



**The Ethics of Existing Treatment of Polycystic Ovary Syndrome**  
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## Abstract

When considering the recent uprise in the amount of new Polycystic Ovary Syndrome (PCOS) diagnoses, it is imperative to also recognize the limited amount of resources available to advocate and address the lessened quality of life for these particular women. Although existing research on the experiences associated with PCOS is lacking, the sources have been analyzed to show that patient dissatisfaction is prominent, indicating frequent ethical missteps. However, the existing data is seemingly outdated as not enough time or resources have been available to properly allocate in depth research for the furthering of PCOS development in the medical environment. Thus, through the accumulation of qualitative and quantitative data from a selected 24 participants that have been diagnosed with PCOS, I was able to inquire on the opinions participants have on the numerous aspects of PCOS that may be contributing to the poor treatments available. Using this data, I identify key patterns in the responses that point to common themes of patient negligence through superficial treatments and negative doctor-patient relationships. Thus, an expansive medical body of knowledge should be implemented in order to see an improvement in the upcoming years. Though some limitations are present in the execution of the method, it is a necessary starting point to begin the process of betterment of the medical atmosphere for PCOS.

*Keywords:* PCOS, treatments, ethical, ethical missteps, negligence, dissatisfaction

## **Introduction**

After Polycystic Ovary Syndrome (PCOS) being established as one of the most common health syndromes in women due to the insulin resistance epidemic, there has been an uprise in patient dissatisfaction in healthcare settings due to the significant lack of attention being put forth to help manage the symptoms of PCOS (Bazarganipour et al., 2017). Further diving into this concept, the need to evaluate the ethics of the existing treatments becomes increasingly urgent. In most cases, PCOS is not seen as a serious syndrome as it is only seen as affecting the menstrual cycle. While that is an important factor of the syndrome, this fact fails to recognize the other underlying symptoms that make the patient more subject to other harmful disorders/symptoms. Thus, the need for the evaluation of current PCOS approaches and the proposal of different drug therapies that are more patient-friendly becomes increasingly prevalent.

## **Literature Review**

Primarily, before being able to assess the gap, the best approach is to evaluate the existing research and body of knowledge on already existing treatments for PCOS. In this, the importance of the treatments should be considered through their side effects and their overall efficacy.

### **Existing Drug Treatments**

Currently, the most prominent treatment for PCOS has been the use of drug therapies such as birth control or, more popularly, clomiphene citrate. Palomba et al. (2009) regards clomiphene citrate as a primary treatment to PCOS; however, it does not seem to relay as

effective of a result as it should. However, on the contrary, Juan Pablo Domecq and his colleagues' research published in the Journal of Clinical Endocrinology & Metabolism actually repudiates the serious side effects that are often associated with common PCOS treatments such as "weight gain" and "infertility," indicating that there may be hope amongst the existing treatments of PCOS (Domecq et al., 2013). However, the lack of government funding presents itself as an obstacle in instituting solid treatment plans that medical professionals can properly follow consistently. For instance, other therapies have yet to be researched and established due to the funding such as "myo-inositol," a type of hormonal therapy (Unfer et al., 2012). Even with proper funding, the issue arises that PCOS does not affect each individual in just one specific way. Nevertheless, with an underdeveloped medical knowledge of PCOS, important information cannot be uncovered about the condition. Thus, in spite of the treatments that are seemingly available and widely considered as effective, many of these therapies have been linked to patient dissatisfaction due to lack of physician attention and disorganized fashion of dealing with patient symptoms and trial materials.

### **Patient Dissatisfaction**

In cases of PCOS, patient dissatisfaction is the largest issue surrounding the health turn-out and research done regarding the syndrome. Azziz et al. (2005) provides some context for the beginnings of PCOS care dissatisfaction, explaining that cases of dissatisfaction in physician care have risen due to the lack of cost-efficiency amongst the therapies and the negative toll it takes on the health of the women. Compared to research done for other syndromes, PCOS tends to be the most inconvenient in terms of cost due to the lack of government funding (Azziz et al., 2005). In addition to the inconvenience of treating PCOS due to limited options, there has been the establishment of drug trials that PCOS patients have

