



SDI Review Form 1.6

Journal Name:	<u>Cardiology and Angiology: An International Journal</u>
Manuscript Number:	2014_CA_8936
Title of the Manuscript:	Assessment of a cardiac rehabilitation program based on the Borg RPE Scale and six-minute walk test
Type of the Article	Original Research Article

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)
<u>Compulsory</u> REVISION comments		
<u>Minor</u> REVISION comments		
<u>Optional/General</u> comments	Whole structure of this study is wrong. First of all, the sample size is too small to reach a valid and reliable conclusion. I think more people might be included for such a study and it was not so hard to persuade the people to participate in an exercise training program.	We agree that the sample size is not large. However our conclusion is certainly valid as for all participants the 6MWT showed an improvement following a 6 weeks CR program assessed by 6MWT. Studies in clinical setting, especially in rural areas with small CR units are difficult to conduct and usually do not have large numbers of patients. It is in fact very difficult to recruit patients in rural areas due to distances between home and hospital. However information from these rural CR units need to be also published. In addition we see that the level of recommended exercise did have an effect as the patients that did not follow the home program had less of a change in 6MWT



SDI Review Form 1.6

	In addition in this paper, it was written that minimum 10% improvement in 6MWT scores between pre and post-testing is necessary to ensure a real change occurred in cardiac diseased populations. But improvement of functional capacity in most of the participants were much lower than this level. Secondly there is not a control group to compare the results. If study had a control group, improvements in 6MWT scores of the control group would be more significant than the study group. Because it is well known that exercise training programs improves maximum walking distance of all people including healthy ones and ones with cardiovascular diseases and/or	It is especially important in this instance as it is the smaller, rural CR units that use the Borg RPE scale. Therefore to have this scale validated as an alternative for use in exercise prescription is an important result to be published. From Table 3 it can be seen that the median improvement in 6MWT was greater than 10% Whether the control group would be more significant is conjecture, but we agree that this is a likely outcome as the control group would be healthy. However we note that the patients not participating in the home program did not improve to the same extent indicating that the prescribed exercise based on the Borg RPE scale has to be followed and that time only would not lead to improvement in 6MWT
--	---	---



SDI Review Form 1.6

	peripheral artery diseases. Previously in many reports, it was shown that exercise programs may improve the functional capacity upto 50%, even in some studies more than 100%. So the results of this study are not meaningful. 10 of fifteen patients was male and	Our study aimed to validate the Borg RPE scale as a means for exercise prescription. No study has been reported that shows that using the Borg RPE scale in fact leads to an improvement in CR outcome as measured by 6MWT. Current exercise programs base their exercise prescription on graded exercise tests, which was not done in the current study. Therefore it is not known whether a self-reported exertion report is sufficient to prescribe an exercise level, which leads to improvement in functional capacity! We like to thank the reviewer for the thought provoking comments. However we disagree with the reviewer as having shown that the use of the Borg RPE does lead to improvement in functional capacity is a meaningful finding as it substantiates that the current practice in rural CR units is valid! It is not the essence of how much improvement or whether it reaches 10%, 50% or 100% that makes a study meaningful . In addition as the reviewer is aware it also depends on the study group and how soon the CR is commenced post intervention as well as the type of
--	--	--



SDI Review Form 1.6

	improvement ratio in males was only 5.3%. As I said before if there was a control group, this ratio (5.3%) would be much less than the improvement ratio of the control group. Thirdly most of the people undergoing surgery or suffering AMI can not walk longer distances in the early subsequent days. This situation may be due to psychological status or chest pain or fear. Two thirds of the study group were in the first month of the event. According to me, those people in this study would walk longer distances at the end of six weeks even they did not undergo an	intervention (CABG or PCI). We discussed this issue and have pointed out that our patient group has had a longer post op recovery period and therefore the expected improvement should be less. However even in this population we do see an improvement following CR. We agree with the reviewer and this is a common problem with the current literature where CR is commenced very early especially in CABG patients and therefore the improvements are of course greater. Since our CR program commenced around one month post intervention we do not see the issue of chest pain or fear. Even CABG patients, which require longer convalescence than PCI have had ample time to do so. Any patients that were not ready for CR were not included in the study, which includes those with chest pain. We agree with the reviewer that this could be the case – however it also shows that utilising the Borg RPE scale does have an impact on CR outcome since patients that did not follow the home program did not
--	--	--



SDI Review Form 1.6

	exercise program. Finally 9 of 15 participants underwent home walking programs. So how can we ensure that the improvement in functional capacity was due to the cardiac rehabilitation based on the Borg RPE scale? As a matter of fact there was no improvement in functional capacity as I said before. But if we accept that there was an improvement, it might be due to the home walkings.	improve The home program is part of the exercise prescription. Overall the 6 weeks program brought about an improvement in the 6MWT with respect to prescribing an exercise regimen based on the Borg RPE scale, which was the aim of the study.
--	---	--



SDI Review Form 1.6

PART 5: Reviewer Details:

Name:	Anonymous reviewer, reviewer preferred to be anonymous.
Department, University & Country	