Employment Opportunity Commission classifying denial of contraception as sex discrimination.<sup>167</sup> The ACA contraceptive mandate required insurance plans cover eighteen contraceptive methods, eliminate out-of-pocket cost, and limit barriers such as prior authorization requirements. According to a study by the Guttmacher Institute, between fall 2012, just before the mandate went into effect, and spring 2014, the proportion of privately insured women paying zero dollar out-of-pocket costs for OCs jumped from 15 percent to 67 percent.<sup>168</sup>

The participants interviewed for this project ranged in age from 18 to 22, with one outlier at age 29. Most started the pill between the ages of 15 and 19 years old. Twelve of the sixteen participants started the pill after the contraceptive mandate took effect. In this way, any of the findings discussed in this chapter will differ from the studies on OTC opinion from before the mandate or with older women who might remember paying out-of-pocket costs. Whereas pre-mandate studies might have involved participants with a frame of reference in terms of out-of-pocket costs, most of my participants either knew they did not pay a copay or relied on their parents to cover any associated costs. For these reasons, responses and mentions of cost of OTC pills involved mainly hypotheticals and speculation, rather than an actual cost-benefit analysis. I found that because most participants had not paid out-of-pocket costs for their monthly pills, the idea that an OTC pill might cost *anything* proved to be the determining factor in whether they would use an OTC pill if available.

#### Cost as the determining factor for potential use of an OTC OC

For some participants, their opinions of the OTC proposal depended what the cost for a pack off the shelf might be. The OTC proposal blurb read during the interview simply said that "Health insurance may or may not cover the cost of pills sold over-the-counter." Grace started taking OCs in 2005 and

<sup>&</sup>lt;sup>167</sup> Adam Sonfield, "What is at stake with the Federal Contraceptive Coverage Guarantee?," *Guttmacher Policy Review* 20 (2017): 8-11, <u>https://www.guttmacher.org/gpr/2017/01/what-stake-federal-contraceptive-coverage-guarantee</u>.

<sup>&</sup>lt;sup>168</sup> Sonfield et al., "Impact of the federal contraceptive coverage guarantee."

remembers paying \$30 per month. If an OTC pill cost around that, she thought "that's not that bad to get thirty days' worth." But if it were to be higher than that, "there's no point [to offering it OTC]." If an OTC pill cost more than \$30, the only benefit, in Grace's opinion, would be the cost savings from avoiding a doctor's visit for a refill. More recently, Grace's insurance has covered the cost of the pill. When asked if her opinion would change had she been covered at age 16, Grace said it would be "better to have a prescription," to have the insurance coverage. But, Grace realizes "it all depends on your [insurance] status and whether your prescriber is in network. If one's doctor is out-of-network, Grace thought it would be better to buy it OTC to avoid the time and cost of getting the refill appointment with the doctor.

Zoe shared Grace's opinion that even if an OTC pill is made more physically accessible, "is that going to matter if people can't afford it?" Exemplifying the importance of cost, when asked her initial thoughts on the proposal overall, Zoe's first question was "How much would they cost?" To her, the expected cost of the pill would dramatically shape her opinion of the plan. Elaborating on her first question, Zoe told me that while an OTC pill would be more accessible in that people could avoid the "very long process" of obtaining a prescribed OC, she would definitely need to know the cost before she could be "in full support of it." During her college years, Zoe has switched insurance plans but is currently on a student plan. As recently as 2014, Zoe remembered paying about \$20 per pack while at an out-of-state college.

Compare Zoe's hesitation to the opinions of Olivia and Taylor—both white, Trinity students from family's making more than \$150,000 per year. Though Olivia mentioned cost as a general concern related to the OTC proposal, she also said that she "[doesn't] see why the mon—if the health insurance didn't cover it, that would be fine" if people had both the option to buy pills OTC for a cost or have them prescribed and covered by insurance. Taylor made a peripheral comment about the potential cost of OTC oral contraceptives, saying that it "would almost be good," explaining that paying out-of-pocket for an OTC pill, while also having access to an insurance-covered pill through prescription could be a good idea:

...cause I know, like, Plan B is so expensive. And, like, I'm obviously not going to tell my parents about those ones, like those I have to pay for on my own. So, like, it definitely makes me think a lot more of the consequences, um, and like if we're not using a condom, like I really have to think.

Putting aside the paternalism in this argument, Taylor's Plan B rationale does not exactly match up with a daily OC. To deconstruct her thought process, Taylor seems to imply that she has to think twice about having unprotected sex because she knows she would have to pay for an emergency contraceptive pill herself (about \$50), because she could not ask her parents to pay for this. Unlike an EC pill, taken once and within a three-day window, a daily pill would require a more constant outpouring of funds. Unlike Taylor, who wants to stop herself from having unprotected sex, reasons for taking the pill are not always something that should be discouraged. Nothing should prevent a woman from protecting herself from pregnancy if that is what she wants to do. In addition, as participants in this study can attest, OCs might serve as medicinal purposes as well.

## No interest in an out-of-pocket cost

In some cases, I would present participants with a hypothetical scenario in which insurance companies no longer covered their prescribed OCs. Though cost did not come across as a major influence in Olivia's opinion, she told me if posed with the choice between picking up her pills from the pharmacy without coverage or off the shelf, she would do whichever was the cheaper option. Several participants came to the same conclusion. Cost would be the major factor for Maya, who told me:

At this point, I do not pay for birth control because it's provided by my insurance...If I had to pay for prescription pills, over-the-counter, based on my current insurance policy, I would not [buy OTC pills].

Though, "accessibility-wise" Maya thought OTC pills "might be easier to acquire," it they were not covered by her insurance, she would continue obtaining them as a prescription because she "wouldn't have to pay anything extra to [her] insurance plan." Angela, a Capital Community College student covered by Medicaid, would not be interested in purchasing OTC pills for any price because her insurance currently covers the cost. Additionally, Angela would prefer prescription access to OTC access,

even at the same price, because she found it more comfortable to speak with her gynecologist and be checked in on.

Kim, covered by HUSKY, also expressed little personal interest in an OTC pill for cost reasons: "Well, considering my insurance is going to cover it now, I wouldn't mind just having that prescribed..." At the same time, Kim knew that "not a lot of people have [the option to have insurance coverage], so [she] would still say that [OCs] should still be over-the-counter." Christina, who had brought a year's worth of birth control when she first arrived in the United States, told me that had OCs been available OTC in the United States, "depending on the price—if it was cheaper to buy over-the-counter—[she] probably would've just done that because...there was a CVS right down the road..."

Is there a scenario in which you see yourself buying oral contraceptives OTC? For Olivia, a Trinity student reporting easy access to her OCs, no immediate scenario came to mind.

Umm, I guess. Yeah...if they are over-the-counter and it's the [type of] pill that I'm using, I guess I would pick it up, but I don't really see if I would ever be in a scenario that I would do that...Trinity [Health Center prescription pickup services] makes it super easy...

Not only does Olivia have no copay, but her parents actively supported her starting OCs. In her experience, she has faced relatively few barriers to accessing OCs. Hypothetically, if Olivia had to pay \$20 per pack for her prescribed pills, she would be "more likely to buy it off the shelf" than to get a prescription.

For Noelle and Whitney, though they both said they would pay no more for an OTC pill than they have for their prescription pills, both said it would be an "easier" route to obtaining their OCs. Noelle said OTC access would be beneficial for her personally if she could pay what she is currently paying for her pills—likely referring to brief periods in which has not had insurance coverage or coverage of her preferred type of pill. Whitney, studying in the United States for one year, brought a year's worth of pills with her. But because obtaining that quantity "was a hassle to get," and then have a letter for customs written, she would consider paying the same amount or slightly more for OCs in the United States.