voluntarily participated in but without promising results or consistency. For example, Fatemeh Bazarganipour, affiliated with Medical Sciences, and her colleagues, detail the most common reasons for withdrawal from most PCOS drug trials as “prolonged periods of treatment and [intense] side effects.” Ultimately, Bazarganipour et al. indicates that the drug trials set up for the sole reason of determining a reliable treatment plan has fallen through due to the lack of focus and ineffective management that has occurred on behalf of the healthcare professionals that are responsible for providing optimal care (Barzarganipour et al., 2017). Furthermore, the patient dissatisfaction outlined by Barzarganipour and Azziz is also explained by the lack of emphasis that is put towards PCOS in teaching facilities. Healthcare professionals seem to be at a disadvantage due to their limited knowledge on the syndrome because of the lack of focus on the topic (Gibson-Helm et al., 2017). The preconceived notion that PCOS is not a serious syndrome has been impeding on the success of the development of care for the syndrome as it does not allow for a proper physician-patient relationship to develop. Overall, the limited teachings of PCOS to medical professionals contributes to these surface-level, preconceived notions of symptoms, leading to patient dissatisfaction.

### **Gap Analysis**

Despite the frequent appearance of PCOS in women, there seems to be a lack of research present due to the scarcity of funding as PCOS is not taken seriously in most healthcare settings. Divulging further, while looking at the wide-ranging aforementioned articles in regards to time, it becomes increasingly apparent that the development of a proper treatment plan and the body of knowledge for PCOS has been neglected in the entirety of the timeline. As a result of this, the current and existing treatments of PCOS have, for the most part, been superficial and not case specific. This has led to patient dissatisfaction in response to the lack of

proper drug therapies being present. Furthermore, the approach to PCOS patients has been recorded as hostile rather than allowing for patient-physician communication that has also led to the hesitance of PCOS patients to indulge in drug trials. This miscommunication often harvests itself within the drug trials that could hold beneficial results but has, in many cases, led to patient withdrawal out of such trials due to their discomfort. However, it becomes impossible to gather such hefty data universally, therefore, in this research paper, I investigated the treatment plans and conducted research in the geographically specific town of Katy as the diversity allows for an accurate and representative sample. Thus, given the high amount of patient dissatisfaction that is partially due to limited medical knowledge on the syndrome, the question becomes increasingly urgent to ask: How can local Katy medical centers better prepare themselves for future PCOS patients through increasing medical knowledge on the subject and in what way can this knowledge be used to establish an effective treatment plan? In an attempt to mitigate the negligent behaviors of healthcare providers, it is important to do a cross-analysis of multiple databases and set up questionnaires in order to determine the best possible method to proceed with treatment plans and improve PCOS patient prognosis.

### **Method**

Finally, after examining the current body of knowledge on the subject of PCOS, I was able to develop a study that reflected a better approach to understanding the current grounds of PCOS through patients rather than a scientific approach. Primarily, I had to develop a design to develop such a study upon.

### **Design**

The design of the experiment deals with women that are dealing with menstruation or have been diagnosed with Polycystic Ovary Syndrome by using a set of questions that was

designed to assess their treatments and care provided. However, nothing incriminating was questioned about due to the fact that discussing this syndrome is a sensitive topic for many women. As a measure to protect the subjects of the study, they are allowed to opt out at any time and t consent forms were involved in order to ensure complete confidentiality. The design of the questions are helpful enough to gain information and address the gap but not harmful to the rights of the subject. This study does not account for one specific demographic as the goal is to acquire information that will be useful to implement universally in order to minimize discrepancies in the medical field surrounding PCOS.

### **Procedure**

The method of my research study is a mixed-method approach in which the practices of multiple methods are taken to provide substantial information about my topic and answers to my research question/hypothesis. The primary information is acquired through a questionnaire sent to a random sample of participants that have PCOS or experience symptoms of it. In this questionnaire, a set of questions evaluating the treatment that the participants have faced provide responses that contain insight into the shortcomings of the medical field in understanding PCOS and how that has affected patients.

Furthermore, a content analysis of databases will be used to develop patterns between the data that has been collected in the past and the data that is newly presented through this study. Furthermore, this method is repeated with other aspects such as concern of the pharmaceutical industry and the path of care that has been developed, or rather underdeveloped, for Polycystic Ovary Syndrome patients. Evaluating current research also led me into utilizing methods in which I apply the information to determine future results which can

be useful in setting up a more reliable healthcare setting as a major issue presents itself in the lack of current knowledge available for medical professionals.

