We would like to thank the editor and the reviewers for their constructive suggestions. We hope they will find our corrections acceptable.

Highlighted in yellow in the manuscript: responses to editor and all corresponding corrections made in the article.

In red in this file, and also in the revised article: responses to Reviewer 1's comments and all corresponding corrections made in the article.

In green in this file, and also in the revised article: responses to Reviewer 2's comments and all corresponding corrections made in the article.

In orange in this file, and also in the revised article: responses to Reviewer 4's comments and all corresponding corrections made in the article.

In purple in this file, and also in the revised article: responses to Reviewer 5's comments and all corresponding corrections made in the article.

In blue in this file, and also in the revised article: responses to Reviewer 6's comments and all corresponding corrections made in the article.

ESPS PEER-REVIEW REPORT

Name of journal: World Journal of Diabetes

ESPS manuscript NO: 30123

Title: Type 2 diabetes in a Senegalese rural area

Reviewer's code: 02946508

Reviewer's country: Japan

Science editor: Fang-Fang Ji

Date sent for review: 2016-09-14 17:47

Date reviewed: 2016-10-03 12:48

CLASSIFICATION	LANGUAGE EVALUATION	SCIENTIFIC MISCONDUCT	CONCLUSION
[ ] Grade A: Excellent	[Y] Grade A: Priority publishing	Google Search:	[ ] Accept
[Y] Grade B: Very good	[ ] Grade B: Minor language	[ ] The same title	[ ] High priority for
[ ] Grade C: Good	polishing	[ ] Duplicate publication	publication
[ ] Grade D: Fair	[ ] Grade C: A great deal of	[ ] Plagiarism	[ ] Rejection
[ ] Grade E: Poor	language polishing	[ ] No	[Y] Minor revision
	[ ] Grade D: Rejected	BPG Search:	[ ] Major revision
		[ ] The same title	
		[ ] Duplicate publication	
		[ ] Plagiarism	
		[ ] No	

COMMENTS TO AUTHORS

This study is the first report in prevalence of diabetes in rural Senegal. Obesity, is evident risk of diabetes, caused by diet change due to urbanization. There remains necessary comments or analysis to upgrade the interpretation of the results.

1. As they pointed out in results, Line 221 "Variables concerning central obesity (WC and WHR) were no longer associated to FBG after adjustment for age, sex and education level (data not shown)." There seems no reason for not showing data, and comments in DISCUSSION is necessary. Is "central" obesity no longer important?

Data concerning WC and WHR in logistic regressions have been added to the tables (Result section, table 2, page 20). Discussion on central obesity has been introduced (page 12, lines 270-274) : "The same cause [recentness of diabetes epidemic] could also explain the lack of association between IFG or diabetes and central obesity. Indeed, whereas central obesity[14], depression[18] and material well-being[19] are generally identified risk factors in populations having a long experience in diabetes, the recentness of diabetes epidemic in our population may explain the absence of these risk factors."

2. Line 276, as limitation, "glycaemic values on venous and capillary plasma are identical but that plasma measures are 11% higher than whole blood measures."   This is true and known previous to starting investigation, therefore, sensitivity analysis or comments in underestimated range of prevalence is considered desirable if this difference really cause underestimation in the RESULTS. And/or, whether the comparison of prevalence between Tessekere and other region in DISCUSSION is based on the same or similar measure methods had better be commented.

Authors would like to thank the reviewer for this remark. In order to respond, they modified the manuscript in order to indicate which studies can be directly compared with this one (page 12, lines 277-280): "In addition, the prevalence of IFG in our Tessekere sample is significantly lower than the 17.9%[17] or the 10.3%[10] observed respectively in Dakar and in urban Ghana with the same criteria and methods, which allow a direct comparison. These results"

Minor comments

1. Define "controlled" and "not controlled" in figure.

In order to clarify the terms "controlled/not controlled", authors had modified the manuscript as follows (page 10, lines 234-235) : "Finally, among individuals with FBG ≥ 126 mg/dL, 5 (23.8%) were aware of their diabetic condition, 2 (9.5%) of the diabetics were treated, and 0 diabetic individual under treatment had a FBG controlled (i.e., FBG < 126 mg/dL) (Figure 1)."

