

PEER REVIEW HISTORY

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ARTICLE DETAILS

TITLE (PROVISIONAL)	COBA-Cohort: a prospective cohort of HIV-negative men who have sex with men attending community-based HIV testing services in 5 European countries (a study protocol)
AUTHORS	Lorente, Nicolas; Fernández López, Laura; Fuertes, Ricardo; Rojas Castro, Daniela; Pichon, François; Cigan, Bojan; Chanos, Sophocles; Meireles, Paula; Lucas, Raquel; Morel, Stéphane; Slaaen Kaye, Per; Agustí Benito, Cristina; Klavs, Irena; Platteau, Tom; Casabona, Jordi

VERSION 1 - REVIEW

REVIEWER	A. J. Schmidt Department of Social & Environmental Health Research, London School of Hygiene and Tropical Medicine, 15-17 Tavistock Place, London, WC1H 9SH, United Kingdom
REVIEW RETURNED	10-Feb-2016

GENERAL COMMENTS	<p>SUMMARY</p> <p>This article explains in detail the methodology for a prospective cohort study of HIV-negative men-who-have-sex-with-men in 6 European countries, recruited from community-based HIV-testing centres for gay and other MSM. The manuscript is well-written but in my view would benefit from some proof-reading by a native speaker.</p> <p>GENERAL COMMENT</p> <p>Abbreviating “community-based voluntary counselling and testing services” as “CBVCTs” is confusing, because it would be expected that the “s” is for “services” and therefore should be capitalised. (page numbers in the reviewer’s comments refer to the page number at the bottom, not at the top, of the pages)</p> <p>SPECIFIC COMMENTS</p> <p>P3L8ff: The first sentence implies that MSM are “less tested”. However in most European countries MSM are among the groups with the highest rates of HIV-testing (see below). In my view, it needs to be stressed that community-based testing offers an environment that is more likely to be free of stigmatising gay sex.</p> <p>P3L12: For the international reader, “Euro HIV EDAT” needs to be explained / spelled out.</p>
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	<p>P3L16: Consider being more consistent with your chosen label, with respect to using a definitive article before “COBA-cohort”, and with respect to capitalising “Cohort” or not.</p> <p>P3L20: Instead “Those refusing to participate answer a 10-items questionnaire”, “... are asked to answer” might be more appropriate, because of the voluntary character of counselling, testing, and study participation.</p> <p>P3L22 and L25: “HIV/STIs testing” should be “HIV/STI testing”. History of HIV/STI-testing? Testing-experience in different settings? Performance?</p> <p>P3L25: The sentence “COBA-cohort will increase” should be re-phrased as an objective and be placed at the end of the introduction.</p> <p>P3L28ff: Is more than one approval necessary for this pan-European project? If yes, please clarify which (or for the abstract at least how many) approvals have been given and how many more are still expected. Or simply, if the authors think it is necessary to talk about ethical approval in the abstract, state how many approvals are already given and in how many centres the study has already started. This list should be up-to-date once the publication date is clear. The word “soon” should be avoided.</p> <p>P3L44: I think if you add “pan-European” before “multi-centre” the claim is safe.</p> <p>P3L47ff: The second sentence needs to be re-phrased. The final sample size is probably unknown and cannot yet be claimed to be large, as recruitment has only started this month. If by the time of publication of this paper the sample size is already large, consider to state the interim sample size.</p> <p>P3L44-51: The main strength of the study in my view is the prospective design of the study, allowing causal inferences. Consider stating this instead of the 2nd and 3rd bullet point.</p> <p>P3L56: The 5th bullet point is confusing because it was stated in the methods that the study recruitment phase is planned for 18 months, but it is not clear how long the follow-up time is planned for. What is the minimum follow-up time, or the minimum number of follow-up visits that has been agreed on? In the respective section in the methods part (P4L41), it is said that participants will be followed at least until march 2017, which is less than 18 months after starting of recruitment. Please clarify - the follow-up time should not end before the enrolment phase is finished, that is somewhat contradictory.</p> <p>P4L4: As of today, all European Union member states are a sub-group of the European Economic Area (not: “AREA”); or in other words, the EEA is the EU plus Norway, Iceland and Liechtenstein. As those three non-EU countries only add a very small population to the population of the EU, it does not make sense to say that at a population level, a trend can be seen in the EU and the EEA; it would be sufficient to talk about the EEA. Consider updating the information to the latest publication. Male-to-male transmission should be specified to “(...) sexual transmission”. I suggest to use the convenient term “transmission group” instead of “socio-epidemiological group”.</p>
