

Efficiency of the cervical cancer program on the budget execution processes during COVID 19 pandemic years 2020 -2021 in Peru

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OBJECTIVE

Determine the impact of the COVID-19 pandemic in Peru’s MoH cervical cancer screening program between 2020-21.

METHODS

- An excel based model was used to estimate by micro-costing analysis for low-grade squamous intraepithelial lesions (LSIL), high-grade squamous intraepithelial lesions (HSIL), and cervical cancer stages, including diagnosis, treatment, and follow-up in the first year. The cost was estimated according to the MoH and National Cancer Institute guidelines and validated by experts using in-depth interviews.
- We modeled two program scenarios: pandemic and non-pandemic for 2020 and 2021. The following parameters were estimated for each year: (1) number of screened and non-screened women, (2) cost of LSIL, HSIL and cervical cancer at different stages.
- We estimated the additional cases of cervical cancer due to the missed screenings and their future cost to the MoH, including the budget execution between the two scenarios considering cost of screening and treatments.

RESULTS

- According to the cervical cancer program plan, 660,000 and 715,000 women would be screened in 2020 and 2021. Actual figures decreased by 70.4% and 36.5%, respectively. (Figure 1)
- During 2020 and 2021, Peru’s MoH missed 110,000 diagnosed cases of LSIL and HSIL. Without pandemic impact the total cases diagnosed would be 151,000 LSIL and 57,000 HSIL, a weighted reduction of 52.8%. (Figure 2)
- The cost of future cancer cases from non-screened women is estimated at U\$883M for both years, while the unspent budget amounts to U\$ 66.6M for both years including the 20,000 cancer cases not diagnosed. (Figure 3)
- More information about methods and results can be found on the appendices (QR code).

CONCLUSION

- The impact of the pandemic in the MoH cervical cancer screening program not only decreased timely diagnosis but also resulted in insufficient budget allocation to implement the cervical cancer program and catch-up those women who lost their chance to be screened and treated promptly.
- A coalition between the public and private sectors could decrease the time and cost to revert this situation. Private healthcare providers could be involved in a massive cervical screening and treatment campaigns with a territorial approach and specific women targets. Despite the widespread use of Pap smears, there is an opportunity to reinforce other home-based screening strategies, such as the PCR to increase detection rates.
- Future studies should investigate the barriers women face when accessing healthcare services as out of ~2 million eligible women per year only 40% were screened prior to the pandemic. This barriers may include: age, urban or rural location, income, informal employment and education.

Figure 1: Screened and non screened women 2020-2021

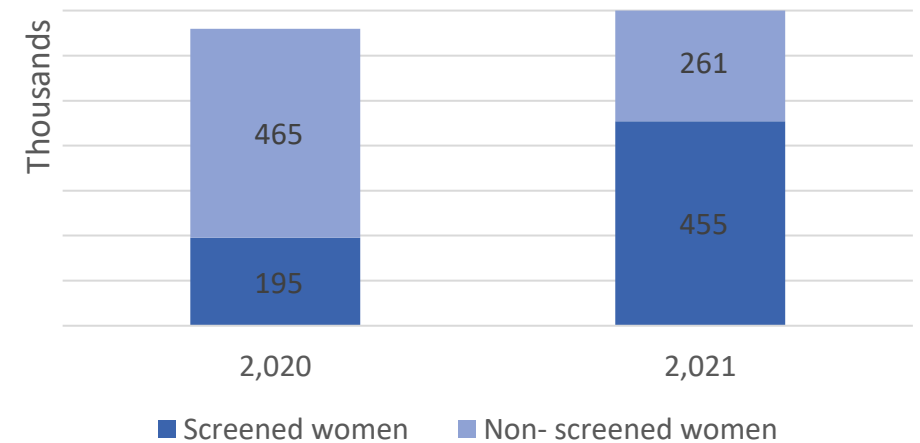


Figure 2 : Diagnosed and undiagnosed cases 2020-2021

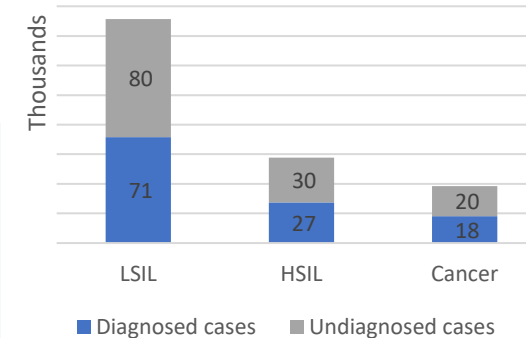


Figure 3: Cost of future cancer cases vs Non executed Budget MoH