2. Discussion is structurally discursive as follows:

- Line 231-261, there is only one paragraph

Between line 231 and 261, there are 3 paragraphs, but they do not appear in the text. Would the reviewer like the authors to make three paragraphs by leaving a blank line?

- Line 248, two facts are ambiguous. If first is true, please refer or comment to previous study. And where is the second fact?

In accordance with this remark, first fact has been described as follow (page 11, lines 258-259): "First, in our study, the Fulani population presents a very high proportion of undiagnosed diabetes (76.19%)…". It indicates that this first fact has been showed by our study.

Furthermore, in order to clarify our purpose, (page 11 lines 264-270) has been modified as follows: "Secondly, even if Senegal is one of five African countries with the most advanced nutrition transition[15], the Fulani population is very isolated (health centers, roads and stores situated more than 5 km from camps, without motorized vehicles[31]), one of the poorest in Senegal, and seems to be just at the beginning of demographic, epidemiological and nutritional transitions. This characteristics could explain the lack of relationship between diabetes and age, as diabetes epidemic appears to be nascent in this population".

- Line 258 and Line262, two "Finally" is somewhat confusing.

In accordance with this remark and with the first remark, the first "Finally" (line 262) has been removed: "The 4.2% prevalence of diabetes found in our study is far below the 8.5% to 12.9% prevalence…"

ESPS PEER-REVIEW REPORT

Name of journal: World Journal of Diabetes
ESPS manuscript NO: 30123
Title: Type 2 diabetes in a Senegalese rural area
Reviewer's code: 01408945
Reviewer's country: Japan
Science editor: Fang-Fang Ji
Date sent for review: 2016-09-14 17:47
Date reviewed: 2016-10-19 12:05

CLASSIFICATION	LANGUAGE EVALUATION	SCIENTIFIC MISCONDUCT	CONCLUSION
[ ] Grade A: Excellent	[ ] Grade A: Priority publishing	Google Search:	[ ] Accept
[ ] Grade B: Very good	[Y] Grade B: Minor language	[ ] The same title	[ ] High priority for
[Y] Grade C: Good	polishing	[ ] Duplicate publication	publication
[ ] Grade D: Fair	[ ] Grade C: A great deal of	[ ] Plagiarism	[ ] Rejection
[ ] Grade E: Poor	language polishing	[ ] No	[Y] Minor revision
	[ ] Grade D: Rejected	BPG Search:	[ ] Major revision
		[ ] The same title	
		[ ] Duplicate publication	
		[ ] Plagiarism	
		[ ] No	

COMMENTS TO AUTHORS

Manuscript Number: 30123 Manuscript Title: Type 2 diabetes in a Senegalese rural area Corresponding Author: Duboz Priscilla et al.   The reviewer's critiques are as follows.

Major criticism:

1. Authors described as follows; The prevalence of diabetes is increasing rapidly, and it is expected that by 2040 there will be 34.2 million adults in sub-saharan Africa living with diabetes, more than double the number in 201 [2]. What is "201"?

Authors apologize for this error and corrected it : page 5 line 103 "The prevalence of diabetes is increasing rapidly, and it is expected that by 2040 there will be 34.2 million adults in sub-saharan Africa living with diabetes, more than double the number in 2015 [2]."

2. The introduction section is too long. Authors should be shorter it.

Authors reduced the introduction pages 1 and 2 lines 81-125 instead of page 1, 2 and 3 lines 81 to 132.

3. Hemocue blood glucose analyzer that authors used is very unstable measurement. Why didn't authors use the blood glucose measurement?