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	<p>P4L41: I suggest to delete the word “serological”, as this is about communication among MSM about having HIV or not.</p> <p>P4L45: Consider re-phrasing.</p> <p>P5L9: To my knowledge, the term “Checkpoint” for community-based VCT centres are only used in continental Europe, but nowhere else. What is more, in my view, the idea behind “Checkpoints” has been somewhat broader than only counselling and (rapid) testing.</p> <p>P5L10ff: Consider re-phrasing. Although most MSM are at higher risk for HIV than most other transmission groups / the general population, MSM are not “less tested” (than who?); and MSM attending “checkpoints” often are repeat/routine testers.</p> <p>P5L18-23: The paragraph has several grammatical issues and is highly unclear. Please re-phrase.</p> <p>P5L30-33: For the international reader, it is not self-evident what the “Euro HIV EDAT” or “COBATEST project” is. Please explain and add a URL to the COBATEST project.</p> <p>P5L57: For the international reader, it would be helpful to mention the cities and the countries of the respective VCT centres. This is done later for some, but not all participating centres.</p> <p>P6L8: For the European reader maybe a footnote would be helpful that explains why Checkpoint Barcelona, like Checkpoint Lisbon already running a cohort of HIV-negative MSM, is not part of the COBA-cohort (while Checkpoint Lisbon is), although the co-ordinating centre is in Barcelona.</p> <p>P6L27: “Opportunistic cohort” is to my knowledge not a frequently used term in epidemiology. I suggest to apply the more widely used term “prospective observational cohort study”. I think the proper term here is “ Prospective observational coded data-probe research” (baseline and follow-up questionnaires with sampling of biological probes).</p> <p>P6L35: To describe the patterns of CBVCT use, to describe characteristics of CBVCT users, or both?</p> <p>P6L36 By talking about “HIV/STI test seeking behaviour”, you suggest that the determinants for HIV testing are the same as for ST testing. I have my doubts. As incident STIs are not mentions as objectives, I think it makes more sense to stick to determinants of HIV-testing. Further, if “sexual risk behaviour” is conceptualised as condomless anal sex, it should be stated as such. Risk factors and thus prevention strategies for HIV are different from those for common STIs, and again from those for e.g. hepatitis C.</p> <p>P6L50ff: If I remember correctly, the main reason for participation refusal in Lisbon is non-residence in Lisbon. I wonder whether this makes the difference to e.g. Ljubljana. It might be interesting for this protocol to get an idea about the yearly number of eligible clients, based e.g. on the last 12 months.</p> <p>P8L4: Please describe the rationale for screening HIV-negative MSM for hepatitis C. As the manuscript talks about STI-testing, it</p>
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	<p>would be crucial to mention which STIs MSM are screened for, in which centres, and how frequently. Is incidence of hepatitis C and syphilis among HIV-negative MSM an objective of the study? Or any other STI? Which tests are applied? I assume the applied tests are not standardised across the centres?</p> <p>P8L41: Has the questionnaire been pre-tested in the local languages? Particular attention should be given on the wording for the drugs. The EMIS experience, particularly regarding the Spanish translation of the English original, has shown that it is crucial to use the street drug names used and understood by the local MSM population.</p> <p>P8L47: If different centres use different follow-up periods as suggested by national testing policies - e.g. 6 months, or 12 months - and the questions refer to the time since the last visit - how is comparability assured across countries/centres?</p> <p>REFERENCES</p> <p>#13: The URL for the EMIS community reports should be: http://www.emis-project.eu/community-1.html, to allow access to the different language versions.</p> <p>#14: The URL for the EMIS final report should be: http://www.emis-project.eu/final-report.html, to ensure the latest version is accessed.</p> <p>#16: There are three more publications on homonegativity and stigma based on EMIS data, which you might want to consider for inclusion. The two most recent and most prominently published are:</p> <ul style="list-style-type: none"> • John Pachankis et al. (2015): Hidden from health: structural stigma, sexual orientation concealment, and HIV across 38 countries in the European MSM Internet Survey. <i>AIDS</i> 29(10): 1239-1246 • Rigmor C. Berg et al. (2013). Structural and environmental factors are associated with internalised homonegativity in men who have sex with men: Findings from the European MSM Internet Survey (EMIS) in 38 countries. <i>Social Science & Medicine</i>, Volume 78, Pages 61–69 <p>FIGURES</p> <p>P16: For this figure I suggest to include the 10-items-questionnaire for eligible MSM who do not accept to participate in the COBA-cohort.</p>
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REVIEWER	Eline Op de Coul Centre for Infectious Disease Control, RIVM, Netherlands
REVIEW RETURNED	21-Mar-2016

