Reviewer's report

Title: Prevalence of cervical infection with HPV type 16 and 18 in Vietnam: Implication for vaccine campaign

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Reviewer: Julio Teixeira

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The authors through a cross-sectional study done in five cities of Vietnam, held on specific groups of women almost of total consisted for women > 30 years old and married, have confirmed that HPV infections and types 16 and 18 are the most prevalent and that would be covered by vaccines already licensed and the potential of these vaccines work. They emphasize, however, that there are other HR-HPV types detected and that the most prevalent types may differ from other countries, such the types detected 58, 52, 35, 45. These types, in principle, are not directly covered by current vaccines, confirming the need for continued maintenance of the screening, even in vaccinated population. Moreover, although a significant proportion of women participants have reported higher level of education, the knowledge about the relationship between HPV and cervical cancer is low, reinforcing the need for educational campaigns. In conclusion, the news in this article is related to the types of HR-HPV prevalent beyond HPV-16 and 18 in this specific population, that were different from those described for other countries. Knowledge about the relationship HPV cervical cancer is low, even in women with top-level of education in Vietnam.

Introduction: with extensive information and part of them not necessary, as p.ex, the price of the HPV vaccine in Vietnam, the long natural history of the disease, screening programs that may have results (already known), etc.. Perhaps it would be interesting to clarify the relationship of the prevalence with age, marital status and education level, because the sample of this work refers mostly to women with > 30 years old, married and the upper level of education.

Report only one vaccine and there are two HPV vaccines available, and the original goals of the vaccines is decrease incidence and mortality related to cervical cancer, and HPV 16 and 18 are responsible for an average of 70% of the total cervical cancer by country, so a vaccine that can prevent them, works not against "only" two types of HPV, but against 70% of all cancers.

Information about what is the “Expanded Program on Immunization” and about the primary cohort which planned to be vaccinated in Vietnam would be interesting.

With respect to previous publication, the results are already sufficient and consistent with what is published worldwide with respect to the prevalence of HPV detection and with minor variations, HPV 16 is always the main HR-HPV
prevalent and the HPV18 is always between the most important (usually in second). Discuss others HR-HPV prevalence could be more important if it were clarified the prevalence of them among cervical cancers in Vietnam. 

Thus, the data showed only confirm the findings around the world with regard to the prevalence of HPV 16 and 18 and specify the others HR-HPV more prevalent in Vietnam.

Discussion: The population for HPV vaccination should be in adolescents and in this study the population studied was composed predominately for women over 30 years old. Probably the HPV detected in older women (perhaps married) would have more likely to be present for a long period and related to a persistent infection, with a higher risk to develop high-grade lesions and cancer, or with less likely to disappear. Moreover, it is known that other HR-HPV types beyond 16, 18 have a slower rate of progression, leading to cancer in a longer period of time, ie with easier detection as a precursor lesion with the screening, that although necessary maintenance, this screening can be different in vaccinated regards to the methods used, age of start and periodicity.

**Level of interest:** An article whose findings are important to those with closely related research interests

**Quality of written English:** Acceptable

**Statistical review:** No, the manuscript does not need to be seen by a statistician.

**Declaration of competing interests:**

I am conducting clinical trials Phase II, III and IV about HPV vaccine from GSK since year 2000 at State University of Campinas (UNICAMP), Brazil.