Re: Preventing Cervical Cancer Globally by Acting Locally: If Not Now, When?

Gage and Castle (1) suggest that noncytological “screen-and-treat” cervical cancer prevention strategies, such as those described by Denny et al. (2), eliminate the need for confirmatory testing. However, any real-world need for confirmatory testing is more appropriately determined by women who have a positive cervical cancer screening test and who understandably want to know whether or not they truly have a life-threatening condition (3). Informed decisions cannot be made if positive screening test results are not confirmed. In experimental noncytological screen-and-treat studies, screen-positive women have received extensive confirmatory testing; consequently, such studies have earned high levels of patient and provider acceptance. However, in real-world noncytological screen-and-treat programs, screen-positive women are informed that they have a positive screening test for cancer, that cryosurgery will probably make it impossible for anyone to determine whether cancer is truly present, and that, if cancer is truly present, cryosurgical treatment will be inadequate (3). Noncytological screen-and-treat strategies, such as those described by Denny et al. (2), would necessitate regular acts of uncontested medical malpractice if they were ever implemented in the United States and are unlikely in other settings to secure the levels of patient and provider acceptance that would be needed to achieve effective screening coverage rates (3). These critical shortcomings of noncytological screen-and-treat strategies do not apply to screen-and-treat strategies that incorporate at least some cytology, which would allow excisional treatment methods that would provide confirmatory testing (3,4). Screen-and-treat strategies that incorporate cytology will be feasible in any setting where screen and treat that incorporates human papillomavirus (HPV) testing has been demonstrated because the minimum turnaround time for Papanicolaou cytology tests is less than 1 hour. Because it will not prove sustainable to refer all HPV- or visual screen-positive women for colposcopy, it is difficult to envision sustainable protocols for confirmatory testing that do not incorporate a component of cytology.

Moreover, cytology is required to assess whether HPV tests are satisfactory or inadequate. HPV tests are not appropriate in the United States for women younger than 30 years due to the unacceptably high false-positive rates that are attributable to 15%–25% HPV prevalence rates in this group. Higher HPV prevalence rates will further limit the utility of HPV screening in lower-resource settings. For example, HPV prevalence rates, which are 25% among women older than 55 years in Nigeria (Africa’s most populous country), are even higher among Nigerian women younger than 55 years (5) and exceed 70% among HIV-positive South African women (6). The high false-negative rate of visual screening methods among older women renders visual screening inappropriate for postmenopausal women in any setting (7). We ask Gage and Castle (1) to consider the possibility that cytology will remain an essential technological component of all effective real-world cervical screening programs and that allocating limited resources to maintain two or three primary screening
test modalities in low-resource settings when one screening test modality is both necessary and sufficient may reduce the rate at which screening is disseminated to high-risk demographic groups.

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References

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