For participants with relatively easy access to OCs, and zero-dollar copays, an OTC OC offered minimal added benefit. Compared to the "free" pill they currently take, an OTC pill at any price did not make financial sense to them. For Ruby, the answer was obvious: only if her pill was cheaper OTC would she consider buying them that way, but "again, I am not paying currently." But if she *was* paying, say \$30 per month with insurance, and the OTC pill was offered for \$20 per month, she would "for sure" buy OTC instead. If the OTC version was the same type of pill offered at the same price, Ruby would feel equally about prescription access and OTC access, but stipulated that "all of this would be subject to change once [she is] not on [her] parent's insurance, obviously." At the time of speaking, Ruby said OTC access would not be beneficial for her, personally, because she does not pay out-of-pocket and she has a "set schedule," with a pharmacy in Hartford and her hometown she can access with ease. If OCs were available OTC, she would "stay doing what [she is currently] doing."

Compare Ruby's relative personal apathy towards OTC access to Joy, an uninsured student for whom OTC access would be beneficial, as she told me herself. Because her main obstacle is a lack of health insurance, being able to simply "get it over-the-counter would be a lot easier and a lot less time consuming and less complicated for [her]." Still, Joy knows the unspecified cost would affect the feasibility of OTC access, pointing out that people are willing to pay a high cost for Plan B, but only one time. On a monthly basis, Joy said pills costing around \$20, \$30, or \$50 would be high and their affordability would depend on a person's income. If pills cost the same price, Joy would definitely get it over-the-counter.

## Willing to pay for OTC in some scenarios

Other participants identified situations in which they would be willing to pay for an OTC pill, even if the zero-dollar copay prescribed pill was still an option. For someone experiencing inconsistent insurance coverage of her preferred type of OC, like Isabel did when she took OCs, OTC access "would've been easier." Isabel is a Hispanic Capital student, covered by HUSKY, and from a family with an income of less than \$15,000 per year. Even if an OTC pill cost something, and the zero-dollar copay prescription was also available, Isabel would rather "just buy it because [she] would know exactly what [kind of pill] [she] was getting every single time." She told me she would have bought her OCs OTC

Even if it cost money cause its, you know, it's like an investment basically. You want to make sure you're getting the right thing. Just cause its free, you don't want to keep taking it, you know what I mean?

Isabel would have paid out-of-pocket for the assurance of knowing that she could access the same OC every month. With a zero-dollar copay prescription option available, the only time Grace would favor paying out-of-pocket for her OCs would be if her pharmacy told her she had to visit a doctor, but the doctor had no availability. In this case, she would buy it OTC if the store offered a similar brand.

Sam, a white Trinity student from a family making more than \$250,000 per year would pay more for an OTC pill if there was "some kind of benefit that was worth the extra money," and if she "was in a pinch, she would definitely pay the extra." By "benefit," Sam meant if the pill worked better for her, for example, if it "helps more with cramps." Taylor, another white Trinity student from a family making more than \$250,000 per year, said that the cost of an OTC pill would not make much of a difference to her, personally. Taylor did note that cost might influence her more when she's "on her own more," likely referring to a future time when her parents no longer cover her OC expenses. Recognizing that \$30 per pack would be "pretty expensive for a month," Taylor thinks, "if you were really in a bind and you needed it, I feel like the price wouldn't make a difference."

## Would OTC access to oral contraceptives be personally beneficial?

For some, an OTC OC would likely become their source of access. For someone like Violet, who might rather avoid an uncomfortable conversation with her mother, purchasing pills OTC might be preferable. For Kim and Joy, and those with experience accessing pills without insurance, if an OTC pill cost similar to a prescription pill, it would offer a more convenient and less expensive option. For wealthier students, like Taylor and Sam, who have relatively easy access to the pill, an OTC OC would allow them to pick up multiple packs at once and on short notice, allowing for easier long-term travel plans.

## Agency for Violet

That OCs are a prescription-only drug means the forced inclusion of a prescriber, parent (perhaps for insurance), and a pharmacist. However, some students would rather access their OCs anonymously and at will. Violet, who ceased taking the pill because she is not currently sexually active, told me that she "definitely would've bought [her pills] over-the-counter if that had been an option available to [her]." Had OCs been available OTC when she first started taking the pill sophomore year, she said she likely would have picked up her packs from a local drugstore, telling me: "honestly, I think I might still be on it now if I could just grab it from Walgreens. But it feels like too much of a pain to have to go through my gynecologist." Recall Violet's tenuous relationship with her gynecologist, a woman Violet thought had inappropriate opinions about her sex life. Additionally, Violet thought that

...in hindsight, [OTC access of OCs} would've meant that I wouldn't have necessarily called my mom to say "Hey, I think I'm going to start having sex now." I think that I probably would've just gone out on my own and gotten them. Which I guess is neither a good nor a bad thing, but I think it would've given me a little more agency in this situation. It would've felt like I had a little more control about, like, my sexual life and my reproductive health and things like that.

Violet clarified that she and her mother have a positive relationship and that she did not feel uncomfortable telling her that she started having sex or "dread the phone call." However, Violet suspected that had pills been available OTC, she would not have told her as "readily," but because it was prescription-only, she felt reliant on her mother as her insurance provider. Violet's mother would also send Violet her pills from their local pharmacy to Trinity. Because Violet's not currently sexually active, she did not feel the immediate need to be on the pill as a sort of back-up birth control method.

What if one night I decided I wanted to have sex? It would be nice to not have to solely rely on a condom. If I were continuously taking [OCs], that would be a sense of comfort to me...If I could just walk there and I didn't have to talk to my gynecologist, I didn't have to talk to my mom, I didn't have to worry about the cost so much, uh I didn't have to worry about what insurance I have, if my insurance is tied to my mom or if its my own insurance, blah blah blah. If I wanted this [type of] pill, but then I change insurance, can I stay on that [type of] pill? ...if I didn't have to worry about *any* of that? Yeah, I probably would still be on birth control right now.

Violet's concerns were also unique as a senior in college, so her living situation and healthcare situation were not yet figured out when we spoke. In a few months' time, she could be living in a new city, with a new job, and on a different healthcare plan. With this in mind, part of her consideration was that she would like to remain on the same type of pill, but insurance or pharmacy switches might jeopardize her access to one consistent type.

Violet struggled to guess what a pack of pills might be worth; in fact, she had never considered this "just because [she hasn't] had to pay for it" in the two years she was taking it. Without a cost in mind for an OTC pill, Violet said

I think that the cost could be worth not having to refer to anyone. Not having to talk to anyone about it. Not having to go to the yearly checkup to get it. And for that reason, I think I would be willing to spend money on it. Also, because [OCs are] an important thing to have and I think it would be worth the cost.

During the interview with Violet, she mentioned feeling a "reliance" on others like her mother, for the insurance, or her gynecologist, for the prescription, and that this made her feel a lack of "agency" because she had to coordinate obtaining OCs with them. If available OTC, Violet would be willing to pay \$15 to \$20 a month for it.

