to organize screening programs have failed ... in spite of a coverage of over 60%."^{2(p233)} Further, the authors cite as "voluminous evidence" of the feasibility of Papanicolaou screening in developing countries just 3 references: a pilot project led by Suba et al. in a city in Vietnam, a set of guidelines in South Africa that have yet to be successfully implemented, and the same International Agency for Research on Cancer document previously cited as evidence that cytology-based programs have been operational (but not effective) in low-resource countries.

Suba et al. claim that successful follow-up of screen-positive women is feasible, as proven in 6 countries they name, but all 6 countries involved limited research studies done with external resources, not routine health services where the real-life problem of poor follow-up prevails.^{3,4}

On visual "screen and treat," Suba et al. state that use of visual inspection with acetic acid (VIA) would "require performing cryosurgery on 18% to 71% of women who are screened."1(p483) The 3 references they cite for this claim (all from 2001 or earlier) list screen-positive rates of 28%, 39%, and 18%. More recent studies (not cited by Suba et al.) produced test-positive rates from 7% to 33%, with most under 15%.4-9 Although some overtreatment is inevitable (because even cervical intraepithelial neoplasia identified by cytology will often regress spontaneously), VIA would not lead to treatment of up to 71% of all women screened, as repeatedly stated by Suba et al.

Contrary to the authors' assertion, visual screen-and-treat algorithms by Alliance for Cervical Cancer Prevention partners and others all call for referring any woman with a lesion suspicious for cancer to further evaluation, and VIA studies have missed few, if any, cancers. ^{6,10} In addition, many proponents of visual inspection for routine service also recommend taking a biopsy before the ablative treatment (wherever pathology services exist). ¹⁰

The drawbacks of cytology are now well understood in resource-poor settings. VIA offers a viable alternative that deserves consideration on the basis of the evidence.

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RECONSIDERING THE FEASIBILITY OF PAPANICOLAOU AND ALTERNATIVE SCREENING TESTS FOR LOW-RESOURCE COUNTRIES

Despite the commendable commitment of Suba et al.¹ to cervical cancer prevention in developing countries, several key conclusions in their article are made on the basis of inaccurate and misleading use of references. For example, they cite an International Agency for Research on Cancer document² as saying that Papanicolaou test—based programs have been "operational" in developing countries for more than 30 years. However, no operational programs of any scale were identified in Africa or Asia. The same document concludes that even in Latin America, "attempts

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References

- Suba EJ, Murphy SK, Donnelly AD, Furia LM, Huynh ML, Raab SS. Systems analysis of real-world obstacles to successful cervical cancer prevention in developing countries. *Am J Public Health*. 2006;96:480–487.
- 2. International Agency for Research on Cancer. Cervix Cancer Screening. Lyon, France: IARC Press; 2005. IARC Handbooks of Cancer Prevention; vol 10.
- 3. Gage JC, Ferreccio C, Gonzales M, Arroyo R, Huivin M, Robles SC. Follow-up care of women with an abnormal cytology in a low-resource setting. *Cancer Detect Prev.* 2003;27:466–471.
- 4. Jeronimo J, Morales O, Horna J, et al. Visual inspection with acetic acid for cervical cancer screening outside of low-resource settings. *Rev Panam Salud Publica*. 2005;17:1–5.
- Claeys P, De Vuyst H, Gonzalez C, Garcia A, Bello RE, Temmerman M. Performance of the acetic acid test when used in field conditions as a screening test for cervical cancer. *Trop Med Int Health.* 2003;8:704–709.
- 6. Doh AS, Nkele NN, Achu P, Essimbi F, Essame O, Nkegoum B. Visual inspection with acetic acid and cytology as screening methods for cervical lesions in Cameroon. *Int J Gynaecol Obstet.* 2005;89:167–173.
- 7. Goel A, Gandhi G, Batra S, Bhambhani S, Zutshi V, Sachdeva P. Visual inspection of the cervix with acetic acid for cervical intraepithelial lesions. *Int J Gynaecol Obstet.* 2005;88:25–30.
- 8. Sankaranarayanan R, Basu P, Wesley RS, et al. Accuracy of visual screening for cervical neoplasia: results from an IARC multicentre study in India and Africa. *Int J Cancer.* 2004;110:907–913.
- 9. Sarian LO, Derchain SF, Naud P, et al. Evaluation of visual inspection with acetic acid (VIA), Lugol's iodine (VILI), cervical cytology and HPV testing as cervical screening tools in Latin America. This report refers to partial results from the LAMS (Latin American Screening) study. *J Med Screen.* 2005;12:142–149.
- 10. Alliance for Cervical Cancer Prevention. *Planning and Implementing Cervical Cancer Prevention and Control Programs: A Manual for Managers.* Seattle, Wash: Alliance for Cervical Cancer Prevention; 2004.