## PEER REVIEW HISTORY

BMJ Open publishes all reviews undertaken for accepted manuscripts. Reviewers are asked to complete a checklist review form (http://bmjopen.bmj.com/site/about/resources/checklist.pdf) and are provided with free text boxes to elaborate on their assessment. These free text comments are reproduced below.

## ARTICLE DETAILS

TITLE (PROVISIONAL)	Correlations of chlamydia and gonorrhea between pharyngeal,
	rectal, and urethral sites among Thai men who have sex with men:
	a multicentre community-led test and treat cohort in Thailand
AUTHORS	Hiransuthikul, Akarin; Sungsing, Thanthip; Jantarapakde,
	Jureeporn; Trachunthong, Deondara; Mills, Stephen; Vannakit,
	Ravipa; Phanuphak, P; Phanuphak, Nittaya

## **VERSION 1 - REVIEW**

REVIEWER	Christopher Fairley Melbourne Sexual Health Centre Australia.
REVIEW RETURNED	07-Dec-2018

GENERAL COMMENTS	Thankyou for asking me to review this paper.
	The paper addresses and important issue of extra genital CT and GC infection which is currently rather controversial. It is a well written paper that is clearly presented.
	I have two main suggestions.
	Firstly remove the complex multivariate analysis in table three and associated text I'm not sure it offers much. Secondly separate out the infections more- it is a nice paper but having them toghether only- leaves lots of interesting data hidden.
	Page 7. The comparison with those tested at all sites and not – for CT or GC is not really validthe opportunity to be positive in those not tested at all sites is lower.
	Page 9. I don't really follow the significance of the multivariate analysis on page 9. Why are you interested in the risks of an infection among those negative at another site? I can't see why this is of value? Table 3 is complex. Not sure it is needed.
	Also Given the transmission of the two infections is so different- I wonder what the value of combining them is?
	I would strongly suggest figure 1 is repeated separately for CG and CT. They are different infections, transmitted differentlyincluding a combined one is fine.
	Discussion

few differences to discuss.
-----------------------------

REVIEWER	S. Ouburg
	Assistant professor Amsterdam University Medical Centers,
	location VUmc Amsterdam, The Netherlands
REVIEW RETURNED	08-May-2019

GENERAL COMMENTS	The paper is interesting and clearly written. The manuscript adds to the available literature e.g. as published by van Liere et al., Wijers et al. and den Heijer et al The authors present how much infections would be missed when testing a single site in their study population. It would interesting to k now what the authors estimate to be the percentage of missed infections in the Thai population, based on the findings from their study.
	The manuscript should be carefully proofread for English because it contains some typographical and grammatical errors, but not to the extend that it affects the clarity of the paper.

## VERSION 1 – AUTHOR RESPONSE

Reviewer 1	
Comments	Responses
1. Firstly remove the complex multivariate	Table three and its associated text were
analysis in table three and associated text I'm	removed accordingly
not sure it offers much.	
2. Secondly separate out the infections more- it	We have separated out the infections
is a nice paper but having them together only-	accordingly. Changes are throughout the
leaves lots of interesting data hidden.	abstract, results, and discussion part.
3. Page 7. The comparison with those tested at	We have removed the comparison accordingly.
all sites and not – for CT or GC is not really	
validthe opportunity to be positive in those not	
tested at all sites is lower.	
4. Page 9. I don't really follow the significance	Table three and its associated text were
of the multivariate analysis on page 9. Why are	removed accordingly to the first comment.
you interested in the risks of an infection among	
those negative at another site? I can't see why	
this is of value? Table 3 is complex. Not sure it	
is needed.	
5. Also Given the transmission of the two	We separated out CT and NG infection
infections is so different- I wonder what the	accordingly to the second comment. Changes
value of combining them is?	are throughout the abstract, results, and
	discussion part.
6. I would strongly suggest figure 1 is repeated	Figure 1 was repeated separately for CT (the
separately for CG and CT. They are different	new Figure 1) and NG (the new Figure 2)
infections, transmitted differentlyincluding a	accordingly.
combined one is fine.	
7. Discussion: This will now need to expand to	We separated out CT and NG infection
include discussion of the differences between	accordingly to the second comment. Changes

GC and CT. I imagine there will be quite a few	are throughout the abstract, results, and
differences to discuss.	discussion part.

Reviewer 2	
Comments	Responses
1. The authors present how much infections would be missed when testing a single site in their study population. It would interesting to know what the authors estimate to be the percentage of missed infections in the Thai population, based on the findings from their study.	Unfortunately, to our best knowledge, there is no official surveillance data on how many Thai MSM access STIs screening service in Thailand. Currently, we are expecting that 5k out of the estimated 500k Thai MSM are able to assess to CT/NG screening using NAAT. Based on our study: With a prevalence of CT/NG infections of 30%, we would expect 150k MSM to have CT/NG in any anatomical sites. If single anatomical site screening was performed, 45k-129k and 60k- 115k of CT and NG infection are expected to be missed, depending on the anatomical chosen for single anatomical screening.
2. The manuscript should be carefully proofread for English because it contains some	Kindly noted. The manuscript has been proofread for English.
typographical and grammatical errors, but not	
to the extend that it affects the clarity of the	
paper.	