This, in turn, has caused a negative patient-doctor relationship that has been detrimental. Overall, this method is considered to be both qualitative and quantitative as the data is represented in a contextual and analytical manner. Along with this, the subjects of the study are also asked questions that reflect the information on the databases that were analyzed in order to determine their validity and accuracy and determine how much Katy has progressed past the general consensus of patient dissatisfaction that has been relayed about PCOS patients and their experiments.

### **Variables**

Because a primary part of this study is to ensure the best way to promote positive patient prognosis for future PCOS cases and better coverage for women that feel misrepresented in their menstrual cycle symptoms, the important variables to consider are the treatments and negative/positive qualitative responses to such treatments. (Barnard et al., 2007). Thus, with this in mind, the study, in turn, shows the effectiveness of certain treatments and approaches in the Katy area, determining a better approach for regions that have not yet experimented with the same treatment. In this way, it will be possible to increase patient satisfaction.

### **Research Instruments**

For this study, a questionnaire is necessary in order to assess patient satisfaction which can be simplified by providing a form that has questions about specific patient experiences or individual experiences that can detail the impact of menstrual cycles on professional care. This questionnaire also helps lessen incrimination and is executed without having to violate HIPAA. The questionnaire is a mix of closed-ended and open-ended response questions as well as



those that prompt ratings of healthcare interactions, similar to that of the Myers-Briggs framework or Likert scales indicated by the example below.

**Figure 1:** *Example of Questionnaire Format*

To what extent do you agree or disagree with each of the following statements?

	Strongly Agree/Agree	Neutral	Strongly Disagree/Disagree
Statement 1	1	3	9
Statement 2	1	3	9
Statement 3	1	3	9
Statement 4	1	3	9

### **Subject(s) of Study**

The subjects of this study are women diagnosed with polycystic ovary syndrome or women that have experienced symptoms of the condition in order to determine the impact of certain healthcare settings and determine their satisfaction with dealing with the syndrome.

## Findings

After contacting about 50 women that were known to have Polycystic Ovary Syndrome (PCOS), I received 24 responses answering the questions I had curated to determine the efficacy and ethicalities of PCOS treatments. The questions are formatted in the likert scale method shown in figure 1 along with short-answer questions to determine the validity of the hypothesis: the ethicality concerns regarding PCOS treatment has detrimentally impacted those diagnosed with PCOS. To provide a brief overview of the extent to which this hypothesis is valid, it is important to note that the options that indicated poor medical environments accounted for over half of the responses to the questions.

### Quantitative Based Data:

For the questionnaire data in survey form, a couple common themes emerged:

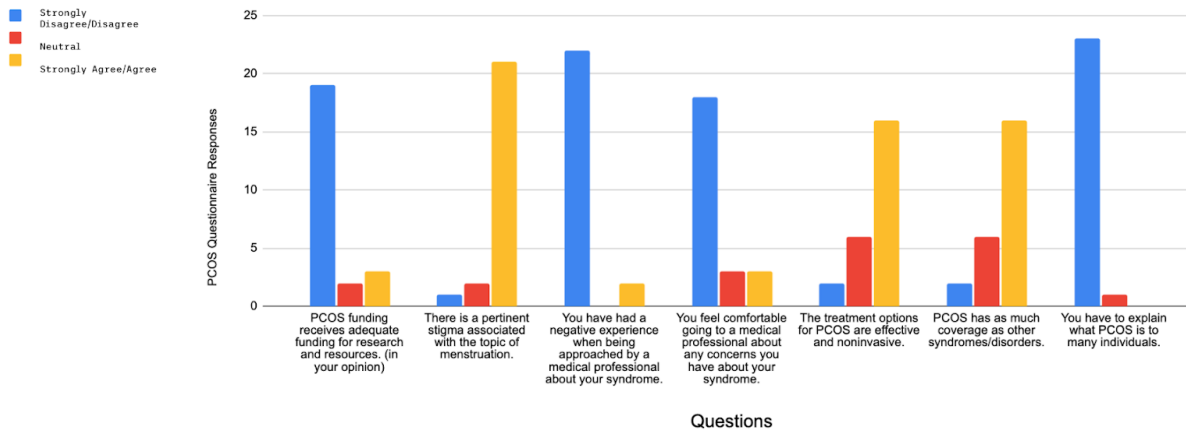
1. Most participants felt comfortable in talking about their own syndrome but still felt the effects of menstruation stigma.
2. All questions relating to the ethics of medical professionals and treatments received negative responses, validating the concerns of the aforementioned hypothesis.
3. Most women were given the same, superficial treatments that did not help in almost all cases.