GENERAL COMMENTS	<p>Herewith I sent you my review of the paper '<i>COBA-Cohort: a prospective cohort of HIV-negative men who have sex with men attending community-based HIV testing services in 6 European Countries (a study protocol)</i>'</p> <p>The paper reports on the content of a study protocol for a prospective multi-center cohort involving community-based counseling and testing services. The paper is well-written and of</p>
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	<p>interest for readers in the HIV/STI field and could help the authors to increase the number of sites across Europe. I have provided some minor comments below.</p> <p>Minor revisions:</p> <p><i>Introduction, page 4, lines 4-15:</i></p> <ul style="list-style-type: none"> - Reference 1 should be updated with the most recent report on HIV/AIDS in Europe (2014) and these numbers should be included within the first paragraph of the introduction: http://ecdc.europa.eu/en/publications/_layouts/forms/Publication_DispForm.aspx?List=4f55ad51-4aed-4d32-b960-af70113dbb90&ID=1408 - First sentence: "In the European...100.000 population". The rate (nr/100.000 population) remained stable since 2004. However, this is not the case for the number of HIV diagnoses (see page 32 of ECDC report). This sentence should be changed according to that. <p><i>Introduction, page 4, lines 22-26:</i></p> <ul style="list-style-type: none"> - Reference 4 presents older data for HIV incidence in the Amsterdam cohort study. The most recent HIV incidence rate is published on page 122 in the report below and is 1.2/100.000 (2014): http://www.rivm.nl/dsresource?objectid=rivmp:281521&type=org&disposition=inline&ns_nc=1. The Valencia incidence rate (line 22) is rather old and therefore less comparable to the other incidence rates. This needs to be either updated or removed from the comparison. <p><i>Methods and analyses, page 6, lines 34-39:</i></p> <ul style="list-style-type: none"> - Objectives, perhaps add determinants of co-infections? determinants of repeated HIV/STI testing? The last item only if 18 months of follow-up is long enough to obtain large enough numbers to examine this. <p><i>Methods and analyses, page 7, line 30:</i></p> <ul style="list-style-type: none"> - Figure 2 is not adding much to the text, can be removed. <p><i>Methods and analyses, page 8, lines 31 and 47-50:</i></p> <ul style="list-style-type: none"> - "Alcohol and drug use during sex" Are questions included about the amount and types of drugs used? If so, please include it in the text. - Linkage to care is briefly mentioned but what referral steps will be taken in case of HIV/HBV/HCV positivity? Perhaps these are described in reference 24 about the COBATEST network, but things should preferably be clear without having to search for another paper.
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VERSION 1 – AUTHOR RESPONSE

Reviewer: 1

Reviewer Name

A. J. Schmidt

Institution and Country

Department of Social & Environmental Health Research,
London School of Hygiene and Tropical Medicine,
15-17 Tavistock Place, London, WC1H 9SH,
United Kingdom

Please state any competing interests or state 'None declared':
None declared.

Please leave your comments for the authors below

SUMMARY

This article explains in detail the methodology for a prospective cohort study of HIV-negative men-who-have-sex-with-men in 6 European countries, recruited from community-based HIV-testing centres for gay and other MSM. The manuscript is well-written but in my view would benefit from some proof-reading by a native speaker.

*** We apologise for the difficulties the reviewer experienced in reading the manuscript. This latter has been carefully revised by a native English-speaker. Changes related to English revision do not appear in the manuscript in order to make reading easier.

