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Polycystic ovary syndrome (PCOS) is a complex disorder associated with obesity, sleep apnea, and disordered eating. We aimed to assess whether COVID19 related social isolation affects lifestyle and weight control in women with PCOS. We performed an online survey including 232 women with PCOS and 157 healthy controls on isolation characteristics, weight alterations, physical activity, sleeping and eating patterns by validated questionnaires. Three-Factor Eating Questionnaire (TFEQ-18), Pittsburgh Sleep Quality Index (PSQI), and International Physical Activity Questionnaire Short Form (IPAQ-SF) were used. PCOS-related quality of life questionnaire (PCOSQ) was also completed by patients. During over 14 weeks of isolation, 48.5% participants gained weight, 13.9% participants' weight was stable, and 37.6% participants lost weight. The patient and control groups did not show any difference in weight alteration ($p=0.44$). Physical activity was reduced ($p<0.001$ for both), eating patterns did not show a significant change in both groups, whereas sleep quality was reduced in PCOS group only ($p<0.001$). Within the weight gainers, increase in BMI was more prominent in PCOS group ($1.3\pm 1\text{ kg/m}^2$) than controls ($1.0\pm 0.6\text{ kg/m}^2$) ($p=0.01$). In weight gainer group, delta BMI values showed positive correlations with delta PSQI scores ($r=0.24$, $p=0.004$), delta sleep induction time ($r=0.25$, $p=0.001$) and delta TFEQ-18 scores ($r=0.25$, $p=0.001$). Weight changes during social isolation are similar in women with PCOS and healthy women. However, the increase in BMI of weight gainers is higher in PCOS and is mainly related to sleep quality and eating habits rather than reduced physical activity.

Reproductive Endocrinology

HYPERANDROGENIC DISORDERS THROUGHOUT THE LIFESPAN AND INTO THE NEXT GENERATION

Lifestyle, Anxiety, Depression, and Clinical Profile in Women With Polycystic Ovary Syndrome: Initial Results From the Brazilian PCOS Study

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Brazil is a large country with rich cultural and ethnic diversity among its different regions. In this ongoing nationwide collaborative study, we are evaluating modifiable lifestyle factors, metabolic and reproductive abnormalities and

prevalence of anxiety/depression in a less-well represented population of women with PCOS from Brazil. The design of the Brazilian PCOS study has been published previously¹. Briefly, the study is being conducted in the outpatient clinics of university hospitals within the public health care network (Unified Health System - SUS) across the country. The sample includes women with PCOS diagnosed according to Rotterdam criteria and a control group of healthy women matched by age and geographic region. Collected data are being incorporated into a unified cloud database. Two hundred five participants have been enrolled thus far (17% of an expected sample size of 1,200 women). Age, years of formal education and socioeconomic class were similar among PCOS phenotypes and the control group. The prevalence of PCOS phenotypes in this sample was 64.7% for phenotypes A + B, 25% for phenotype C, and 10.3% for phenotype D. Phenotypes A + B and D had higher prevalence of obesity (BMI>30) ($p=0.001$) and metabolic syndrome as compared to the other groups (32.4% in A + B and 50% in D vs. 16% in C and 5.9% in controls; $p=0.002$). Total testosterone levels, determined by mass spectrometry were higher in PCOS A+B than in the other phenotypes, even after adjustment for BMI ($p<0.001$). Sedentariness (<150 min/week of physical activity) was present in more than 60% of participants in all PCOS phenotypes and in controls, with no difference between the groups. More than 70% of participants in all PCOS phenotypes had a fruit and vegetable intake below 5 portions/day. Anxiety/depression (SRQ-20) was frequent in phenotypes A + B (41.6%) and D (56.3%) vs. phenotype C (23.1%) and controls (28.6%) ($p=0.062$). These initial results suggest that PCOS participants, besides often presenting metabolic abnormalities have an unhealthy lifestyle and high prevalence of psychological distress. Analysis of the full study sample will be useful to guide specific public strategies for primary and secondary prevention of psychological, metabolic and reproductive comorbidities in the PCOS population of Brazil. 1Spritzer PM, et al. BMJ Open. 2019; 9:e029191.

Reproductive Endocrinology

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Mechanisms Involved in Intrauterine Growth Restriction in Patients With Polycystic Ovary Syndrome: Primary and Secondary Prevention of Metabolic Syndrome and Cancer Risk in the Adult Life of Offspring

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Polycystic ovary syndrome (PCOS) is one of the most common hormonal disorders that affects between 5- 10% of women of reproductive age. It is currently considered a complex and multifactorial disease with metabolic, cardiovascular implications and represents per se an increased cancer risk. PATIENTS with PCOS routinely have menstrual disorders, hyperandrogenism, infertility and