those patients presenting from September to November 2020 during the peak of COVID-19. Data collected included demographics, presenting smear, time to report, method of biopsy and biopsy result.

**Results** 158 patients were included in 2019 and 87 in 2020 (45% reduction). There was a mean increase of 5 days to report the presenting smear in 2020. The most common presenting smear result was a borderline result for both years however more patients presented with severe dyskaryosis during 2020 (7% increase). A smaller time interval was seen in 2020 for colposcopy review and a mean reduction of 36 days for reporting the cervical biopsy result was seen during 2020 but no significant change in biopsy results were seen.

**Conclusion** COVID19 has had an impact on the timings of reporting presenting smears, smear to colposcopy interval and cervical biopsy reporting, there is no statistical difference in the individual outcomes of presenting smear and cervical biopsy.

## SEXUAL FUNCTIONING MORE THAN 15 YEARS AFTER PREMENOPAUSAL RISK-REDUCING SALPINGO-OOPHORECTOMY

Lara Terra, Maarten Beekman, Marian Mourits, Flora van Leeuwen, HARMOny study group.

**Introduction/Background** Women with a BRCA1/2 pathogenic variant are advised to undergo premenopausal risk-reducing salpingo-oophorectomy (RRSO), to reduce their risk of ovarian cancer. Our aim was to study long-term sexual functioning in women at increased familial risk of breast/ovarian cancer who underwent a RRSO either before the age of 46 years (premenopausal group), or after the age of 54 years (postmenopausal group).

**Methodology** Between 2018 and 2021, 368 women with a high familial risk of breast/ovarian cancer participated in the study (premenopausal group, n=226, postmenopausal group, n=142). Differences between groups were analyzed using multiple regression analyses adjusting for current age, breast cancer, hormone replacement therapy, chronic medication use (yes/no) and body image.

**Results** Mean time since RRSO was 20.6 years in the premenopausal group and 10.6 years in the postmenopausal group (p-value <.001). In the premenopausal group, mean age at questionnaire completion was 62.7 years, versus 67.0 years in the postmenopausal group (p<.001). In the premenopausal group, 47.4% was still sexually active, compared to 48.9% of the postmenopausal group (p-value:.80). Current sexual pleasure scores were similar for women in the premenopausal group and the postmenopausal group (mean pleasure score 8.6, p-value.99). However, women in the premenopausal group more often reported substantial discomfort than women in the postmenopausal group (35.6% compared with 20.9%, p-value .04). After adjusting for confounders, premenopausal RRSO was associated with substantially more discomfort during sexual intercourse, compared to postmenopausal RRSO (OR 3.1, 95%CI 1.04; 9.4). Moreover, following premenopausal RRSO, more severe complaints of vaginal dryness were observed (OR 2.6, 95%CI 1.4; 4.7).

**Conclusion** More than 15 years after premenopausal RRSO, women experienced more vaginal dryness and more often had substantial sexual discomfort during sexual intercourse. This did not lead to less pleasure with sexual activity.

## LONG-TERM EFFECTS OF PREMENOPAUSAL RISK-REDUCING SALPINGO-OOPHORECTOMY ON COGNITION IN WOMEN WITH HIGH FAMILIAL RISK OF OVARIAN CANCER

Lara Terra, Philippe Lee Meeuw Kjoe, Joost Agelink van Rentergem Zandvliet, Maarten Beekman, Sanne Schagen, Flora van Leeuwen, HARMOny study group.

**Introduction/Background** Several studies reported that bilateral oophorectomy before menopause is associated with cognitive impairment. However, these studies had methodological limitations. We examined the effect of a premenopausal risk-reducing salpingo-oophorectomy (RRSO) in women at increased risk of ovarian cancer on objective and subjective cognition at least 10 years after RRSO.

**Methodology** The study population consisted of women (66% BRCA1/2 mutation carriers) who underwent either a premenopausal RRSO ≤ age 45 (n=436) or a postmenopausal RRSO ≥ age 54 (n=205) and were older than 54 years at study. Participants completed an online cognitive test battery and a questionnaire on subjective cognition. We examined the influence of RRSO on objective and subjective cognition of women with a premenopausal RRSO compared to women with a postmenopausal RRSO, using multivariable regression analyses, adjusting for age, education, breast cancer, hormone replacement therapy, depression and cardiovascular risk factors. We performed subgroup analyses comparing an early premenopausal RRSO (RRSO ≤ age 40, recommended to BRCA1 mutation carriers) versus a later premenopausal RRSO (RRSO between ages 41–45, recommended to BRCA2 mutation carriers).

**Results** After adjustment, women with a premenopausal RRSO (mean time since RRSO 18.2 years) performed similarly on objective cognitive tests as women with a postmenopausal RRSO (mean time since RRSO 11.9 years). However, they more frequently reported problems with reasoning (odds ratio (OR) 1.8 (95% confidence interval (95%CI) 1.1–3.1)) and multitasking (OR 1.9 (95%CI 1.1–3.4)) than women with a postmenopausal RRSO. This difference between groups