GENERAL COMMENT

Abbreviating “community-based voluntary counselling and testing services” as “CBVCTs” is confusing, because it would be expected that the “s” is for “services” and therefore should be capitalised.

(page numbers in the reviewer’s comments refer to the page number at the bottom, not at the top, of the pages)

*** We understand the confusion; we thus decided to use “CBVCT” in the entire article, specifying “services” when necessary.

SPECIFIC COMMENTS

P3L8ff: The first sentence implies that MSM are “less tested”. However in most European countries MSM are among the groups with the highest rates of HIV-testing (see below). In my view, it needs to be stressed that community-based testing offers an environment that is more likely to be free of stigmatising gay sex.

*** We are sorry for the confusion. This sentence – as well as later in the introduction section – aimed to state that CBVCT services managed to reach MSM who are less tested than the majority of MSM (ref 19 and 20), and NOT that MSM are “less tested”. However, we changed the sentence as suggested (Page3, Paragraph Introduction).

P3L12: For the international reader, “Euro HIV EDAT” needs to be explained / spelled out.

*** We spelled out the name of the study: Early Diagnosis and treatment (EDAT) (P3§introduction).

P3L16: Consider being more consistent with your chosen label, with respect to using a definitive article before “COBA-cohort”, and with respect to capitalising “Cohort” or not.

*** We harmonize the entire article (COBA-Cohort).

P3L20: Instead “Those refusing to participate answer a 10-items questionnaire”, “... are asked to answer” might be more appropriate, because of the voluntary character of counselling, testing, and study participation.

*** We finally removed this sentence in order not to reduce the abstract (max 300), but we changed it in the “method” section of the manuscript (P8§4).

P3L22 and L25: “HIV/STIs testing” should be “HIV/STI testing”. History of HIV/STI-testing? Testing-experience in different settings? Performance?

*** We changed “HIV/STIs” to “HIV/STI” and added “history of” as suggested (P3§ Methods and analysis).

P3L25: The sentence “COBA-cohort will increase” should be re-phrased as an objective and be placed at the end of the introduction.

*** We removed the sentence and added the sub-section “Research objectives” after the introduction. We also added a few details about data analysis. (P3§abstract)

P3L28ff: Is more than one approval necessary for this pan-European project? If yes, please clarify which (or for the abstract at least how many) approvals have been given and how many more are still expected. Or simply, if the authors think it is necessary to talk about ethical approval in the abstract, state how many approvals are already given and in how many centres the study has already started. This list should be up-to-date once the publication date is clear. The word “soon” should be avoided.

*** Ethical issues must be mentioned in the abstract according to the BMJ Open instruction for the authors. It is now stated that “The present study was approved by the Public Health authorities of each country where the study is being implemented” (P3§Ethics and dissemination). Indeed, the European Commission asked each partner to obtain such approvals locally. Regarding the “pending” ethical approval, it is not the case anymore since, as mentioned earlier, since Aids Hilfe (Germany) left the project.

P3L44: I think if you add “pan-European” before “multi-centre” the claim is safe.

*** We thank the reviewer for this suggestion, we changed it (1st bullet point).

P3L47ff: The second sentence needs to be re-phrased. The final sample size is probably unknown and cannot yet be claimed to be large, as recruitment has only started this month. If by the time of publication of this paper the sample size is already large, consider to state the interim sample size.

*** There is probably a misunderstanding regarding the commencement date of the cohort. The first sites (in Lisbon, Ljubljana, Copenhagen and Aarhus) started in early 2015, the last ones (10 in France and one in Athens) in early 2016.

To clarify this point, we added a table including each commencement date (see Table 1). This table also enables showing that more than 2000 participants have already been enrolled in the cohort. We also rephrased the second bullet point “The COBA-Cohort (COMMUNITY-BASED Cohort) is being recruiting a large sample of HIV-negative MSM expected to be larger than 4 000 individuals [...]” (P4; 1st bullet point).

P3L44-51: The main strength of the study in my view is the prospective design of the study, allowing causal inferences. Consider stating this instead of the 2nd and 3rd bullet point.