# Access to medicine for Kim and Joy

For others, especially low-SES students, accessing a physician to write the prescription might pose the greatest challenge to obtaining their OCs. For these students, having a pill OTC might allow for more consistent continuation rates. For instance, Kim and Joy are both Hispanic, full-time Capital students, and have both encountered complications due to insurance. Kim has switched insurance plans recently and her HUSKY plan had not covered her more recent packs, though she expected it would kick in the next month. Joy's lack of insurance, and the policies of her health clinic stalled her appointment to obtain a new refill, and she had ceased taking OCs. Kim thought an OTC-accessible pill would be beneficial for her because

even during [her] doctor switch, and between insurance switching and just pill [type] switching in general, it would've just been nice to say "well, I don't have them [prescribed] now....the pharmacy doesn't have them ready, but I could just pick some up so I don't start bleeding profusely, randomly. So (laughs) that would've been nice!

Kim took the pill primarily to control an excessive and unhealthy amount of bleeding. Several participants mentioned hating to miss a pill because it would trigger their periods, but Kim missing a pill could result

in a more severe medical situation. For her, easier access to OCs would allow her the control of constant access to her medicine. Joy also used OCs primarily as a medicine, a treatment for her painful periods. Considering her access struggles and uninsured status, Joy told me that if OCs were on the shelves today, she would buy them tomorrow.

# Travel flexibility for Taylor and Sam

Taylor and Sam, both white Trinity students whose families' annual incomes both exceed \$250,000 per year, and are both covered by a parent's insurance, identified travel flexibility and the ability to purchase several packs at once as reasons OTC access might be personally beneficial. Taylor gave an example of travelling from home to Trinity and forgetting a pack in one location. Otherwise, Taylor thought there might be a scenario in which "you're travelling and you end up staying, like, a month longer," so if OTC access were an option, one could simply pick up pills at a local store. OTC access presented an opportunity to stress slightly less about obtaining her next pack, though Taylor knows she has had easy access to OCs:

cause like going to school, I always have to [count] the amount of packs I had and I told my mom, I was like "Ok, I have like 2 months like I'm gonna need another pack at like this time"...you wouldn't have to plan as much but [OTC access is] not for me, at least cause it's been so accessible and I'm able to do the multiple packs at a time. It's like easy enough but if like someone is unable to do that and they still haven't transferred it, then that would be a lot easier I guess.

While Taylor said OTC access would not be "for [her]," Sam would "definitely consider [purchasing OCs OTC]," "especially before [her family meets their] deductible, having to pay for all these prescriptions, it's still really expensive..." Sam would consider paying for an OTC pill, but it would just

...depend on how many you could buy. Cause prescription for [her] is limited for three months. But, you know, one of the struggles of thinking about going abroad, for example, is how do I get prescriptions? So, if you could buy, like, 6 at a time, then that would be favorable. You know? So that you wouldn't have to keep going back.

Like Taylor's example of deciding to extend a trip for a month, Sam mentioned that she is not able to go on these backpacking trips for months, where people go "off the grid," due to her prescriptions.

#### The impact of an OTC OC on low-SES students

The extent to which an OTC pill would convenience a student also seemed to correlate with their SES. While it might make the lives of wealthier students marginally more convenient, it might have a transformative effect on less affluent students who do not have the option to rely on a parent to handle the logistical details that might be avoided with OTC access. Among the benefits of offering oral contraceptives over-the-counter, the convenience of picking up one's pills without having to coordinate any appointments or insurance coverage came up in several interviews. Of course, the sheer availability of the pill sitting on the shelf would be easier for everyone in this way. Recall findings from Chapter 2 on the drastically different levels of access to prescribers and pharmacies, depending on one's socioeconomic status: students from families with lower annual incomes reported more barriers to scheduling appointments with a clinic, obtaining consistent insurance coverage of OCs, or having close relationships with prescribers.

For instance, Taylor's pills have been "super accessible." But Taylor recalled a time when she nearly forgot her new pack at Trinity during a long weekend and had to start the first pill on Sunday. If she did forget, she said it would have been "nice" to be able to "just run out to CVS and go pick up [her] pill and not worry about it at all." In preparation for her semester abroad this fall, Taylor anticipates she will want to bring several packs with her. Coming from a family with an annual income in excess of \$250,000, Taylor said an OTC pill would be a convenient option for her because she "wouldn't have to plan as much." Again, Taylor acknowledges that she *has* been able to pick up several packs at once, meaning pay out-of-pocket for them with the financial assistance and coordination from her mother. But she told me that for someone unable to do that, or that has neglected to transfer their pills to a nearby pharmacy, an OTC pill would be "a lot easier."

Recall Isabel, the Capital Community College student from a family whose income is less than \$15,000 per year. In Isabel's experience on oral contraceptives, she had to assume the responsibility of obtaining her pills from a young age, and without a vehicle. After struggling with inconsistent insurance coverage of a singular type of pill, and issues getting rides to the pharmacy, Isabel finally decided to have

the Nexplanon arm implant instead. When asked whether having the option to buy the pill OTC would have been beneficial for her while she was on it, she said "it would've been easier," because she would not have to call anyone or talk to any "intermediate [people]," and could just go straight to the source selling it. She would have preferred to simply buy them over-the-counter because it would have been "easier than waiting to see if the insurance covers them, or see if that brand's covered." With access to an OTC pill, Isabel said she would just buy that because she "would know exactly what [type of pill] [she] was getting every single time."

#### Importance of types of OCs available OTC

The most glaring concern regarding OTC access of oral contraceptives was whether several types of pills would be offered on the shelf. As explained in Chapter 2 and Chapter 3, most participants had been on several types and brands of OCs, switching because insurance companies refused coverage, or because they experienced side effects to one type of pill. For this reason, most participants worried that new users would be unaware of the differences between pills and choose the "wrong type" of pill off the shelf. Joy worried that people might not know "what kind of birth control [pill] to take because there are different kinds and some birth controls don't suit other people and some do." Because most participants had either first-hand experience with type switching or heard about it from a friend, they knew the effect that the type of pill would have on their reactions to OCs.

Brittany put forward the idea that OTC pills would be distinct from selling condoms OTC in that pills are unlike condoms "...basically any one will work. It's not like that. (Laughs)" Whitney also mentioned that oral contraceptives "are not as simple as a condom," but her reason for saying so was that OCs involved hormones in your body. Whitney also knew several friends who started on one type of pill, and "then it didn't work out for them so they had to choose another one..." Whitney assumed that if you consult your doctor, "they can examine you and they will know what type should suit you." Though, as previously stated, doctors are not required to perform a physical examination before prescribing someone oral contraceptives. Both Whitney and Olivia agreed they would only consider using an OTC pill if the type they currently use became available OTC. Whitney thought switching pill types might pose a health risk, but would have considered purchasing her pills upon arrival in the United States had her same type been available OTC. Olivia, afraid to "mess with anything," would not use a pill different from the same type she had been using for the past three years.

Angela told me about her best friend who started on a "lower dose" pill and when she went to a "higher one" she started to say that her body felt different and she did not like it. Angela's friend might have switched from a progestin only pill to a combined pill with estrogen, which would affect her body. When Sam switched to a Walgreens-only brand of OCs, she started "having all these horrible symptoms," so she thought there would need to be a variety offered over-the-counter, and that stores would need to "make it more clear the difference between birth control pills…" Sam used the example of different types of pain relievers: "…but I think if there were multiple brands like just how we have Tylenol, Advil, we have all these pain relievers, um, and they all kind of are a little bit different and work differently for different people."