Authors would like to thank the reviewer for his/her remark. In fact, our laboratory is equipped since the beginning of non-communicable diseases in Africa with these Hemocue devices, chosen for four reasons: first, this device appears to be a suitable point of care (POC) blood glucose measurement device (Sudha Reddy et al., 2014); second, it has been used in validations as reference for other methods (Zueger et al., 2012); third, it is equipped with fixed analyzer calibration, means no need to recalibrate; and finally, handheld and battery-operated system are ideal for mobile settings, which is very important to us since we go to every home to interview and measure individuals.

4. Authors should measure HbA1c. Because it is very important factor to diagnose the diabetes mellitus.

Authors introduced this factors in the limitations section (page 12, lines 292-293): "Second, the measure of HbA1c are missing, but would have been important to accurately diagnose diabetes mellitus in our sample. Furthermore,…"

5. Authors described almost ? had not attended school and the majority was not depressive. However, "?" is not suitable.

"¾" has been replaced during the submission of the manuscript by the "?". Authors apologize for this mistake and wrote "three quarters" entirely to avoid this type of error (page 9, line 209):"Almost three quarters had not attended school and the majority was not depressive."

6. Authors described that 0 diabetic individuals had a FBG < 126 mg/dL (Figure 1). This expression is not suitable for medical manuscript. *

In order to clarify this sentence, and in accordance with reviewer 1's suggestion, authors had modified the manuscript as follows (page 10, lines 234-235): "Finally, among individuals with FBG ≥ 126 mg/dL, 5 (23.8%) were aware of their diabetic condition, 2 (9.5%) of the diabetics were treated, and 0 diabetic individual under treatment had a FBG controlled (i.e., FBG < 126 mg/dL) (Figure 1)."

7. In the conclusion section, authors should include only this study results and conclusions. When there are references in the conclusion section, it is not your study but others.

Authors have removed from the conclusion section the references to other studies (and removed also reference 37).

ESPS PEER-REVIEW REPORT

Name of journal: World Journal of Diabetes
ESPS manuscript NO: 30123
Title: Type 2 diabetes in a Senegalese rural area
Reviewer's code: 03494395
Reviewer's country: Taiwan
Science editor: Fang-Fang Ji
Date sent for review: 2016-09-14 17:47
Date reviewed: 2016-10-17 18:39

CLASSIFICATION	LANGUAGE EVALUATION	SCIENTIFIC MISCONDUCT	CONCLUSION
[Y] Grade A: Excellent	[Y] Grade A: Priority publishing	Google Search:	[Y] Accept
[ ] Grade B: Very good	[ ] Grade B: Minor language	[ ] The same title	[ ] High priority for
[ ] Grade C: Good	polishing	[ ] Duplicate publication	publication
[ ] Grade D: Fair	[ ] Grade C: A great deal of	[ ] Plagiarism	[ ] Rejection
[ ] Grade E: Poor	language polishing	[ ] No	[ ] Minor revision
	[ ] Grade D: Rejected	BPG Search:	[ ] Major revision
		[ ] The same title	
		[ ] Duplicate publication	
		[ ] Plagiarism	
		[ ] No	

COMMENTS TO AUTHORS

The introduction provides sufficient background and includes all relevant references. The research design is appropriate. The methods are adequately described. The results are clearly presented. The conclusions are supported by the results. I therefore recommend to accept this manuscript for publication.

Authors would like to thank the reviewer for his/her comment.

ESPS PEER-REVIEW REPORT

Name of journal: World Journal of Diabetes
ESPS manuscript NO: 30123
Title: Type 2 diabetes in a Senegalese rural area
Reviewer's code: 00160386
Reviewer's country: India
Science editor: Fang-Fang Ji
Date sent for review: 2016-09-14 17:47
Date reviewed: 2016-10-18 15:12