*** We thank the reviewer for this suggestion. We changed the 3rd bullet point (P4, 2nd bullet point).

P3L56: The 5th bullet point is confusing because it was stated in the methods that the study

recruitment phase is planned for 18 months, but it is not clear how long the follow-up time is planned for. What is the minimum follow-up time, or the minimum number of follow-up visits that has been agreed on? In the respective section in the methods part (P4L41), it is said that participants will be followed at least until March 2017, which is less than 18 months after starting of recruitment. Please clarify - the follow-up time should not end before the enrolment phase is finished, that is somewhat contradictory.

*** We are sorry for the confusion.

The initial study periods decided in the framework of EURO HIV EDAT planned to:

- start on January 2015,
- recruit until June 2016 (18 months) and to
- follow-up participants until (at least) March 2017.

The difficulties in obtaining the ethical clearance and in preparing the fieldwork (translations, trainings, pilots, etc.), delayed the commencement in many sites, which in turn shortened the Euro HIV EDAT study periods.

All participating CBVCT services are highly motivated by this cohort project and are aware that such a project implies long-term follow-up and are willing to do so.

Regarding the recruitment period, and as stated in the first version of the manuscript: "...the recruitment period could be reduced or increased depending on the workload of the participating sites and the resources that can be mobilized" (P7§3).

To date, the first sites (in Lisbon, Ljubljana, Copenhagen and Aarhus) already confirmed that they will recruit during 18 months (i.e. several months after the due date planned of June 2016).

The other sites (in France and Greece) which started in 2016 agreed to continue recruiting after June 2016. Although they did not confirm the 18-months duration, they are likely to recruit during at least 12 months.

ACTIONS

- We added that CBVCTs expressed their willingness to continue after the time frame of Euro HIV EDAT (P9§2).
- We completely re-organised the "Inclusion criteria and recruitment" section, and added more details regarding the recruitment period planned in the framework of Euro HIV EDAT (P9§1) as well as the new agreed recruitment times just mentioned (P9§2).

*** Regarding follow-up, none of the participating CBVCT services formally agreed upon a given follow-up duration or a number of follow-up visits after the Euro HIV EDAT project. Please keep in mind that we are still in the recruitment phase, so the extra workload attributable to the cohort implementation is much higher than during the sole follow-up phase: checking eligible criteria, offering the study participation (explaining the protocol and its implications, asking for the informed consent), entering data (the baseline questionnaire is longer than the follow-up one), etc.

It is thus difficult for NGOs to formally commit that they will continue during X time without knowing the real workload that will require, or having the guarantee of extra funding if necessary.

To make the long-term follow-up easier for the CBVCT providers, the study group is currently trying to implement online or tablet-based self-administered questionnaires that would considerably reduce the time dedicated to the study since data entry would not be necessary anymore.

In addition, the COBA-Cohort has been included in a proposal of a larger project to be submitted for funding, and the study group is actively seeking other ways to obtain financial support.

Nevertheless, as these two projects (tablet-based questionnaires and call for funding) are still in progress, we prefer not to detail that in the manuscript.

ACTIONS

- The first paragraph of the "Follow-up" section is now the penultimate one (P10§1). It mentions the date until which participants will be followed-up in the framework of Euro HIV EDAT (March 2017), as well as the willingness of all sites to continue afterward, and the commitment of some of them to do so.

- We added a paragraph (P10§2) in order to mention that the study group is currently trying to obtain extra funds and to reduce the workload due to COBA-Cohort participation by implementing online or

tablet-based self-administered questionnaires.

P4L4: As of today, all European Union member states are a sub-group of the European Economic Area (not: "AREA"); or in other words, the EEA is the EU plus Norway, Iceland and Liechtenstein. As those three non-EU countries only add a very small population to the population of the EU, it does not make sense to say that at a population level, a trend can be seen in the EU and the EEA; it would be sufficient to talk about the EEA. Consider updating the information to the latest publication. Male-to-male transmission should be specified to "(...) sexual transmission". I suggest to use the convenient term "transmission group" instead of "socio-epidemiological group".

*** We originally used the same terms as those used in the ECDC/WHO report. But we agree and changed "EU/EEA" to "EAA" in the manuscript (P4§1).

The reference has been updated.

