

Reply to “Accuracy of Self-Report of Sexual Activity among Adolescent Girls: Implications for Interpretation of Vaginal Flora Patterns”

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We appreciate the interest of Muzny and Schwebke in our paper entitled “Vaginal microbiota of adolescent girls prior to the onset of menarche resemble those of reproductive-age women” (1, 2), in which we report the longitudinal changes in vaginal and vulvar microbial communities of adolescents that occur prior to and immediately following menarche.

Muzny and Schwebke focus their comments on the occurrence of *Gardnerella vaginalis* in the vaginal and vulvar communities of some perimenarcheal adolescents. They had not anticipated this based on their tacit assertion that *G. vaginalis* is a sexually transmitted organism. The possibility that vaginal *G. vaginalis* is sexually transmitted exclusively has been extensively investigated but remains unresolved and controversial (3–5).

Even so, Muzny and Schwebke argue that undisclosed sexual contact could explain identification of *G. vaginalis* in a significant proportion of the perimenarcheal girls comprising our study sample. We have no way to know the means by which these communities assembled and point out that this was not an objective of the study. That said, we think it is unlikely that so many study subjects with *G. vaginalis* (at least 11 out of 31, some as young as 10 years old) misreported history of sexual contact, either voluntarily or involuntarily. Instead, we contend that our data add to those of other studies demonstrating *G. vaginalis* in vaginal samples of children, adolescents, and adults without history of sexual contact (6–8). The means by which *G. vaginalis*—or other common vaginal species, such *Lactobacillus iners*, for example—is acquired remains unknown, and an understanding of this awaits the results of future investigations on microbial community assembly in the female urogenital tract. The anogenital route may represent one possible reservoir for transmission; though rare, *G. vaginalis* has been isolated from the anal canal of children 5 to 6 years old (9).

We also point out that participants in our study were all under the age of consent for sexual relationships as specified by Indiana law. Any identified partnered sexual activity is considered child abuse, which must be reported to child protection authorities for both ethical and legally mandated reasons. In addition, the disclosure of this reporting requirement is required in informed consent documents. We believe that our approach represents the best balance of protection of the privacy and confidentiality related to the sensitive issues of genital examination and genital sampling. In our opinion the remarks of Muzny and Schwebke reflect a lack of sensitivity to the ethical and legal issues involved in studies of early adolescents and disparage the study participants.

In summary, Muzny and Schwebke put forth a hypothesis to

explain the occurrence of *G. vaginalis* in the vaginal and vulvar communities of some perimenarcheal adolescents that is unlikely to be testable and beyond the scope of the study we conducted.

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