### The Collected Data:

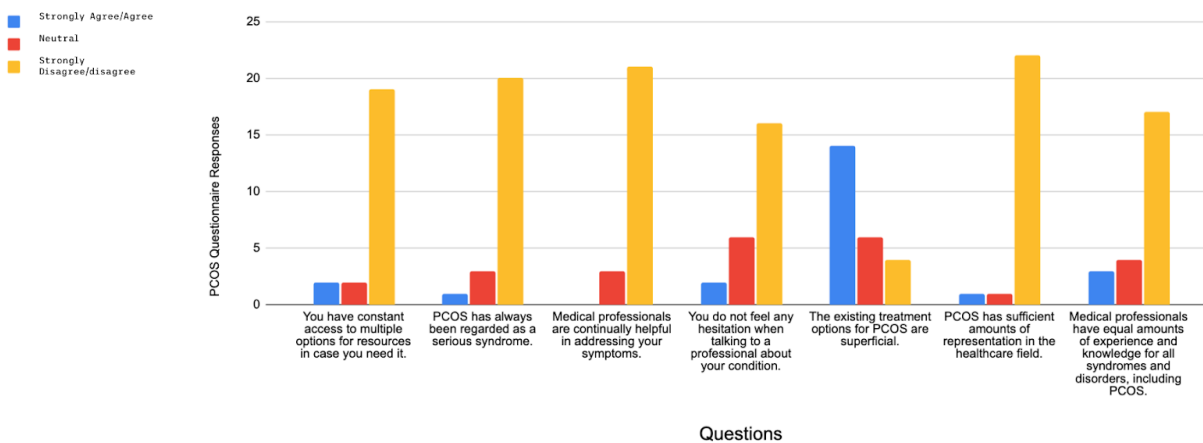
Each of the 24 responses are factored into this chart to showcase the overall skew of the data collected towards negative concerns of the ethical missteps in treating and addressing women with PCOS.

### Table 1: *Quantitative Responses*

### PCOS Questionnaire Responses



### PCOS Questionnaire Responses



All the survey questions asked received an overwhelming majority advocating for the response that depicts unethical treatments. A couple of responses went in the opposite direction, but this could be due to the variety of medical centers and their varying approaches to dealing with PCOS.

### Qualitative Based Data:

In tandem with these likert scale responses, participants also offered anecdotal experiences represented in Table 2 which were both positive and negative in regards to medical

professionals in the context of prescribing treatments, general medical attention, and doctor-patient relationships. The same preexisting themes gathered from the quantitative portions have remained consistent throughout the positive and negative experiences of participants.

**Table 2: *Personal Experiences***

<b>Type of Patient Negligence</b>	<b>Responses*</b>
<b>Doctor-Patient relationship</b>	<p>Participant 4: “My doctor made it seem like I wasn’t gonna make it with pcos.”</p> <p>Participant 5: “I’ve dealt with doctors disregarding my symptoms and concerns which has impacted the treatment options available to me”</p> <p>Participant 8: “For negative, there was a time when I got my blood drawn to check my hormone levels and my doctor claimed that since my testosterone wasn’t in the range it needed to be to be considered as having PCOS, I no longer had it, yet still experienced many symptoms of it, have struggled with it for yrs, and yet my testosterone was still higher than my estrogen levels. After that, she continued to say that I should “just keep taking birth control” without giving me any other solutions.”</p> <p>Participant 9: “My PCOS was caught early as a child, I was overweight, my doctors were persistent and even rude about me losing weight instead of addressing the other issues of my PCOS. As a teen I was pushed to try several forms of BC to regulate my periods, which only led to heavy continuous bleeding. As an adult my GYN now addresses my PCOS as the issue it is, offering medicine for the hair growth, regulating my cycle if I go longer than 3 months without, etc.”</p> <p>Participant 18: “I have been disregarded and made to feel less than. Doctors don’t know what they are doing and they throw birth control at my face.”</p> <p>Participant 19: “It went undiagnosed for years, doctors kept telling me I was being dramatic and that it was normal to feel pain so bad you threw up.”</p>