We changed "male-to-male transmission" to "male-to-male sexual transmission", and "socio-epidemiological group" to "transmission group" as suggested (P4§1).

P4L41: I suggest to delete the word "serological", as this is about communication among MSM about having HIV or not.

*** We removed the word (P5§1).

P4L45: Consider re-phrasing.

*** The whole paragraph has been rephrased (P5§2).

P5L9: To my knowledge, the term "Checkpoint" for community-based VCT centres are only used in continental Europe, but nowhere else. What is more, in my view, the idea behind "Checkpoints" has been somewhat broader than only counselling and (rapid) testing.

*** We removed the reference to "checkpoint" to avoid confusion (P5§3).

P5L10ff: Consider re-phrasing. Although most MSM are at higher risk for HIV than most other transmission groups / the general population, MSM are not "less tested" (than who?); and MSM attending "checkpoints" often are repeat/routine testers.

*** We removed "less tested" in order to avoid any misunderstanding, and rephrased the rest of the paragraph (P5§3).

P5L18-23: The paragraph has several grammatical issues and is highly unclear. Please re-phrase.

*** The paragraph has been rephrased (P5§4).

P5L30-33: For the international reader, it is not self-evident what the "Euro HIV EDAT" or "COBATEST project" is. Please explain and add a URL to the COBATEST project.

*** We spelled the acronyms, and added a link to find the COBATEST reports (the study webpage does not exist anymore; all the documents have been moved to the Euro HIV EDAT website) (P6§1).

P5L57: For the international reader, it would be helpful to mention the cities and the countries of the respective VCT centres. This is done later for some, but not all participating centres.

*** The "General study design" section has been re-organised.

The first paragraph now lists the participating NGOs (and their respective countries) and refers to figure 1 where all cities are listed (P6§3).

Please note that the table also includes all cities of the CBVCT services and their receptive commencement dates.

P6L8: For the European reader maybe a footnote would be helpful that explains why Checkpoint Barcelona, like Checkpoint Lisbon already running a cohort of HIV-negative MSM, is not part of the COBA-cohort (while Checkpoint Lisbon is), although the co-ordinating centre is in Barcelona.

*** BCN Checkpoint is an associated partner of Euro HIV EDAT and was initially involved in the COBA-Cohort. However, in the course of the discussions on the protocol and the questionnaires, they decided not to participate because this cohort was incompatible with theirs and their routine activities. Since they are not participating, we think this information should not be included in the article. However, we added a sentence to thank the input of BCN checkpoint, as well as Aids Hilfe, in the new “acknowledgements” section (P14§2).

P6L27: “Opportunistic cohort” is to my knowledge not a frequently used term in epidemiology. I suggest to apply the more widely used term “prospective observational cohort study”. I think the proper term here is “Prospective observational coded data-probe research” (baseline and follow-up questionnaires with sampling of biological probes).

*** We agree with the reviewer and changed “opportunistic” to “service-based” (P7, §1 and 4).

P6L35: To describe the patterns of CBVCT use, to describe characteristics of CBVCT users, or both?

*** “To describe the patterns of CBVCT use”, we changed it (P7§2).

P6L36 By talking about “HIV/STI test seeking behaviour”, you suggest that the determinants for HIV testing are the same as for ST testing. I have my doubts. As incident STIs are not mentioned as objectives, I think it makes more sense to stick to determinants of HIV-testing. Further, if “sexual risk behaviour” is conceptualised as condomless anal sex, it should be stated as such. Risk factors and thus prevention strategies for HIV are different from those for common STIs, and again from those for e.g. hepatitis C.

*** We are sorry for the misunderstanding. The objectives are those submitted to the corresponding Work Package of Euro HIV EDAT, and we did not want to suggest that the determinants of HIV testing were the same as for STI testing. We changed “HIV/STI” to “HIV and/or STI” in order to clarify (P7§2, as well as in the rest of the manuscript).

P6L50ff: If I remember correctly, the main reason for participation refusal in Lisbon is non-residence in Lisbon. I wonder whether this makes the difference to e.g. Ljubljana. It might be interesting for this protocol to get an idea about the yearly number of eligible clients, based e.g. on the last 12 months.

*** The added table now gives an idea of the annual eligible users (although being raw data) in the sites that commenced in early 2015 (Table 1).