CLASSIFICATION	LANGUAGE EVALUATION	SCIENTIFIC MISCONDUCT	CONCLUSION
[ ] Grade A: Excellent	[ ] Grade A: Priority publishing	Google Search:	[ ] Accept
[ ] Grade B: Very good	[ ] Grade B: Minor language polishing	[ ] The same title	[ ] High priority for publication
[ ] Grade C: Good		[ ] Duplicate publication	
[Y] Grade D: Fair	[Y] Grade C: A great deal of language polishing	[ ] Plagiarism	[ ] Rejection
[ ] Grade E: Poor		[ ] No	[ ] Minor revision
	[ ] Grade D: Rejected	BPG Search:	[Y] Major revision
		[ ] The same title	
		[ ] Duplicate publication	
		[ ] Plagiarism	
		[ ] No	

COMMENTS TO AUTHORS

The Authors Duboz Priscilla et al report on the prevalence of diabetes in rural Sengalese population.

Although reporting prevalence in a low economic background is important, There is evidence of published reports in rural Senegal.Quick google search shows a report as early as in 2012 giving an estimate of 4% in Senegal.Hence it is not correct to say that this is the first study.Such a statement to be deleted wherever it is stated.

Authors would like to thank the reviewer for his/her remark. In order to correct the manuscript, authors has modified it as follows: (pages 6, lines 132-133): "Information about diabetes prevalence in Senegalese rural areas are scarce." And page 10, lines 241: "The present study is to our knowledge one of the first to evaluate the prevalence of diabetes and impaired fasting glucose in a rural area in Senegal"

References: 1. Global estimates of the prevalence of diabetes for 2010 and 2030 in   "Diabetes Research and Clinical Practice" 2012

2. Diabetes Burden in Urban and Rural Senegalese Populations in "Int Journal of endocrinology" 2015

Reference has been added in the manuscript (page 12, lines 275-276): "Finally, the 4.2% prevalence of diabetes found in our study is comparable to the 4.6% observed in rural Senegal by Seck and collaborators[32]"

The whole manuscript needs english and grammar corrections It is suggested to state that Identification of principle components with hypoglycemic effects is important in the traditional plants that the senagalese use.

In accordance with reviewer 2's remark, this sentence of the conclusion section has been removed.

ESPS PEER-REVIEW REPORT

Name of journal: World Journal of Diabetes
ESPS manuscript NO: 30123
Title: Type 2 diabetes in a Senegalese rural area
Reviewer's code: 00037668
Reviewer's country: United States
Science editor: Fang-Fang Ji
Date sent for review: 2016-09-14 17:47
Date reviewed: 2016-10-22 00:02

CLASSIFICATION	LANGUAGE EVALUATION	SCIENTIFIC MISCONDUCT	CONCLUSION
[ ] Grade A: Excellent	[ ] Grade A: Priority publishing	Google Search:	[ ] Accept
[Y] Grade B: Very good	[Y] Grade B: Minor language	[ ] The same title	[ ] High priority for
[ ] Grade C: Good	polishing	[ ] Duplicate publication	publication
[ ] Grade D: Fair	[ ] Grade C: A great deal of	[ ] Plagiarism	[ ] Rejection
[ ] Grade E: Poor	language polishing	[ ] No	[Y] Minor revision
	[ ] Grade D: Rejected	BPG Search:	[ ] Major revision
		[ ] The same title	
		[ ] Duplicate publication	
		[ ] Plagiarism	
		[ ] No	

COMMENTS TO AUTHORS

This study investigates the incidence of T2DM in a Senegalese population in a rural area of the country. The population in question has historically been pastoral and with the changes in nutrition and in labor structure it is now undergoing a major social overhauling.   The study appears to be properly conducted and written (for the most part). No major criticisms were noted.

Minor:

a. line 86: date is missing and the sentence starting after the period needs restructuring

Corrections had been made and the manuscript has been modified as follows : "The prevalence of diabetes is increasing rapidly, and it is expected that by 2040 there will be 34.2 million adults in sub-saharan Africa living with diabetes, more than double the number in 2015 [2]. This increasing rate of diabetes mellitus is an additional burden to a region that continues to bear the brunt of communicable diseases, such as tuberculosis and malaria[3]."

b. not clear if the comments (line 305 on) are from the authors or others and should probably be

incorporated better in the body of discussion.

