Annual Physical Examination for Adolescents: A Reassessment

In his review of 12 studies of the results of more than 20,000 physical examinations of adolescents, Dr. Stickler of the Mayo Clinic calls into question the value of annual physical examinations in adolescents.[1]

There are actually three separate and important questions here. First is whether there is a medical reason that adolescents have a physician-performed physical examination before they can participate in sports. Second is whether annual physical examinations are beneficial for adolescents. Third is whether a physical examination is good or cost-efficient only when it finds something medically serious that was not previously known.

There have been concerns about the necessity of physician involvement in obtaining medical permission for adolescent sports participation. By reviewing the literature, Dr. Stickler does show there is little evidence that physician-directed or -performed physical examinations are obligatory for sports participation. Although he does not compare the data as rigorously as he would in a meta-analysis, and he dismisses facts that do not fit the hypothesis, in more than 7900 examinations done by a physician, no particular severe medical problem was found that would keep an adolescent athlete from participating in sports. Any medical problem found was already known. It might be time to unbind physician physical examinations from sports participation, and for this argument, the article by Dr. Stickler is important.

Unbinding has been suggested in other areas as well. Grimes,[2] a long-time crusader against unplanned pregnancy, in a refreshing suggestion that supports consumer, patient, and feminist rights, has called for the unbinding of Papanicolaou tests and birth control prescriptions. Why should a woman be obligated to have a Papanicolaou test so she can get birth control? He readily admits that yearly Papanicolaou tests are important to prevent the precursors of cervical cancer and should be done. He proposes, however, that no medical contraindication to birth control use will be found on a Papanicolaou test and pelvic examination that could not be discovered in a good history. Where physicians or conditions do not allow pelvic examinations and Papanicolaou tests, women should be able to get contraception without waiting for the blessing and permission of a physician. Women (and couples) should have the freedom to obtain contraception without the medical profession holding them hostage to a physical examination and Papanicolaou test.

So, should we believe Dr. Stickler and unbind adolescent physical examinations and sports physical examinations? Must adolescents complete an annual physician-performed physical examination (most likely for other good reasons) so that they can compete in sports? Is this not going against consumer or patients' rights? Other reasons for unbinding are the cost, the physician time, and the disruptions to lives, schools, sports teams, and physicians' offices caused by performing physical examinations on one half of all high-school children during a 2- to 3-month period. In any era, can society afford something that is not needed?

Is it not, instead, more responsible and ethical for physicians and the medical community to educate the public about the need for yearly Papanicolaou smears or yearly adolescent physical examinations if the medical profession thinks it is important, rather than paternalistically obligating the public to do something to get what it wants (birth control or participation in sports)? Would not educating and advising the public be more likely to generate trust in the medical profession than rules and regulations, than creating more hoops the public must jump through? Would not unbinding give the public the freedom to choose excellent health care and show that the health care profession believes the public is educable and able to choose effectively? Is it not the task of the medical profession to publicize the needs for yearly Papanicolaou smears or periodic visits to the phy-

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sicians? This has happened gradually during the last 50 years as the public has come to believe that smoking is bad for its health and demanded smoke-free workplaces, malls, airports, and restaurants. Annual physician-performed physical examinations for sports participation could be a relic of a paternalistic past of which we are ready to rid ourselves.

The second question is whether we believe that annual adolescent physical examinations are in themselves important. Many pediatric experts still believe in the yearly physical examination. The Guidelines for Adolescent Services (GAPS) advises an annual preventive health visit for every adolescent,[3] but questions exist about its cost-effectiveness and the strength of the evidence that supported these guidelines.[4] Most adult organizations, such as the American Academy of Family Physicians and the American Medical Association (which first publicized the idea), have abandoned the yearly physical examination as inefficient and cost-prohibitive.[5] Instead, the US Preventive Services Task Force[6] suggests periodic health care visits. Preventive care is now usually addressed at any and all office visits.

As Dr. Stickler recounts, the opinion on how often physical examinations should be performed on adolescents is disputed. Certainly, at least one visit during the adolescent years would be considered minimal; more visits would be appropriate for sexually active teenagers. Yearly physical examinations might not be medically necessary for teenagers, but how often is best for the patient is not well evidenced. The US Preventive Services Task Force suggests individual attention and decision making as to how often visits are needed.

There are, however, good medical reasons for adolescents to have periodic health examinations. US preventive health services includes six screening procedures and more than 14 areas of counseling, in addition to an immunization review, that should be periodically accomplished in adolescents. All family physicians know that the primary good they accomplish in sports or yearly physical examinations in adolescents include, first, the time spent making contact with the teenager, and second, the time for counseling a variety of healthy behaviors. Later, when the teenager might need the physician, the earlier visit has established trust. Evidence to the efficacy of counseling on behavioral changes is scarce, although evidence does exist in adults that short counseling of adults to quit smoking does have a positive affect. This interaction, this development of the therapeutic relationship and the counseling that accompanies it, certainly might be more necessary and important, albeit intangible, especially for teenagers, than finding medical abnormalities.

Thus, although not proved from Dr. Stickler's evidence, annual physical examinations might not be necessary in adolescents,. More importantly, annual physician-driven physical examinations might not be ethical or cost-efficient as an obligation before sports participation. Physicians might need to allow unbinding of yearly examinations from sports participation. Finally, periodic adolescent health examinations are important, but not because they discover hidden disease. They are important for adolescents, because they begin the relationship of trust and therapy between the physician and an aware, consenting adult. Further research into the efficacy of counseling is essential.

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References

1. Stickler GB. Are yearly physical examinations in adolescents necessary? J Am Board Fam Pract 2000; 13:172–77.
2. Grimes DA. Emergency contraceptives over the counter. Allowing easy access is important. West J Med 2000;172:148–9.
3. Montalto NJ. Implementing the guidelines for adolescent preventive services. Am Fam Physician 1998; 52:2181–90.
4. Stevens NG, Lyle S. Guidelines for adolescent preventive services: a critical review. The American Medical Association Department of Adolescent Health. J Am Board Fam Pract 1994;7:421–30.
5. Oboler SK, LaForce FM. The periodic physical examination in asymptomatic adults. Ann Intern Med 1989;110:214–26.
6. Guide to clinical preventive services. Report of the US Preventive Services Task Force. Baltimore: Williams & Wilkins, 1996.

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