We moderate the sentence regarding the possible reason (feedback from the CBVCT providers) of observing a smaller rate of refusal in Slovenia (P8§2). Indeed, as suggested by the reviewer, “not being resident of the region of the checkpoint” may also influence refusal rate (although “being resident of the region” is an eligible criteria). As we are also collecting refusal reasons (including an “other” item where users can explain why the decline participation), we will be able to look at the differences between countries.

P8L4: Please describe the rationale for screening HIV-negative MSM for hepatitis C. As the manuscript talks about STI-testing, it would be crucial to mention which STIs MSM are screened for, in which centres, and how frequently. Is incidence of hepatitis C and syphilis among HIV-negative MSM an objective of the study? Or any other STI? Which tests are applied? I assume the applied tests are not standardised across the centres?

*** As stated in the objectives of the study, we aim to assess only HIV incidence and not STI/Hepatitis. STIs will only be investigated regarding objective No. 2 (“test seeking behaviour”), based on the data from the self-administered questionnaire (testing patterns, attitudes etc.). To avoid such a confusion regarding hepatitis C screening – that is not being implemented in the frame of the COBA-Cohort – the mentioned sentence has been removed (P9§4).

P8L41: Has the questionnaire been pre-tested in the local languages? Particular attention should be given on the wording for the drugs. The EMIS experience, particularly regarding the Spanish

translation of the English original, has shown that it is crucial to use the street drug names used and understood by the local MSM population.

*** All the questionnaires have been translated by the participating sites, which considerably reduces the risk of wrong translations.

Each site was then invited to test the questionnaire in order to check whether it was understandable by local MSM. We mentioned this in the penultimate paragraph, page 10.

P8L47: If different centres use different follow-up periods as suggested by national testing policies - e.g. 6 months, or 12 months - and the questions refer to the time since the last visit - how is comparability assured across countries/centres?

Questions referring to "since the last visit" are already used elsewhere (Lisbon cohort for example) and allows to cover all period of exposition between two visits. We added this point (P10; penultimate paragraph). Indeed, contrary to clinical trials, where participants may return according to a fixed period of time, referring to a given period would have missed or overlapped follow-up periods. The differences in follow-up period can be taken into account according to various options, depending on the nature of the analysis and the objective.

For example, GEE models for longitudinal allow modelling different periods of time between visits across participants.

When possible, i.e. when the assumed error is low, standardised indicators with fixed periods can also be computed (using decision algorithm).

It will also be possible, for example, to select all visits occurring 12 months after inclusion - more or less X weeks or months – to compare several indicators a year after inclusion.

As statistical approaches are numerous and will depends on the type of analysis, we just added that "[...]differences in the period of time between visits will be taken into account by using the appropriate statistical models (e.g. GEE and mixed effects models)" (P12§5).

REFERENCES

#13: The URL for the EMIS community reports should be: <http://www.emis-project.eu/community-1.html>, to allow access to the different language versions.

*** We changed the URL (ref 12).

#14: The URL for the EMIS final report should be: <http://www.emis-project.eu/final-report.html>, to ensure the latest version is accessed.

*** We changed the URL (ref 13).

#16: There are three more publications on homonegativity and stigma based on EMIS data, which you might want to consider for inclusion. The two most recent and most prominently published are:

- John Pachankis et al. (2015): Hidden from health: structural stigma, sexual orientation concealment, and HIV across 38 countries in the European MSM Internet Survey. *AIDS* 29(10): 1239-1246
- Rigmor C. Berg et al. (2013). Structural and environmental factors are associated with internalised homonegativity in men who have sex with men: Findings from the European MSM Internet Survey (EMIS) in 38 countries. *Social Science & Medicine*, Volume 78, Pages 61–69

*** We thank the reviewer for his suggestion and added both references (ref 16 and 17).

FIGURES

P16: For this figure I suggest to include the 10-items-questionnaire for eligible MSM who do not accept to participate in the COBA-cohort.

*** We believe the reviewer was referring to figure 2. However, as suggested by reviewer 2, this figure has been removed.

Nevertheless, we included the list of questions in the manuscript (P8§4).