It should be said, however, that among the sixteen individuals interviewed, all were prescribed from a health professional and ten switched their type of pill (seven switched for reasons unrelated to an insurance issue). In other words, though they all theoretically benefit from this counseling with a doctor, most were prescribed "the wrong type" initially anyway. For example, see Ruby's rationale for wanting people to talk to a doctor first:

[E]ven my normal physician didn't put me on the right one. So, I think, that coming from that perspective, I think that it would be best to, like, make sure that you had some medical opinion in what [type of pill] you were being put on before doing so.

Ruby's point was that even *with* the advice of a doctor, she had been prescribed the "wrong type of pill," so it would be *more likely* that someone without a doctor's input would take the wrong pill. However, Ruby's story, considered alongside the other seven participants switching types for side effects reasons, speaks to the unpredictability of side effects, even with a doctor's consultation. Another way to read this statement, however, is that doctors do not have any insider knowledge when it comes to matching women with the ideal pill type. Other than a few basic guidelines—such as, people with high blood pressure should take pills without estrogen—doctors seem unable to predict with accuracy whether someone will experience negative side effects from one type or one brand. And even if they could, doctors have no control over the type of pill one's insurance chooses to cover. Several participants had to switch types to have the pill covered by insurance, so for them, it was not much of a choice at all.

Isabel, concerned with young women being able to choose a type and brand of birth control, wished there could be guidelines making it easier to decide on a type off the shelf. She said to me, "You know when you go to the store to buy makeup and it's like 'Oh, this is your brand'?" Isabel was referring to the makeup aisle in a drugstore, for example, where different foundations might be advertised as for oily skin, combination skin, and dry skin, so people could decide based on the advertising. As long as it was easy to "know what you're doing," she thought the OTC proposal was a great idea.

## **OTC Proposal: Policy vote**

After discussing people's areas of concern and potential benefits, participants were asked whether they would vote to allow oral contraceptives OTC access. The question was usually phrased, "If you were a politician, which way would you vote?" Of the individual participants, 13 said they would vote "yes" to allow OCs to be sold OTC (81%), two said they would vote no (12%), and one person was not sure (6%). Despite the areas of concern and low levels of immediate personal use identified, most participants would want to see OCs available OTC because they assumed it would mean increased access for other people. Christina, one of the participants most concerned about health complications and people avoiding doctor's visits if on an OTC pill, said "You know what? Yeah, I think it should be [available OTC]. I guess at least—if you're not using condoms, then at least you're taking something, right? So, I guess it's okay." Other participants "voted" yes, with stipulations. For example, Joy thought ...there might be some people who can establish regulations like age restriction and maybe also put the information saying the side effects for it to inform the person of what's happening. But I feel like the decision should be made by the person themselves after they're informed and after, you know, they have all their [insurance] situations okayed. And then they could just they could just pick it up over the counter without, you know, having to go through any other complications—I feel like that would be really beneficial.

Similarly, Sam would vote yes but thought there would need to be "further discussions about possible age limits and price and brands and things like that." Part of participants' hesitancy relates to the minimally detailed blurb that participants had to base their opinions on, as opposed to a more detailed policy proposal. For many, knowing the cost or if several types would be available would greatly influence their interest in *using* an OTC pill, though not necessarily their decision to support it as a policy.

Table 10. Should oral contraceptives be available OTC?

Vote	Number of participants	Percent of participants
Yes	13	81%
No	2	13%
Don't know	1	6%
Total	16	100%

# Who voted no?

The two participants who thought oral contraceptives should remain prescription-only drugs were Brittany and Whitney. Olivia did not vote either way. Notably, these three participants all felt comfortable enough with their parents not to conceal their reasons for starting an OC. Perhaps for this reason, they did not see the potential of an OTC OC from the perspective of an adolescent with disapproving parents.

Brittany is a white Capital student who has used the Nexplanon arm implant rather than oral contraceptives for about a year. Recall Brittany's concerns about the safety of an OTC oral contraceptives: she feared young people may start on a type and experience negative side effects, and she feared that no one is "educated enough" on oral contraceptives. In response to the mention of placing a warning label on the box, Brittany said, "They put warning labels on cigarettes and people still buy 'em." Brittany said that she had in mind "the least informed person," using a 16-year-old girl as an example, for whom a checklist to determine eligibility might be useful. While Brittany does not think that oral

contraceptive access "should be like an open market," she did support pharmacy access<sup>169</sup> to oral contraceptives. Brittany wants pills to be widely accessible, but she also "[thinks] [OCs] should be regulated." Brittany does not think the prescription needs to come from a doctor, because "it is something that everyone, well, every woman basically takes." By this, Brittany implies that the universality of oral contraceptives ought to afford their users enhanced access to them.

Whitney acknowledged that the pervasiveness of the "whole religious thing" as it relates to birth control in the United States. Unlike in her home country, Whitney explained, American parents might restrict OC-use on religious grounds. For this reason, she thought OTC access would make it easier for children with religious parents, especially if health insurance covered the cost of OTC pills. Like Brittany, Whitney also thought the pharmacy access proposal was "definitely a better idea" because a pharmacist would "know what they're talking about." Though Whitney felt certain she could not vote "Yes" on the proposal as ambiguous as it stood, she recognized the appeal of an OTC OC: "I would feel uncomfortable that people just, like, take it without medical checkups. But at the same time, it's definitely good if [the pill is] more accessible. And then you don't have to go over the hassle every time."

Whitney, an exchange student at Trinity College, said that "under current conditions," meaning the blurb presented to her, "[she] would be a no." In her opinion, people are "not really aware of, like, how [OCs work]," and she therefore recommended an educational campaign to awaken the "public consciousness before it goes over-the-counter." The purpose of Whitney's envisioned educational campaign would be to spread awareness that people should continue scheduling regular check-ups with their doctors. Notably, at home, Whitney is usually required to visit her gynecologist every six months to obtain a refill, twice as often as most of the American participants.

<sup>&</sup>lt;sup>169</sup> As the final scripted question in the interview, participants were given a description of pharmacy access a new policy which allows pharmacists to write prescriptions for oral contraceptives—and asked their opinion of this idea. The blurb given was "In some states in some states, they have recently passed laws to allow birth control pills to be sold from a pharmacist at a drugstore or grocery store. You wouldn't need a prescription but you may need to answer some questions about your health to the pharmacist before obtaining the pills. Do you think that birth control pills should be available from a pharmacist?"

#### Stipulation: Educational campaign needed

Four participants mentioned a concern regarding a lack of knowledge, specifically for younger or first-time pill users. To remedy this, five participants specifically called for some sort of educational campaign to combat this perceived lack of education. For example, Sam felt conflicted in her choice of policy preference between the easy access of an OTC pill and the seemingly "safer" option of pharmacy access to OCs. While she thought the pharmacist would be able to tell someone about the potential risks, she also recognized that some people may be embarrassed to get it from a pharmacist, and therefore less likely to do so. For this reason, she valued the anonymity of the OTC proposal. In the end, Sam decided to favor the OTC option because it would be "accessible to more people," but she did think it would be good to have a checklist on the box, or "other information that would just help people to figure out" whether OCs generally, or a specific type, were right for them.

Angela's best friend once went days without taking her pill without realizing the detrimental impact this had on the effectiveness of the pill as a birth control method. Angela told me that she never learned about proper OC-use. When I asked if they covered it in school, she said "Never, nothing. Even in sex class. I learned about condoms…but I didn't learn about birth control [pills]. Never talked about. Why? It's sex, it's health." Part of the reason Angela was so disturbed by the lack of formal education in schools seemed to be because she realized how common OC-use had become, especially considering "…what females had to do to fight for the right to have birth control. Cause it shocks me sometimes to think there was a time where we couldn't even have access to [birth control]. This is crazy. What did people do?"