In accordance with reviewer 4's remarks, this sentence has been removed from the manuscript.

ESPS PEER-REVIEW REPORT

CLASSIFICATION	LANGUAGE EVALUATION	SCIENTIFIC MISCONDUCT	CONCLUSION
[ ] Grade A: Excellent	[ ] Grade A: Priority publishing	Google Search:	[ ] Accept
[ ] Grade B: Very good	[Y] Grade B: Minor language	[ ] The same title	[ ] High priority for
[Y] Grade C: Good	polishing	[ ] Duplicate publication	publication
[ ] Grade D: Fair	[ ] Grade C: A great deal of	[ ] Plagiarism	[ ] Rejection
[ ] Grade E: Poor	language polishing	[ ] No	[ ] Minor revision
	[ ] Grade D: Rejected	BPG Search:	[Y] Major revision
		[ ] The same title	
		[ ] Duplicate publication	
		[ ] Plagiarism	
		[ ] No	

COMMENTS TO AUTHORS

The authors examined the prevalence of diabetes in the rural population of Tessekere (Senegal) and to investigate the associated risk factors.   The findings are interest, however, I have several concerns.

1. Authors should described information of diabetes in the present subjects in greater detail. Especially, author should add the HbA1c levels in the subjects. In addition, are all subjects type-2 diabetes in the present study?

In accordance with reviewer 2's remarks, the following sentence has been added to the manuscript concerning HbA1c (page 12, lines 291-293): "Second, the measure of HbA1c are missing, but would have been important to accurately diagnose diabetes mellitus in our sample." Furthermore, as Mbanya et al. (2010) point out: "In published studies, prevalence of the disorder [Type 1 diabetes] is low: 0·33 per 1000 in Nigerian (Afoke et al., 1992)". We then suppose that over our 500 subjects, all of our diabetic subjects were type 2 diabetes.

2. The reviewer would like to know the characteristics of diabetes in a rural area in Senegal compared with other countries.

We would like to thank the reviewer for his/her remark. The following sentence in the introduction would fit with this demand (page 5 lines 110-113): "Diabetes was virtually non-existent in West African populations about three decades ago[5,6]. But today, it is estimated that 4% of urban West African adults have diabetes[7], and this figure is higher in some countries: 7.7% in Ghana[8], 4.2% in Kenya[9], 4% and 7.7% in rural and urban Guinea respectively[10], 8.8% in Nigeria[11] for example" In accordance with this, and with several remarks of reviewers, the following sentences have been added to the manuscript (page 12, line 275-279) : "Finally, the 4.2% prevalence of diabetes found in our study is comparable to the 4.6% observed in rural Senegal by Seck and collaborators[32] but is far below the 8.5% to 12.9% prevalence reported for all other parts of the world[2]. In addition, the prevalence of IFG in our Tessekere sample is significantly lower than the 17.9%[17] or the 10.3%[10] observed respectively in Dakar and in urban Ghana with the same criteria and methods, which allow a direct comparison."

3. In table2, the authors examined odds Ratios for FBG ≥ 110 mg/dL and FBG ≥ 126 mg/dL by sex, age, and education level and body mass index in Tessekere. Why did the authors select the variables?

Authors selected the variables in relation to the modifiable and non-modifiable risk factors identified in the literature and described in the introduction (page 5-6, lines 113-126): "Among non-modifiable risk factors, **age** is one of the most important, […]. Trends in **gender**, an another non-modifiable risk factor, […] Urbanization is then associated with physical inactivity and **adiposity**, another modifiable risk factors for diabetes. […] Finally, Peer et al.[12] also mentioned that **psychosocial stress** or **depressive syndrome** might be considered as a potential risk factor for diabetes." Urbanization was not included since we didn't have data on urban settings, and education level was introduced because several studies took it into account in their analyses. We hope that this justification will respond to the reviewer's demand.

4. There are several typo-errors throughout the text: e.g. prevalences

These mistakes have been corrected.