



SDI Review Form 1.6

Journal Name:	British Journal of Medicine and Medical Research
Manuscript Number:	2013_BJMMR_7180
Title of the Manuscript:	Excess Lifetime Cancer Risk due to gamma radioactivity in and around Warri Refining and Petrochemical Company in Niger Delta, Nigeria
Type of the Article	Cross-sectional study

General guideline for Peer Review process:

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound.

To know the complete guideline for Peer Review process, reviewers are requested to visit this link:

(<http://www.sciencedomain.org/page.php?id=sdi-general-editorial-policy#Peer-Review-Guideline>)



SDI Review Form 1.6

PART 1: Review Comments

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
Compulsory REVISION comments	<p>The paper reports relavant natural radioactivity and excess lifetime cancer risk data in an important area around Warri Refining and Petrochemical Company in the Niger Delta region.</p> <p>Some corrections should be done as follow</p> <p>The authors should inform if the amount of samples may be deemed as satisfactory for the objectives of the research.</p> <p>Numbers of samples should be added in subtitle "material and method"</p> <p>New subtitle named "Samples Activity Concentrations" should be added after subtitle of "Results and Analysis" It should be contained average activity concentrations of naturally occurring radionuclides (^{40}K, ^{232}Th and ^{238}U or ^{226}Ra)</p> <p>The results of the research containing activity concentrations of ^{40}K, ^{232}Th and ^{226}Ra and basic statistical parameters such a min, max, main, standard deviation should be added in table 3</p> <p>line 84 should be done, changing "$\epsilon_{\gamma} = A_{\text{net}} / A_{\text{S}} \cdot Y_{\gamma} \cdot M_{\text{S}} \cdot t$" to $A_{\text{S}} (\text{Bq kg}^{-1}) = A_{\text{net}} / \epsilon_{\gamma} \cdot Y_{\gamma} \cdot M_{\text{S}} \cdot t$</p>	<p>The objective is basically to access the cancer rsik due to natural radionuclides in soil samples inside the refinery and to the local community around. The number of soil samples collected were such that they were representative of each community. The number of samples were limited because of accessibilty and restivness of the community to sample collection. However, they were considered relatively enough for the purpose of the study.</p> <p>The observed and suggested editorial changes have been effected. We have reported range of values and mean and Std in table 3 now table 2 following the deletion of table 1.</p> <p>These changes have been effected as suggested.</p>



SDI Review Form 1.6

	<p>Minimum Detectable Activity (MDA) is unclear.</p> <p>In line 55-56 Sentence of "They were sealed for 28 days for the short lived members of Radon – 222 and Radon – 220 series to reach a secular equilibrium." Should be changed to "They were sealed for 28 days for the short lived members of Uranium and Thorium series to reach a secular equilibrium"</p> <p>In line 108 should be Corrected by changing ^{40}C, ^{323}Th to ^{40}K, ^{232}Th</p>	<p>With the measurement system used in this present work, detection limits obtained were 17.2BqKg^{-1}, 4.2BqKg^{-1} and 5.1BqKg^{-1} for ^{40}K, ^{226}Ra and ^{232}Th respectively. Values below these numbers were taken in this work as being below the detection limit (BDL) of the detector.</p>
<u>Minor</u> REVISION comments	<p>Some corrections in line 78-79 should be done, changing "631.00 Bq/kg for ^{226}Ra (1760 MeV) and 11.00 Bq/kg for ^{232}Th (2.615 MeV)" to 631.00 Bq/kg for ^{226}Ra (1760 MeV of ^{214}Bi) and 11.00 Bq/kg for ^{232}Th (2.615 MeV of ^{208}Tl)"</p>	<p>This has been effected on the revised version</p>
<u>Optional/General</u> comments	<p>Table 1 should be omitted</p>	<p>Table 1 has been deleted from the paper as suggested.</p>