#### POLICY RECOMMENDATION

This thesis sought to answer the question: would college OC-users benefit from an over-thecounter oral contraceptive? The motivating purpose for most research on an over-the-counter oral contraceptive has been to limit the number of unintended pregnancies. But rather than making the economic/public cost argument other studies have made,<sup>170</sup> this thesis argues for greater OC access on the basis of bodily autonomy for women. This thesis did not restrict its sample to only those at risk of unintended pregnancy because one's reasons for taking OCs constantly change, especially for college students, as demonstrated by the first chapter. Participants often started pills for acne or painful periods, but also anticipated becoming sexually active soon after. I wrote this thesis from the starting assumption that, if desired, women ought to have the power to protect themselves from pregnancy—or treat painful periods—without relying on prescribers to extend this right to them.

But should advancing over-the-counter oral contraceptives be a priority to advance women's bodily autonomy? In general, expanding access to birth control methods clearly fulfills the purpose of preventing unintended pregnancies. Expanding access to long-acting reversible contraceptives, such as IUDs, might prevent more unintended pregnancies, considering its superior effectiveness as compared to OCs. However, expanding access to methods like oral contraceptives—methods that do not require intervention by a doctor—equip college students with the power to decide for themselves how and when to use birth control. To borrow Violet's word, OTC access to OCs would give college students *agency* to make these decisions on their own.

OTC OCs would likely only benefit college women to the extent that they could be offered at a low-cost and in abundant variety. Most participants obtain their OCs without a copay, reflecting the national expansion of zero-dollar copays following the ACA's contraceptive mandate and existing state mandates. While thirteen of the sixteen participants think OCs should be available over-the-counter, only

<sup>&</sup>lt;sup>170</sup> Adam Sonfield and K. Kost, *Public Costs from Unintended Pregnancies and the Role of Public Insurance Programs in Paying for Pregnancy-Related Care: National and State Estimates for 2010*, New York: Guttmacher Institute, 2015, <u>http://www.guttmacher.org/pubs/public-costs-of-UP-2010.pdf</u>.

five envisioned themselves obtaining OCs OTC, keeping in mind that five participants no longer take OCs. The primary reasons participants would not use an OTC pill were 1) that they would not pay out-of-pocket for a pack when they could instead receive it without a copay if their insurance covered them consistently, and 2) that they would only purchase a pack OTC if it was the same type and brand they had been using previously. On a macro-level, participants expressed concerns regarding health risks of unexpected side effects, and the lack of education among adolescents about OCs. Fourteen of the sixteen participants thought OCs were safe enough to be sold OTC, ten participants specifically highlighted the benefit of increased accessibility to OCs for younger girls, and every participant acknowledged that OTC OCs would expand access for all.

#### Policy recommendations to accompany an Rx-to-OTC switch for oral contraceptives:

If oral contraceptives do become available over-the-counter, the findings outlined above inform the following five recommendations:

# 1) Public health officials and reproductive health organizations should implement educational campaigns to allay safety concerns.

Nine participants expressed concerns about potential health risks associated with an over-thecounter oral contraceptive, and five recommended some type of educational effort accompany an OTC OC. In participants' imaginations, these efforts would take several forms. First, participants considered the importance of packaging. An opinion supported by previous research finding women are capable of self-screening for OC-use using checklists,<sup>171</sup> participants with safety concerns explained they would want pill packs to have clear labeling and instructions. The labeling would need to provide enough information for people with contraindications to avoid use and for first-time users to understand how to take pills. When participants spoke about new users "not knowing how" to use OCs, they often meant instructions like taking it at the same time every day, and what to do if you miss a pill—information

<sup>&</sup>lt;sup>171</sup> Shotorbani et al., "Agreement between women's and providers' assessment."

already included on a pamphlet in pill packs. One participant hoped an OTC pill display in a drugstore would provide first-time users with enough information to point them to the "right" type for their needs and characteristics.

Lastly, considering situations like Angela's, where she had no formal education on birth control methods, I would recommend the development of a curriculum to be used by health educators in middle schools, high schools, and college orientation leaders on proper use of oral contraceptives. As a prescription-only drug, educators might assume personal doctors take responsibility for explaining how to use OCs. But if OCs become OTC, proper use and compliance will become more of a public health issue. This curriculum could also be used in a social media campaign targeted to first-time OC-users or teenagers.

# 2) No age restrictions should be imposed on an OTC OC to expand access to younger girls facing barriers to obtaining prescription oral contraceptives.

Discussions about the process of initiating birth control pills as teenagers revealed an intense embarrassment and shame surrounding the topic of sex, regardless of religious affiliation. When initiating oral contraceptives, six participants admitted to misleading parents or doctors about pregnancy prevention as a secondary use—or secret primary use—for oral contraceptives. As teenagers, participants' attempts to conceal their true motivation for wanting OCs and/or their insistence they did not start OCs to prevent pregnancy point to a desire to disassociate themselves from sex, especially to their parents. This level of embarrassment suggests teenage girls might be so committed to starting OCs, and so humiliated to admit their sexual activity, that they might choose to avoid the issue altogether and purchase the pills themselves.

Consider the case of Sam's high school friend with a Catholic mother who forbade OCs until she turned eighteen. During our discussion of an OTC OC, Sam thought of this friend because she knew her friend had been having sex since their freshman year of high school, and "actually buying birth control pills off of one of her [other] friends." Sam concluded that having the pill over-the-counter "would be so helpful for those kinds of situations."

Because interviews were only conducted with people who had successfully initiated OC-use, this study cannot reflect the voices of those facing insurmountable barriers to obtaining OCs, like Sam's friend. However, students reflected on younger versions of themselves as potential beneficiaries of an OTC OC. For example, Olivia said that when she was younger she would "never talk to [her] parents about wanting to be on birth control," and Zoe thought that an OTC pill would have benefit her younger self because "it would just be more convenient to not talk about [initiating OCs] with [her] mom." At least two Trinity students specifically mentioned wanting to initiate OC-use in high school in advance of starting college, insinuating they planned to become sexually active as college freshmen. In cases such as this, students may wait until they no longer live under their parents' roofs and choose to purchase OCs OTC in their college towns, without having to explain a visit to the doctor or bill on the insurance.

# 3) More states should require insurance coverage of over-the-counter methods of birth control to extend convenient access of OCs to less affluent people.

Current OC-users with consistent insurance coverage of oral contraceptives would likely not be willing to pay out-of-pocket for an OTC option every month. Currently, only five states require insurance coverage of over-the-counter methods of birth control.<sup>172</sup> For an OTC pill to serve the purpose of expanding access, more states would need to require insurance companies cover the cost of OTC methods of birth control.

The contraceptive mandate of the ACA and 28 states' policies require insurance companies cover the cost of oral contraceptives. Nearly every participant in this study initiated OCs post-ACA. For those with consistent insurance coverage, they have never been expected to pay out-of-pocket for their OCs. For this reason, six of the participants currently using OCs would not consider purchasing pills OTC at

<sup>&</sup>lt;sup>172</sup> "Insurance coverage of contraceptives," *Guttmacher Institute*, updated May 8, 2018, <u>https://www.guttmacher.org/state-policy/explore/insurance-coverage-contraceptives</u>.

any price, because they would choose the more cost-effective option: prescribed pills covered by insurance. For affluent students, the inconvenience of obtaining a prescription pill falls primarily on their mothers. The cost, had there been one, would also have been covered by their mothers. Therefore, if offered over-the-counter, students from wealthy families would be able to take advantage of this convenient option.