	<p>Participant 24: "Before I was diagnosed at age 24, I was told I was "too young" to warrant further testing, even though I'd regularly soak super plus pads and tampons for up to a year at a time, and had massive clotting. Another doctor told me if I controlled my anxiety, my "period problems" would fix themselves (after being diagnosed). Even within the last month, now at age 31, I was told by a doctor that it just is what it is, and I just have to deal with the fact that this is my life (regarding the symptoms, ie bleeding excessively, pain, stomach issues, ect)."</p>
<b>Lack of medical knowledge on PCOS</b>	<p>Participant 2: "No knowledge of PCOS..."</p> <p>Participant 6: "Been told PCOS, endometriosis and my other gynecological issues don't exist. Been told my pain isn't as bad as it is and that I'm being dramatic. Been told it's normal to puke when your period is painful."</p> <p>Participant 10: "Being told I'll never have my own children with no explanation as to why, or other treatment possibilities."</p> <p>Participant 12: I have unfortunately been to five OB/GYN, who have all communicated very negatively regarding PCOS. It honestly seems like no one wants to help, or no one really knows what they're talking about. However, I have found more holistic approaches and physicians as a better resource.</p> <p>Participant 13: "was told I would outgrow the hormone imbalance. Offered birth control now and when I want to get pregnant they'll prescribe metformin. Told I was lazy, and needed to lose more weight"</p> <p>Participant 14: "Negative? Almost all of them... I was always told that the root issue was my weight when PCOS was one of the MAIN REASONS I couldn't lose any weight. It was almost always what they resorted to when I explained any of my issues even in college. A positive experience was when I was finally diagnosed because my OBGYN listened. That's all I had ever asked for. I got tests and scans done to show that I had a reason for all of this pain. The only treatment I've had available to me was to get the Nexplanon implant to help manage my hormones, but it has knocked out my period and it still causes pain even after a year and a half of having it. It's good to help with the symptoms of a period, but even then I still get my full pain around the normal time I would</p>



	<p>get one.”</p> <p>Participant 15: “When I brought up more questions with my doctor in regards to PCOS they were not able to answer my questions in a sufficient way and I was still left confused about my condition with no effective treatment plans as well.”</p> <p>Participant 16: “I approached a doctor because I was having horrible bleeding and passed a clot the size of a ping pong ball. The doctor refused to acknowledge my PCOS diagnosis and instead offered to put me on continuous birth control pills. He also said my symptoms were normal for periods. Another time, I went to my doctor for issues with my bleeding and he told me I just needed to lose weight.”</p> <p>Participant 20: “It took me many years and multiple visits to healthcare professionals in order to get the help I needed. After being diagnosed with PCOS I was only offered the pill and to come back when I wanted to get pregnant. They also told me I needed to lose weight (even though I’m in my BMI range for my age). I was also referred to see a dietician who made me go on a keto diet which unfortunately caused me to have an unhealthy relationship to food.”</p>
<b>Treatments</b>	<p>Participant 1: “Before my current doctor, my previous experiences with doctors were that they pushed birth control as a treatment option”</p> <p>Participant 3: “Professionals tend to give you 1 main solution, which is taking birth control pills. They tell you that’s the only effective treatment in mind, however not everyone has positive experiences with it because of the side effects it gives you. My only positive experience was being treated holistically, where a care team suggested supplements and foods that’ll help me control my hormones naturally. I saw a change in pcos symptoms once I started and didn’t really have to take pain killers for cramps anymore either. I think a lot of difficulty in handling pcos is being told that the only best thing to do is take birth control, or take pain meds for cramps. If you tell a provider you don’t want to take birth control it feels as though you’ve reached a dead end in treatment options which can be discouraging, especially knowing that there hasn’t been as much research or findings about it.”</p> <p>Participant 7: “I’ve had many negative experiences but one specifically was about two years ago, I went in because I was</p>



