

## **COVID-19 - pandemic effect in the organized breast cancer screening program in Croatia**

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### **Background:**

COVID-19 pandemic effected preventive health services. The implementation of the breast cancer screening program (BCSP) in Croatia was paused for one and a half month in 2020. The aim of this research was to compare the results of BCSP rollout during and before pandemic.

### **Methods:**

Data of fourth, fifth and sixth BCSP round of women (about 700,000 women per round): invited in BCSP, responded to invitation and response rate were analysed.

### **Results:**

Of all women included in sixth round, 93.0% were invited (92.7% in fifth and 89.3% in fourth). Response rate (53.3%), including woman screened in BCSP and on the doctor's referral, was 5.7% lower compared to fifth and 5.4% lower compared to fourth round. Response rate on invitation letter was 44.9% in sixth, 42.3% in fifth and 40.1% in fourth round. There was 24,768 mammography check-ups in sixth, 41,040 in fifth and 80,846 in fourth round. There was 11.8% less mammography examinations in sixth round compared to fifth and 0.3% less compared to fourth round.

### **Conclusions:**

Lower response rate in the sixth BCSP invitation round was observed with similar invitation coverage. There was 11.8% less mammography examinations done in relation to the 5th and 0.3% less than in the 4th invitation round. Response rate to the invitation letter was higher in the sixth in relation to the previous rounds. Explanations for the observed differences could be lower number of mammography examinations done on the doctor's referral, less available terms in mammography units and consequently less second invitation letters sent because of the epidemiological measures. Intensive public health campaign and more mammography unit terms, including mobile mammography units, are needed in order to return the invitation and response rates to the pre-pandemic values.

### **Key messages:**

- COVID-19 pandemic caused 5.7% lower response rate and 11.8% less mammography examinations in BCSP.
- In order to close the observed gap in the BCSP response rate, more mammography unit terms are needed to be available followed by the intensive public health campaign.