For students without consistent coverage—either students between insurance plans or completely uninsured—the over-the-counter pill would offer access to an otherwise restricted form of birth control. Also, uninsured OC-users might be willing to pay out-of-pocket, considering this would be their only option of obtaining OCs. Without insurance coverage, a doctor's appointment to obtain a refill poses a significant cost and the prescribed pill would need to be paid for out-of-pocket as well. Therefore, an OTC pill without the option for insurance coverage would likely only benefit these students.

# 4) Stores should seek to offer a variety of types and brands of oral contraceptives to allow existing OC-users to remain on the type they currently take.

Eleven participants emphasized the importance of type-variety for an over-the-counter pill, and four participants said they would consider an OTC pill only if they could purchase the same type and brand they already use. Without several types offered, the interest in an OTC pill would be minimal among existing users. Although the first FDA-approved OC will likely be a progestin-only pill (POP), most women in the United States take combined oral contraceptives and would not be willing to switch types. Therefore, a target market for an OTC POP might be first-time users without a pre-established brand or type. The findings from Chapters 2, 3, and 4 suggest that type is a high priority for OC-users. Some students are so adamant about their pill type that they have paid out-of-pocket to remain on the same type and avoid potential side effects. Therefore, without an abundant variety of the most popular types of pills, an OTC option would not achieve its full potential of expanding access.

# 5) Retailers looking to sell oral contraceptives over-the-counter would need to equip pharmacists with the necessary information to answer questions about the pills.

As the final question of the interview, participants were asked their opinion on pharmacy access to OCs. Pharmacy access to OCs refers to the process by which people could purchase pills directly from a pharmacist, though they might have to answer a few questions before receiving a prescription for it. Every participant supported this policy, and seven participants preferred this option to an OTC option, primarily because they felt more comfortable with the idea of someone consulting a medical professional before initiating the pill. Even before the pharmacy access option had been introduced, participants often mentioned the importance of being able to ask someone questions about OCs if sold OTC. Therefore, when OCs are available OTC, pharmacists should be trained to answer basic questions about proper use and compliance.

#### **Other policy recommendations:**

Aside from over-the-counter access, participants' barriers to access and poor OC-compliance prompted three additional policy recommendations.

6) States with pharmacy access to OCs should incentivize more retailers to offer this option. More states should allow pharmacists to prescribe oral contraceptives to increase access to those unable to see a prescribing physician.

As of March 2018, ten states allow pharmacists to prescribe birth control directly,<sup>173</sup> though full implementation of this new policy may take more time. One year after this law went into effect in California, just 11 percent of retailers in the state offered pharmacist-prescribed contraceptives.<sup>174</sup> A nationally representative telephone survey in 2004 sought to identify the number of women interested in

<sup>&</sup>lt;sup>173</sup> "What's the law in your state?," *Free the Pill*, updated March 28, 2018, <u>http://freethepill.org/statepolicies/</u>.

<sup>&</sup>lt;sup>174</sup> Ronnie Cohen, "Few California pharmacists prescribing birth control," *Reuters*, December 15, 2017, <u>https://www.reuters.com/article/us-health-contraception-drugstores/few-california-pharmacists-prescribing-birth-control-idUSKBN1E92OW</u>.

pharmacy access to hormonal contraception.<sup>175</sup> Sixty-eight percent of the 811 respondents claimed that they would start a hormonal method of birth control (pill, patch, or vaginal ring) if it were available from a pharmacist. For someone like Joy, for whom scheduling a follow-up visit became a major hurdle, pharmacy access would allow her to bypass the prescriber altogether.

# 7) More states should require insurance cover an extended supply—at least 12 months' worth of oral contraceptives to allow for greater flexibility for long-term travel and convenience with fewer trips to the pharmacy.

More states should follow the example of the thirteen states that offer insurance coverage for a year's supply of oral contraceptives. Previous research has found that women who receive a one-year supply are thirty percent less likely to have an unintended pregnancy than those who receive a three-month supply.<sup>176</sup> As demonstrated by the findings of Chapter 2, attaining one's pills required foresight and planning, and usually the involvement of a mother. For Trinity College students, rather than requesting their mothers send pills in the mail, or timing their OC-pickups around breaks, or switching to a local pharmacy and worrying about the timing of your transfers, a year's supply of pills would offer a more reliable option. If insurance companies simply offered to cover a year's worth of OCs, rather than the current 1-3 packs, out-of-state students would benefit from this service. Currently, only eleven states offer require insurance coverage for an extended supply of birth control.<sup>177</sup> In addition, on the occasions when students spend months travelling—a gap year, summer internship, or study abroad, the ability to take several packs would encourage consistent use of birth control.

<sup>&</sup>lt;sup>175</sup> Sharon Landau, Cohen, Molly Parker Tapias, and Belle Taylor McGhee, "Birth control within reach: a national survey on women's attitudes toward and interest in pharmacy access to hormonal contraception," *Contraception* 74, no. 6 (2006): 463-470.

<sup>&</sup>lt;sup>176</sup> DG Foster, D. Hulett, M. Bradsberry, P. Darney, and M. Policar, "Number of Oral Contraceptive Pill Packages Dispensed and Subsequent Unintended Pregnancies," *Obstetrics and Gynecology* 117 no. 3 (March 2011): 566-572.

<sup>&</sup>lt;sup>177</sup> "Insurance coverage of contraceptives," *Guttmacher Institute*.

Students from less affluent families would also benefit from insurance coverage for a year's supply of oral contraceptives. Students from families with lower incomes reported assuming more responsibility in obtaining their pills. This responsibility often meant coordinating appointment times, insurance coverage, and pharmacy pickups. For these students, streamlining the process would mean less stress for them on a monthly basis.

State Medicaid programs ought to make extended supply coverage a priority. Several participants on Connecticut's Medicaid program, HUSKY, reported inconsistent coverage of pill types. In the first few months they were covered by HUSKY, two participants paid out-of-pocket for their pills ranging from \$19 to \$28 dollars, as found in Chapter 2. One participant switched to the Nexplanon arm implant in large part because her HUSKY insurance constantly changed the type of pills it would cover, contributing to damaging side effects. If individual states' Medicaid programs offered a year's worth of coverage at once, users could simply pick up twelve packs of their preferred type and not be held hostage to the whims of their insurance month-to-month.

# 8) Colleges and universities should incorporate presentations about all birth control methods in orientation programming to inform college students about the benefits of LARCs.

Five participants were only offered oral contraceptives and no other method when they asked for birth control, and three had never heard of an intrauterine device (IUD). Seven participants chose OCs as their birth control method *because* it was the most familiar option for them. These participants knew family members or friends already taking the pill, or had the perception that "everybody" else was on the pill. According to estimates by the Guttmacher Institute, 54 percent of unintended pregnancies are the result of not using a birth control method, whereas 41 percent of unintended pregnancies are the result of inconsistent use of birth control.<sup>178</sup>

<sup>&</sup>lt;sup>178</sup> "Unintended pregnancy in the United States," *Guttmacher Institute*, September 2016, <u>https://www.guttmacher.org/fact-sheet/unintended-pregnancy-united-states</u>.