	<p>having extreme sharp pains on my ovaries. I told the doctors about the pain that I was experiencing and they read it off by saying that it was from menstruation pains. I went to seek a second opinion and in fact it was cyst rupturing and growing on my ovaries which was causing the pain. The best the doctors could do for me was prescribe me pain medicine and birth control. However birth control does help but once I'm off it for a couple of days or even weeks my symptoms seem to get worse."</p> <p>Participant 11: "Prescribing the pill as a solution."</p> <p>Participant 17: "I'd say a negative experience is no professional picking up on it until I went to discuss my lack of periods etc at the age of 24. I've had many blood tests and it was down on my record that I started my periods late but I didn't know anything about PCOS, Adenomyosis etc so how could I know that anything was wrong and blood tests were coming back as normal (even though now I know my hormones are certainly not from my last blood test begging them to look into it) I have been given medroxyprogesterone to take every 3 months if I don't have a natural period so I am deemed as 'healthy' and that's it. I haven't received information about supplements or certain exercises or things I should be doing. So I did the research myself, take supplements I found helped for others and practice well-being because I didn't receive advice on insomnia, excessive bloating, how to cope with my hormones etc (all symptoms from my PCOS)"</p> <p>Participant 21: "Doctors will throw birth control into the conversation without first even giving ultrasounds, TRANSVAGINAL ultrasounds and recommending herbal products that have worked. Doctors are also not doing enough research on PCOS. They are just doing the surface level reading and knowledge without doing clinical studies and more. I have no schooling in PCOS but with my extensive research, trials, and studies, I can tell a doctor more about PCOS than they can tell me"</p>
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\*All responses are anonymous and the identity of the participants are protected. Responses are obtained from a google form that was sent out to individuals willing to participate. Not all participants are reflected here as some participants opted out of answering this section.

The positive and negative experiences of the participants depicted in Table 2 closely connect with the results of Table 1 by providing further depth to reasoning behind picking certain choices for the likert scale questions.

### **Existing Sources/Research**

Another aspect of the mixed-method approach was the investigation of past scholarly sources that depict PCOS struggles and its representation in the medical field. Once again, the same themes that were seen through the findings were consistent with the patterns seen in the existing sources regarding PCOS. The same concerns with patient dissatisfaction and unhealthy approaches to the condition were also expressed by scholars. Certain treatment options were also examined which are expanded upon during the analysis.

### **Analysis**

By using the mixed method approach, the multiple viewpoints employed the use of a questionnaire in order to acquire both qualitative and quantitative data that helped me to understand, thoroughly, the ethical perspective of PCOS and how it is viewed in the medical world based on patient accounts.

It can be noticed from Table 1 that almost all of the participants chose to lean towards the responses that depicted ethical missteps in medical settings in regards to treatments, doctor-patient relationship, and lack of medical knowledge. The astounding 94.8% (calculations based on quantitative results) participants that agreed with the statement “You have to explain what PCOS is to many individuals” highlights that one of the widespread reasons for many of these issues could be the undercoverage of PCOS, including in the medical field. This statistic works in tandem with the 89.5% of participants that disagreed with statement 12, explaining that the coverage of PCOS, despite it being a prominent condition for women past the age of 13,



does not have the sufficient resources to properly support their PCOS patients. In the qualitative responses, the participants reported that, most of the time, the go-to reaction from doctors would be to prescribe birth control which had little to no impact on alleviating the symptoms of PCOS. This very closely aligns to the limited research that has been done on PCOS treatments in reaffirming that, since its prevalence, little has been done to address the issue of superficial treatments. However, amongst the short answer responses, participant 14, also not satisfied with the care they received in the medical setting, did highlight that, of the treatments they were prescribed, their nexplanon implant did work to alleviate some of the symptoms but not all. Because this participant offered another treatment apart from the birth control that majority of the other participants are mentioning, it may be possible that this implant could work if it was modified in a way that would be more helpful in addressing and lessening the symptoms for other individuals with the syndrome. With these findings, it can be seen that there is a way to address the ethical implications of the patient mistreatment through the inability to provide the proper resources for patients. Using the responses that explain specific hormonal dietary plans that thoroughly addressed case specific symptoms may be something that local facilities in Houston should look into in order to implement as a steady plan for women that deal with PCOS in order to have a strict regimen to stick that is meaningful and relevant in its results. Currently, PCOS patient treatments have been very superficial as aforementioned and being able to develop alternative treatments that allow for more growth on the subject and more development is necessary to understand the condition better than other conditions. The findings highlight and underscore this as they outline the main reasons why this is applicable as they are being negatively impacted by the lack of resources and funding for PCOS patients. Thus, the current findings all point to furthering equalized funding amongst all conditions including PCOS and also

involving doctors in more PCOS related studies while giving importance to proper approaches rather than staying unknown about its effects and its symptoms on women that have the syndrome.

