Authors investigated the sex knowledge, attitudes, and high-risk sexual behaviors among unmarried youth in Hong Kong, given its effect on public health importance, education, policymaking, prevention and intervention programs. Based on the Youth Sexuality Survey conducted by Hong Kong Family Planning Association (FPAHK) in 2011, the study explored the characteristics of sexual knowledge, attitudes, and high-risk sexual behaviors among 1,126 unmarried youth. Multiple logistic regressions were performed to examine factors associated with unmarried youth’s premarital sex, casual relationships, multiple sex partners, and premarital pregnancy. Results revealed that unmarried youth in Hong Kong had adequate sex knowledge, but contraceptive knowledge was deficient. The majority of unmarried youth (63.8%) held liberal attitudes toward premarital sex and about half held liberal attitudes toward any form of sexual activity and premarital pregnancy. Around 60% held conservative attitudes toward causal sex relationships and multiple sex partners. Males tended to hold more liberal attitudes toward high-risk sex behaviors than female youth. Approximately 41.5% of unmarried youth reported having engaged in premarital sex, whereas less than 10% engaged in high-risk sexual behaviors. Males also reported higher amounts of premarital sex, casual sex relationships, and multiple sex partners. Females reported higher levels of sexual coercion. Logistic regressions indicated that age, parents’ marital status, study status, and liberal attitudes towards sex were positively associated with premarital sex or high-risk sex behaviors, and gender, education and immigration status was negatively associated with premarital sex or high-risk sex behaviors. However, immigration status was positively associated
with high-risk sex behaviors. Authors concluded that premarital sex is becoming prevalent among unmarried youth in Hong Kong, and a small proportion of young adults are engaging in high-risk sexual behaviors. Sex education and HIV prevention programs should equip them with adequate knowledge on contraception and condom use. Intervention programs can start with their attitudes toward sex.

Overall comments:
1. The research question posed by the authors is well defined and clear.
2. Methods are very well defined and defensible.
3. Data analyses and procedures selected are correct and extremely well presented. Software selected has well tested algorithms.
4. The manuscript certainly more than adheres to relevant standards for reporting and data deposition using the t-tests, Chi-square tests, and logistic regressions.
5. Discussion and conclusions are very well balanced and adequately supported by the data.
6. Authors clearly acknowledge any work upon which they are building, both published and unpublished.
8. Both the title and abstract accurately convey results.
9. Writing is very clear and flows with the primary and secondary aims of the study.

Judgment:
In my opinion this is an extremely well designed, executed and reported study. The manuscript is very well written and the statistical procedures selected and their reporting of results is extremely well done. I cannot find anything of major importance that would necessitate a revision. I would suggest that the authors do put in “N” numbers in Tables 2 and 3 for both males and females, as well as for each variable examined in the LR in table 5. The n numbers are variable and it makes it easier to keep track of the changing numbers when so many regressions are conducted and explored.

Level of interest: An article of outstanding merit and interest in its field

Quality of written English: Acceptable

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

Declaration of competing interests:
I declare that I have no competing interests.