REPRODUCTIVE HEALTH matters

FEATURE

Structural barriers to screening for and treatment of cervical cancer in Peru

Valerie A Paz-Soldán,[a] Angela M Bayer,[b] Lauren Nussbaum,[c] Lilia Cabrera[d]

a Research Assistant Professor, Department of Global Health Systems and Development, Tulane University School of Public Health and Tropical Medicine, New Orleans, LA, USA; and Associated Researcher, Universidad Peruana Cayetano Heredia, Lima, Peru. *Correspondence*: vpazsold@tulane.edu

b Post-Doctoral Fellow, University of California, Los Angeles, CA, USA; and Associated Researcher, Universidad Peruana Cayetano Heredia, Lima, Peru

c JD Candidate, Washington College of Law, American University, Washington, DC, USA

d Research Coordinator, Pampas Research Station, Asociación Benéfica PRISMA, Lima, Peru

Abstract: *Through in-depth interviews with 30 key informants from 19 institutions in the health care system in four regions of Peru, this study identifies multiple barriers to obtaining cervical cancer screening, follow-up, and treatment. Some facilities outside Lima do not have the capacity to take Pap smear samples; others cannot do so on a continuing basis. Variation in procedures used by facilities and between regions, differences in women's ability to pay, as well as varying levels of training of laboratory personnel, all affect the quality and timing of service delivery and outcomes. In some settings, perverse incentives to accrue overtime payments increase the lag time between sample collection and reporting back of results. Some patients with abnormal results are lost to follow-up; others find needed treatment to be out of their financial or geographic reach. To increase coverage for cervical cancer screening and follow-up, interventions are needed at all levels, including an institutional overhaul to ensure that referral mechanisms are appropriate and that treatment is accessible and affordable. Training for midwives and gynaecologists is needed in good sample collection and fixing, and quality control of samples. Training of additional cytotechnologists, especially in the provinces, and incentives for processing Pap smears in an appropriate, timely manner is also required.* © 2012 Reproductive Health Matters

Keywords: cervical cancer screening and treatment, barriers, women's health policy and programmes, Peru

Though cervical screening and treatment have successfully lowered cervical cancer incidence and mortality in developed countries, screening and treatment has not been as effective in Peru and other developing countries due to barriers to full programme implementation.[1–3] Cervical cancer is the most common cancer and the second cause of cancer-related deaths among Peruvian women.[4–7] In 2008, Peru's age-standardized incidence rate of 34.5 per 100,000 women and its cause-specific mortality rate of 16.3 per 100,000 women were each more than double the respective rates in the Americas as a whole.[8,9] Estimates of Pap smear coverage in Peru ranged from 7.0% to 42.9% in recent studies.[10–12]

According to the World Health Organization (WHO), successful cervical cancer screening and treatment programmes must have high coverage of the at-risk population, appropriate follow-up and management for patients with abnormal test results, effective links between programme components, and adequate, high quality resources.[13,14] The Peruvian Ministry of Health (MINSA) declared cervical cancer reduction a national priority in 1998 with the National Plan for Cervical Cancer Prevention and Control, which was updated in 2007. The National Cancer Institute's 2008 Manual of Standards and Procedures for Cervical Cancer Prevention[15,16] mandates that all sexually active women aged 30–49 or women with at least one risk factor (including presence of HPV, sexual activity before age 18, multiple sexual partners, chronic cervicitis, history of sexually transmitted infection (STI), tobacco use and low socio-economic

level) should have a Pap smear every three years.[15] Despite these policies, many women still never get tested, partly due to inadequate programme implementation.[1,2,11–13,17,18]

A 2001 WHO consultation[13] associated the failure to lower cervical cancer incidence and mortality with political barriers, community and individual barriers, economic barriers, and technical and organizational barriers. These may all apply in Peru. Many women do not know what Pap smears are for or do not know that cervical cancer is treatable if detected in time.[19] Moreover, only some Peruvian women with abnormal results pursue the recommended follow-up and/or treatment.[5,20] This may be due to lack of available treatment for pre-invasive cervical lesions or even cancer. Not all cancer treatments are available outside Lima, yet many women cannot afford to go to Lima for treatment.[20] A cervical cancer screening programme cannot be successful with these limitations.[11,17,21–23]

The objective of this study was to explore structural barriers to cervical cancer screening, follow-up and treatment in Peru, in order to propose recommendations which may reduce morbidity and mortality associated with cervical cancer here. We interviewed key informants from diverse institutions and with different roles relative to early detection and treatment of cervical cancer in four regions of Peru.

Methodology

Triangulation was key to understanding the data and synthesizing the results presented here. We interviewed individuals with diverse roles, from different institutions, and from different regions of the country. Moreover, as part of a larger study reported elsewhere, we also conducted focus group discussions with women from diverse backgrounds, to explore their knowledge and perceptions of cervical cancer and Pap smears,[19] and observed the health education provided to women by health care providers during clinic visits.[24]

The study was carried out in four Peruvian cities with geographic and cultural diversity and socioeconomic and demographic factors relevant to cervical cancer: Iquitos (rainforest, Loreto region), Huancayo (highlands, Junín region), Chincha (coast, Ica region) and metropolitan Lima (coast, capital city, home to one-third of the population). Poverty by region varied in 2007: 19% in metropolitan Lima and 15% in Ica, versus 43% in Junín and 55% in Loreto.[25] In the 2011 Peruvian Demographic & Health Survey (ENDES), 35% of women in Lima had completed secondary education, compared to 27% in Ica, 22% in Junín and 19% in Loreto. The median age at first sex was 16.6 among 20–49 year-old women in Loreto, 18.4 in Junín, 18.8 in Ica and 19.5 in Lima. The proportion of women not in union who reported two or more sexual partners in the previous year was 7% in Loreto, 3% in Lima and 2% in Ica and Junín.[26]

The Peruvian health care system has three main sectors: the public Ministry of Health system (MINSA), the semi-public, employer-based social security system (EsSalud), and the private system. Each sector is independently organized and administered and has its own facilities: health posts, health centres, hospitals and specialized institutes, including the *Instituto Nacional de Enfermedades Neoplásicas* (National Cancer Institute) in MINSA, health centres and hospitals in EsSalud, and private clinics. All systems also have laboratories within institutions and independent laboratories.[27]

Thirty health professionals participated in this study (Table 1). Since the MINSA provides care for 76% of Peruvians, we focused on this sector.[27] We identified key informants from among national and regional governmental health policy officials, administrative personnel and health professionals who provide direct services to women, and lab technicians who carry out cytology. During the initial interviews, we used purposive sampling to identify other key informants on topics that required further exploration. The key was saturation: when we achieved understanding of what occurs during each step of the cervical cancer screening and follow-up process.[28]

We carried out one semi-structured interview with each participant from June-August 2007, using a topic guide with open-ended questions, which varied with the interviewee's position and experience. Topics included key women's health issues; their perceptions of cervical cancer screening and treatment; their recommendations for improving screening and treatment processes, including sample taking, analysis of samples, provision of results and follow-up/treatment; and the strengths of and challenges related to each step in the process.

The interviews in Lima were carried out by three of the authors (AMB, LN, VAPS); interviews in the other sites were carried out by AMB and LN. All of the interviewers are fluent in Spanish and familiar with the country; VPS is Peruvian. Most interviews were audio-recorded and transcribed