Considering the finding that college students struggle to remain compliant with a daily pill, a long-acting reversible contraceptive method, such as an IUD, might offer more effective protection. In addition, long term methods would relieve participants interested in preventing pregnancy from the burden of managing their OCs. After insertion, the IUD and Nexplanon arm implant allow users years of birth control coverage without maintenance. Recent trends among contraceptive users in the United States show significant increases in those choosing LARC methods. In 2008, only six percent of contraceptive users had an IUD or implant as their primary method, but this percent increased to 12 percent in 2012, and 14 percent in 2014.<sup>179</sup> But without the same level of familiarity among young women, and without medical professionals presenting young women will all their options, LARCs cannot compete with the popularity of the pill.

Two participants had recent experiences of doctors "pushing" the IUD as a more effective method, indicative of the recent findings of LARCs effectiveness for younger women.<sup>180</sup> Though medical professionals ought to consider the ethical complications and historical context of "pushing" a method of birth control, college women actively seeking an effective method of pregnancy prevention should be made aware of their options. A report by the Guttmacher Institute argues that to avoid reproductive coercion, all people should have the right to choose the contraceptive method they prefer—or no method at all.<sup>181</sup>

An OTC OC might further exacerbate this lack of choice. The ability to start OCs without a doctor's consult would limit opportunity for the presentation of other options. In an effort to avoid this consequence, I recommend colleges and universities incorporate birth control options into their health and safety orientation programming as well as featuring information about all methods in college health

<sup>&</sup>lt;sup>179</sup> Megan L. Kavanaugh and Jenna Jerman, "Contraceptive method use in the United States: trends and characteristics between 2008, 2012, and 2014," *Contraception* 97 no. 1 (January 2018): 14-21.

<sup>&</sup>lt;sup>180</sup> "ACOG Strengthens LARC Recommendation," *News Releases*, The American College of Obstetricians and Gynecologists.; American Academy of Pediatrics. *Contraception for Adolescents*.

<sup>&</sup>lt;sup>181</sup> Adam Sonfield, "Why family planning policy and practice must guarantee a true choice of contraceptive methods," *Guttmacher Policy Review* 20, November 1, 2017, <u>https://www.guttmacher.org/gpr/2017/11/why-family-planning-policy-and-practice-must-guarantee-true-choice-contraceptive-methods</u>.

centers. First-year orientation represents an ideal opportunity to present students with birth control options. Recall that two participants chose to start OCs in high school in "preparation" for college, meaning they expected to become sexually active at that time. Another participant had no memory of learning about methods of birth control in high school. With these findings in mind, colleges and universities ought to do more than offer free condoms and encourage "safe sex" to avoid sexually-transmitted diseases. While college first-years learn about alcohol poisoning and sexual violence on campus during their orientation, they should also be presented with different birth control methods and where they can pursue these options.

# 9) States should regulate companies offering OCs through mobile apps to ensure consumer safety. At the same time, states should adjust state policies about online prescriptions to better accommodate these services and their potential to improve access to OCs.

In nearly every state, an online prescription service is available. In some states, consumers might be required to submit a video questionnaire or take a quiz to screen for contraindications. Some services accept insurance coverage, while others do not. Some services charge for the online consultation in addition to the packs. I would recommend these requirements be streamlined and made more consumerfriendly. If students were to utilize these services, their pills could be sent directly to their campus or homes and avoid the pharmacy altogether. In the years it will take Ibis Reproductive Health and HRA Pharma to apply to the FDA and get a progestin-only pill approved for sale OTC, more OC users could start using online prescriptions and apps to avoid the inconvenience of a doctor's appointment or trips to the pharmacy.

#### **Concluding Remarks**

As the findings of this thesis demonstrate, although insurance coverage guarantees have made it less expensive to obtain OCs in recent years, college women continue to face barriers to access. Though most can pick up their pills without a copay, their insurance restricts coverage to only three months or less, or will suddenly change the types of OCs they choose to cover. For the students I spoke to, those from high-SES families had access to social capital resources such as mothers to manage their pills or close relationships with prescribers. In addition, changing insurance plans and gaps in coverage were more often felt by lower-SES students and determined their out-of-pocket costs for an OTC OC. To improve consistent access to OCs, I recommend states adopt requirements such as extended coverage, mobile app access, or pharmacy access. For these access reasons, as well as the low daily compliance rate, oral contraceptives might not be the best method to fit a student's lifestyle. One way to boost familiarity of LARCs as a method may be for colleges and universities to introduce it along with their other pre-orientation health and safety programming.

When OCs become available OTC, the findings of this thesis inform four recommendations. An Rx-to-OTC switch would need to be accompanied by an educational campaign. OTC pills would also need for more states to require insurance coverage of OTC birth control methods to in fact expand access to everyone. Multiple types would need to be available OTC to accommodate existing OC-users already using a preferred or prescribed type. Finally, pharmacists should be educated on basic OC safety in order to advise customers with questions.

#### CONCLUSION

Politically, the proposal for an OTC OC has received bi-partisan support. Of course, the "bipartisan" nature of cross-party support is somewhat deceiving. In 2012, Louisiana Governor Bobby Jindal wrote an opinion piece for the Wall Street Journal titled "The End of Birth Control Politics" in which he argues in favor of allowing birth control pills OTC, citing the American College of Obstetricians and Gynecologists (ACOG) endorsement of the switch.<sup>182</sup> Jindal expresses that Conservative Republicans have been "stupid" to allow Democrats political control of the birth control issue. In 2015, Republican Senators Cory Gardner (R-CO) and Kelly Ayotte (R-NH) introduced the "Allowing Greater Access to Safe and Effective Contraception Act"<sup>183</sup> which would require the FDA to prioritize applications for OTC contraceptive pills and waive the application fee. The Republican bill specified that the pills could only be purchased by women over 18 years old. The president of ACOG came out against the bill because it would undermine the Affordable Care Act's contraceptive mandate.<sup>184</sup> Even had it been passed, this bill served as nothing more than a political symbol.

The reactions of women's health advocates revealed more than the bill itself. For example, a representative of the Center for Reproductive Rights pointed out that the Republican age limit and ID-requirement would make it difficult for young and undocumented women to access birth control OTC, the same two groups who stand to gain the most from an OTC switch for birth control pills. Planned Parenthood expressed concern that the Republican plan would not support low-income women and offer an option so expensive as to put it out of reach for most. Cecile Richards of Planned Parenthood described this bill as a "sham" and an "insult to women."<sup>185</sup> During the election later that year, Planned Parenthood invested nearly a million dollars in advertisements against the OTC plans of Cory Gardner (R-CO) and Thom Tillis (R-NC). While this move prompted right-wing websites and a conservative journalist's

<sup>&</sup>lt;sup>182</sup> Bobby Jindal, "The End of Birth-Control Politics," *Wall Street Journal*, December 13, 2012. https://www.wsj.com/articles/SB10001424127887324640104578163120400999616.

<sup>&</sup>lt;sup>183</sup> U.S. Congress, Senate, *Allowing Greater Access to Safe and Effective Contraception Act*, S.1438, 114<sup>th</sup> Congress, Sess. Of 2015. <u>https://www.congress.gov/bill/114th-congress/senate-bill/1438/</u>.

<sup>&</sup>lt;sup>184</sup> Ibid.

<sup>&</sup>lt;sup>185</sup> Emily Crockett, "GOP Introduces 'Sham' Birth Control Access Bill," *Rewire*, May 22, 2015. <u>https://rewire.news/article/2015/05/22/gop-introduces-sham-birth-control-access-bill/</u>.