Additionally, the quantitative statistics collected are further explained by the qualitative responses given by the participants that emphasize the way they feel disregarded by their doctor through the way they were addressed and their symptoms are not acknowledged or addressed. Table 2 depicts patient 19's response explaining that many of their doctors told them that they were being dramatic rather than helping them. This goes to show how medical knowledge is very limited, lending to doctors being unable to address PCOS with respect and care in a professional way. Clearly, with the short answer responses, the themes that were previously mentioned are now validated as many PCOS patients admittedly endure the unethical treatment of medical professionals. A lot of the participants also were mentioning problems with being able to identify their symptoms as they had never been exposed to the concept of PCOS as explained by participant 17 as neither her nor her doctors knew enough about PCOS to actually address her symptoms. Therefore, many of these ethical implications are important to address and be cognizant of in order to fully improve patient prognosis for PCOS individuals and curb the common patterns of doctor-patient relationship, treatment missteps, and the overall lack of knowledge that is being reported in both Table 1 and Table 2. Furthermore, the participants also highlighted issues that they had with patient negligence with being told that they were being "dramatic" which was exemplified in Table 2.

### **Analyzing Existing Sources/Research**

Existing research on PCOS is outside of the 15 year time frame, indicating the minimal research done on the topic. The journals of reproductive biomedicine (2007) correlates poor

management of individuals with PCOS and detriments to the quality of life. Gibson-Helm and his colleagues of the *Journal of Clinical Endocrinology and Metabolism* (2017) set up an experiment in which they review women's experiences. The most common results show that women are extremely dissatisfied due to lack of education on the disorder as explained by Hoyos et al. (2020) which such dissatisfaction “raises concerns about the responsibilities of academic institutions” to properly educate future health professionals on the aspects of PCOS. This type of incompetence ultimately leads to poor approaches to PCOS thus resulting in the long-term impact of delayed diagnosis presenting itself through “anxiety and depression symptoms” as reiterated by Gibson-Helm. Both of these sources also indicate the consistent delay of diagnosis due to inadequate medical services. Upon diagnosis, patients are also met with usually only one type of treatment: birth-control. These sources work in tandem to form the third party database that depicts the same patterns as the resulting responses from the survey. The same themes arise showing dissatisfaction with medical personnel and treatment. Nevertheless, some scholars such as Lee Radosh, an affiliate of The Reading Hospital and Medical Center in Pennsylvania, explains that treatment regimens like “metformin and clomiphene” should be considered as well as individualized treatments (Radosh, 2009). However, the issue with these suggestions once again supports the pattern seen in the previous findings. Much of the research that is acquired on the topic is outdated and does not address the ongoing issue that occurs with PCOS, thus showing a pressing need for cognizance of the matter at hand. Preetham Rao and Priya Bhide, associated with the Homerton University Hospital, explains the numerous difficulties that arise in PCOS and its complexity that has yet to be addressed (Rao & Bhide, 2020). Rao and her colleague explain the discrepancies of diagnosing PCOS that do not account for all presentations of the condition such as a “strict

threshold” that does not allow for variety. With this in mind, it becomes clear that patient dissatisfaction is valid as, sometimes despite their symptoms, they are regarded due to the lack of lenience and information about the condition.