Reviewer: 2

Reviewer Name

Eline Op de Coul

Institution and Country

Centre for Infectious Disease Control, RIVM, Netherlands

Please state any competing interests or state 'None declared':
None declared.

Please leave your comments for the authors below

Introduction, page 4, lines 4-15:

- Reference 1 should be updated with the most recent report on HIV/AIDS in Europe (2014) and these numbers should be included within the first paragraph of the introduction:

http://ecdc.europa.eu/en/publications/_layouts/forms/Publication_DispForm.aspx?List=4f55ad51-4aed-4d32-b960-af70113dbb90&ID=1408

*** Sorry for the mistake. We updated the reference (ref 1) and the numbers. We also mentioned "when adjusted for reporting delay" in order to avoid confusion between data from the tables (annex of the report) and those used within the text (introduction section; paragraph 1).

- First sentence: "In the European...100.000 population". The rate (nr/100.000 population) remained stable since 2004. However, this is not the case for the number of HIV diagnoses (see page 32 of ECDC report). This sentence should be changed according to that.

*** We corrected this sentence (introduction section; §1).

Introduction, page 4, lines 22-26:

- Reference 4 presents older data for HIV incidence in the Amsterdam cohort study. The most recent HIV incidence rate is published on page 122 in the report below and is 1.2/100.000 (2014):

http://www.rivm.nl/dsresource?objectid=rivmp:281521&type=org&disposition=inline&ns_nc=1.

*** We thank the reviewer for this update. We changed the number and the reference (introduction section; §2).

The Valencia incidence rate (line 22) is rather old and therefore less comparable to the other incidence rates. This needs to be either updated or removed from the comparison.

*** We did not find more up-to-date data, so we removed this reference.

Methods and analyses, page 6, lines 34-39:

- Objectives, perhaps add determinants of co-infections? determinants of repeated HIV/STI testing? The last item only if 18 months of follow-up is long enough to obtain large enough numbers to examine this.

*** We added "determinants of co-infection" as secondary objectives, and "including repeat testing" in objective 2 (objectives section, §1 and 2).

We are aware that the 4th objective may be difficult to achieve with a small follow-up period, but we are quite sure that almost all sites will continue recruiting, as previously explained to Reviewer 1 (see

the authors' answer to comment "P3L56" of reviewer 1).

Methods and analyses, page 7, line 30:

- Figure 2 is not adding much to the text, can be removed.

*** We agree with the reviewer. After removing the figure, we decided to add a table with interim monitoring data (see Table 1).

Methods and analyses, page 8, lines 31 and 47-50:

- "Alcohol and drug use during sex" Are questions included about the amount and types of drugs used? If so, please include it in the text.

*** We added the following sentence in page 7 §4: "Several questions also gathered information about alcohol and drug use during sex (type of drugs and frequency) as well as history of injecting drug use (whether or not related to sex, date of the last injection)".

- Linkage to care is briefly mentioned but what referral steps will be taken in case of HIV/HBV/HCV positivity? Perhaps these are described in reference 24 about the COBATEST network, but things should preferably be clear without having to search for another paper.

*** The linkage to care procedures are very different from a country to another and an NGO from another. In COBATEST, this was not exhaustively described either.

However, we added in the manuscript that "linkage to care procedures are being investigated as part of another work package of the Euro HIV EDAT project" (P9, penultimate paragraph). The results should be published soon.

VERSION 2 – REVIEW

REVIEWER	A. J. Schmidt Department of Social & Environmental Health Research, London School of Hygiene and Tropical Medicine, 15-17 Tavistock Place, London, WC1H 9SH, United Kingdom
REVIEW RETURNED	04-May-2016

GENERAL COMMENTS	All my concerns have been properly addressed. I would like to thank the authors for their very clear and comprehensive responses. Especially the newly introduced table adds important information. (I found a tiny typo on P12L20: "NGO" needs to read "NGOs".)
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REVIEWER	Eline Op de Coul Centre for Infectious Disease Control Netherlands National Institute for Public Health and the Environment (RIVM)
REVIEW RETURNED	25-Apr-2016

GENERAL COMMENTS	One minor textual change needed: CBVCTs should be changed into CBVCT services at page 31, line 12, as was done in the rest of the paper. No need to send it back to the authors, can be done by the editorial office.
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