Forbes article<sup>186</sup> to question why Planned Parenthood would "oppose" OTC access, these pieces misrepresent Planned Parenthood's position on the issue. In fact, Planned Parenthood's stance on OTC access was made clear when they backed<sup>187</sup> Senator Patty Murray's (D-WA) bill written in response to the Republican bill.<sup>188</sup>

The Affordability IS Access Act reads like a series of reassertions of the contraceptive mandate of the Affordable Care Act. Unlike the Republican plan, this bill would require insurance coverage of OTC birth control without cost-sharing. Of course, like the Republican bill, Senator Murray's bill also served a political purpose. Senator Murray's bill simply requests that the FDA approve any applications for OTC birth control "without delay" as long as the product met their requirements. It also includes a clause clarifying that the bill does not intend to modify any of the FDA's usual procedures. In essence, this bill does not propose any action be taken. However, as a piece of legislation, it offered Planned Parenthood something to rally behind by proposing OTC birth control be more accessible *and* affordable.

So where are we now? Over the next few years, the Ibis-HRA Pharma partnership will conduct research regarding the safety of progestin-only oral contraceptive pills, or "mini pills," rather than combined oral contraceptives, which contain estrogen. This research will build on the decade of research done by affiliates of the OC OTC Working Group, and the strong evidence collected already on the safety and potential effectiveness of the switch. Progestin-only pills are considered safer for widespread use, and perhaps more FDA-friendly considering FDA-approved emergency contraceptive pills are also progestin-only. To compare the progress of OTC OCs with the OTC EC process: the Women's Capital Corporation, the manufacturer of Plan B, filed their FDA application in April 2003. Until oral contraceptives are

<sup>&</sup>lt;sup>186</sup> Hadley Heath Manning, "Why Does Planned Parenthood Oppose Over-The-Counter Birth Control? Because They'd Make Less Money," *Forbes*, September 29, 2014.

<sup>&</sup>lt;sup>187</sup> Planned Parenthood, "Act Now to Help Make Birth Control Available Over-the-Counter and Protect Insurance Coverage," June 9, 2015. <u>https://www.plannedparenthoodaction.org/blog/act-now-help-make-birth-control-available-over-counter-and-protect-insurance-coverage</u>.

<sup>&</sup>lt;sup>188</sup> U.S. Congress, Senate, *Affordability is Access Act*, S. 1532, 114<sup>th</sup> Congress, Sess. Of 2015, https://www.congress.gov/bill/114th-congress/senate-bill/1532.

available OTC, college users would benefit from extended coverage, pharmacy access, mobile apps, and LARC education.

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### APPENDIX

### **Interview Guide**

My name is Haley Dougherty and I'm a student researcher from Trinity College conducting a study on college women's access to birth control. I am interested in learning two things from you. First, I want to understand the process you go through [or went through] to obtain your birth control pills. Second, I am interested in hearing your opinion on the possibility of buying birth control pills off the shelf rather than via prescription in the pharmacy.

## [GIVE PARTICIPANTS TIME TO READ THE CONSENT FORM]

Do you have any questions about the consent form? Are you willing to participate?

[IF YES]: If it's alright with you, I'm going to be recording our conversation so we can just talk more casually without me trying to write everything down. Is that ok?

[IF YES]: Before we start, I want to let you know that you are not obligated to answer every question. If you do not feel comfortable answering a question, you can ask me to move on to the next one. Your participation is completely voluntary and you can stop me at any point if you no longer wish to continue.

There are no right or wrong answers, I simply want to hear your story and your opinions.

Do you have any questions so far?

### 0. **Opening questions**

- a. What year are you?
- b. What are you studying?

### **PART I: Birth control pills**

### 1. Birth Control Pill History/Current Accessibility

- a. At what age did you begin taking birth control pills?
- b. Can you tell me about initially starting on birth control pills? (Did you consult any family or friends?)
- c. Can you tell me the reason you started taking birth control pills?
  - i. [If they still take pills]: Is [this] still the primary reason you take birth control pills?
  - ii. Has your pill type/brand ever changed? Why?
- d. What kind of doctor first prescribed you "the pill"? (ex. Pediatrician, General Practitioner, Gynecologist, Planned Parenthood clinician, etc.)
  - i. Does this same doctor still prescribe you the pill?
  - ii. If not, when did the switch occur?
  - iii. What are your thoughts about your doctor?

- e. How often are you required to see this [TYPE OF CLINICIAN] in order to obtain more packs of pills? (How many packs of pills can you obtain in one visit to the pharmacy?)
- f. In the years that you've been taking the pill, have you noticed any changes in accessibility?
- g. Can you tell me about your experience with pharmacists?
- h. Have you ever been told that you need to visit the doctor (OR clinician, nurse, Planned Parenthood, etc.) before receiving more pills?
- i. If you had to guess, how much total time would you say it takes for you to get more pills?

### 2. Cost

- a. Have there been any changes in the out-of-pocket cost of your birth control pills since you began taking them?
- a. In your experience, would you say your birth control pills are easily accessible?

### 3. Discontinuation

- a. Can you tell me about your process to obtain a new pack of birth control pills? (If you ran out today, what would you do?)
- b. When was the last time you missed a pill or a few pills at once?
  - i. [YES]: Do you remember why you missed that pill(s)
  - ii. [NEVER MISSED]: How do you make sure that you will not miss a pill?
- c. What do you do over break/summer/long-term trips?

### 4. Birth Control Type Comparisons

- a. What are the most important factors you considered when you decided to use birth control pills (rather than another type of birth control)?
- b. Would anything make it easier for you to obtain your preferred method of birth control?
- c. Have you been on another type of birth control?
  - i. [YES]: What did you like or dislike about this type? Why did you decide to switch from the pill to [NEW TYPE] or from [NEW TYPE] to the pill?
  - ii. [NO]: Have you ever considered a different type of birth control? If so, why have you decided to remain on birth control pills?

### PART II: Over-the-counter opinion

5. [EXPLAIN the proposals for over-the-counter birth control pills]:

In the past few years, some people have been trying to make birth control pills available over-thecounter. This means that anyone could buy them at a drugstore like Walgreens or CVS or a grocery store just like you would aspirin or vitamins. You wouldn't need to talk to a doctor, parent, or pharmacist unless you wanted to. You wouldn't need a doctor's appointment or a prescription. Health insurance may or may not cover the cost of pills sold over-the-counter.<sup>189</sup>

- a. Based on this description, what are your initial thoughts on this idea?
- b. In your opinion, what are some of the benefits of offering birth control pills over-thecounter?
- c. Do you think birth control is safe enough to be sold over-the-counter?

### 6. Over-the-counter expected personal use

- a. Would having the option to buy your birth control pills over-the-counter be beneficial for you?
- b. Would you ever consider buying birth control pills over-the-counter? Why?

### 7. **Opinion Question**

- a. Do you think birth control pills should be available over-the-counter for anyone to purchase?
  - i. [NO]: In some states, they have recently passed laws to allow birth control pills to be sold from a pharmacist (the person that gives out medicine) at a drugstore or grocery store. You wouldn't need a prescription but you may need to answer some questions about your health to the pharmacist before obtaining your pills.
  - ii. Do you think birth control pills should be available from a pharmacist?<sup>190</sup>

### 8. Conclusions

- a. Is there anything I should have asked you but didn't? / Is there anything else you want me to know?
- b. Is there anything we talked about that you would like to clarify or add to?

 <sup>&</sup>lt;sup>189</sup> Wording from Manski, Ruth, and Melissa Kottke. "A survey of teenagers' attitudes toward moving oral contraceptives over the counter." *Perspectives on Sexual and Reproductive Health* 47, no. 3 (2015): 123-129.
 <sup>190</sup> *Ibid.*