### **Conclusion**

Through the examination of PCOS patients and the ways in which they have been limited in alleviating their symptoms, it becomes clear that future direction needs to be laid out to better address the individuals in the local community of Houston as well as applying the results on a more widespread scale. Though the experiment was limited in being unable to reach a very wide audience and containing a small sample, this presents more grounds for continued research into PCOS for furthering effective treatments and looking into incorporating alternative and case-based treatments for more specificity. Overall, the limitations presented as being unable to facilitate face-to-face interviews due to the COVID restrictions that are still being enforced, leading to a shift to using an online form for primary data collection. Even through the changes, the data support the idea of improving facilities and increasing resources for PCOS to ensure a healthier environment for treatment and furthered comfort without continuing the pattern of negligence. Though the results of my study were not exactly what I was hoping for as I had hoped to find a specific treatment that could be enforced into the medical plan for individuals with PCOS in order to help them holistically, it also brought a plethora of new details to the current body of knowledge as now we have more insight into the specific symptoms of PCOS that some individuals experience and the intensity of the syndrome itself. This is ultimately valuable knowledge as direct patient advice and experience is very beneficial to gain perspective on the syndrome and how it can affect women differently. Ultimately, these intensities can also be furthered to see if they are different amongst differing demographics

which is yet another specific that can help the understanding of PCOS as this study and its results are a sizeable step in the right direction to better addressing the concerns of PCOS.

### **Limitations**

Although these suggestions are extremely important to implement and reflect in the medical field, there are also certain implications and consequences to consider. In order to further funding for PCOS and develop treatments, it will be a considerably lengthy process that requires a lot of resources including time as it is a time-consuming project. For this reason, there may be financial implications as it may be hard to put aside a set amount of money for PCOS research; however, it should be taken into account the rising number of diagnoses amongst women that need to be addressed. This can only be addressed through long-term research and adequate allocation of funds that address the aspects of PCOS as well as any other condition. However, even through the engagement in researching and developing proper treatments for the syndrome, much of this will not be reflected in the medical atmosphere until the future. But, even so, it should still be an ongoing effort and started using the feedback of participants from the sample proposed as well as a more diversified sample. Along with this, there are also several limitations that arise. These limitations present themselves in how to ultimately implement these necessary changes to improve the quality of life for those experiencing the symptoms of PCOS. In the short-term, it will be hard to immediately reflect such major changes for the overall curriculum that will also allocate time and emphasis on PCOS to increase the overall knowledge that exists amongst the medical body. The benefits of this, however, can be seen through increased emphasis on PCOS in the medical body also automatically translates to a more wide-spread awareness and normalization of the syndrome, allowing for more comfort amongst those diagnosed with the disorder. Nevertheless, these major changes will take a lot of

time and effort to implement thoroughly which means the benefits of it will not be reflected in any evident way until viewing the futuristic perspective. Regardless, the efforts to continue to try to amend the current ethical missteps will still be useful to identify the problem and start the process to rectify it.

### **Future Direction**

After examining and evaluating the results that were collected from the mixed-method approach, it can be seen that something must be done in order to provide the same attention to PCOS as is given to other conditions as well. This also includes a more widespread coverage amongst primary-care physicians and doctors in general that should be aware of the proper way to address and understand symptoms rather than subject the patient to feelings of discomfort and instability in their own symptoms. Furthermore, this kind of coverage can also be achieved by promoting a better curriculum and deeper cognizance of the syndrome in which doctors are able to fully help patients through their syndrome while further treatments are developed that are more in-depth than birth control.

As for these treatments that should be considered to be developed, it should be encouraged for the research into developing treatments that may include hormone balancing lifestyle choices that provide a meaningful regimen that does not reflect superficial approaches. In order to take the participants' responses into account, it is important to include possible future research that delves into the benefits of the nexplanon implant or rather remedies for hormonal imbalances that are approved by scholars to implement better treatment methods that will provide a more successful approach rather than instituting the go-to method of birth control that may not be suitable for all body types and all severities of the syndrome.



To actually further the research and take on ambitious projects for the sake of the betterment of the lives of PCOS patients, it is important to consider the redirection of funding towards PCOS as the rate for women that are diagnosed with PCOS is beginning to increase. This also does not include those that have yet to be properly diagnosed due to the lack of knowledge on the syndrome in the field. With this redirection of funding and resources that include research projects aiming to further the cause of increasing the quality of care for these patients, the proper awareness will also increase as a result, leading to a drastic improvement in the standing of the syndrome in the medical environment, thereby prioritizing the lives of women with PCOS as well. Evidenced by the lack of existing data available for a fruitful database analysis into PCOS women and their experience with a lessened quality of life due to their syndrome, it is imperative that the prospect of directing new attention towards the prevalent syndrome occurs by taking into consideration the increasing diagnoses and the results seen from the study proposed.

## References

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