
COMMENTARY

Point of Care Testing: Can it be a Solution for Cervical Cancer Prevention?

Viroj Wiwanitkit

Abstract

In several Asian countries, such as Thailand, cervical cancer is the most common female malignancy. Early detection of cervical cancer by pap smear screening test is the classical method but there are problems with this, especially for loss of the following up. Therefore the feasibility of new alternative usage of point of care testing that might be a useful tool for cervical cancer prevention needs to be stressed.

Keywords: Cervical cancer - screening - prevention - point of care testing

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Introduction

In gynecology, cervical cancer has long been considered as an important fatal malignancy (Chassagne, 1980). This cancer of the female genital tract is in the first rank of registry cancer data in several developing countries such as Thailand (Vatanasapt et al., 2002). It is believed that the viral infection of the female genital tract might be an important contributing factor to cervical cancer (Huh, 2009).

For prevention of cervical cancer, the two main present approaches include cervical cytology screening and human papilloma virus vaccination. The later approach, vaccination, is the new method that has only been used for a few years (Harper, 2009). However, it is not generally implemented due to cost concerns. In general, early detection of cervical cancer by the pap smear screening test is the classical method in cervical cancer prevention (Wiwanitkit, 2009). The concept is based on the principle of secondary prevention, early detection for prompt treatment.

The problem on coverage of this screening test can be seen in many countries, especially with loss to follow up (Kurkure and Yeole, 2006; Zlatkov and Kostova, 2006). Here, an example of specific problem of pap smear screening test in the context of Thailand, a developing country in Southeast Asia is presented. Also, the author proposes for a feasible of new alternative usage of point of care testing that might be a useful tool in cervical cancer prevention.

Problems with Cervical Cancer screening

As earlier noted, there are still many present problems on cervical cancer screening although this practice has been performed for many decades. At first, the problem on coverage of screening program should be discussed. In many countries, especially for those developing ones, the

problem of coverage still exists. Recently, Othman and Rebolj (2009) noted that "Improving screening coverage will remain an important strategy for combating cervical cancer in Malaysia." Lin et al (2008) studying in Taiwan reported that "the likelihood of a woman receiving a Pap test or a clinical breast examination depends on a variety of factors such as age, marital status, income level, education, and health status". Hence, the promotion of cervical cancer screening is the public health issue for many countries around the world.

The national policy on cervical cancer screening is set in many countries. In New Zealand, Bethune and Lewis (2009) recently reported on the attempt of national cervical cancer screening program with a special focus on increasing awareness, understanding and discussion of cervical cancer and cervical screening on the focused underprivileged group. For the Southeast Asian countries, national screening programs already exist or are planned in Indonesia, Malaysia, the Philippines, Thailand and Vietnam (Domingo et al., 2008). However, Domingo et al (2008) reported that "uptake of screening remains low in all regions and is further compounded by the lack of basic knowledge women have regarding screening as an opportunity for the prevention of cervical cancer".

Focusing on the screenees who get screening test, there are also some additional problems. The great concern is on loss of following up. It is useless if one get screening test but do not get test result and proper prompt treatment in case of abnormal screening result. This problem can be seen in any countries. For a solution of this problem, Hunt et al studied the cases in USA and proposed that "Strategies that may help to reduce loss to follow-up among similar patients include the following: allowing clinic staff more flexibility in follow-up procedures for women who have consistently normal follow-up tests, including Spanish translations of written messages; enlisting patients' agreement in setting appointments; and updating patient records to reflect follow-up care that

had been received in other clinics" (Hunt et al., 2002). However, if there is still a long waiting period for the pap smear result, loss at follow up can be expected.

Zlatkov V, Kostova P (2006). Clinical aspects of gynecological cancers' prophylaxis. *J BUON*, **11**, 439-45.

Point of Care Testing: a Solution for Loss of Followup after a Pap Smear Test

Although there are some ideas for management of post screening patient care, the problem of loss following up can be seen. To shorten the waiting period as much as possible is the clue. Point of care testing (POCT) is the new concept in laboratory medicine. The concept is to shorten the turnaround time or waiting time for the patients by performing the test at site. This might be helpful in getting rid of the problem of loss following up. The application of POCT in cervical cancer screening is not already set. At present, there are some available POCT tools for this purpose (Bissell, 2001; Bissell and Sanfilippo, 2002). The test makes use of new system for shorting the cytological preparation and interpretation period. However, since there is no complete study of its implementation, further studies on this area is recommended. As a conclusion, the author proposes for a feasibility of new alternative usage of point of care testing that might be a useful tool in cervical cancer prevention.

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