Equator Network: Conference Abstract Guideline Checklist

Items to Include when Reporting a Randomized Trial in a Journal or Conference Abstract

Item	Description	Reported on line number
Title	Identification of the study as randomized	
Authors *	Contact details for the corresponding author	
Trial design	Description of the trial design (e.g. parallel, cluster, non-inferiority)	
Methods		
Participants	Eligibility criteria for participants and the settings where the data were collected	
Interventions	Interventions intended for each group	
Objective	Specific objective or hypothesis	
Outcome	Clearly defined primary outcome for this report	
Randomization	How participants were allocated to interventions	
Blinding (masking)	Whether or not participants, care givers, and those assessing the outcomes were blinded to group assignment	
Results		
Numbers randomized	Number of participants randomized to each group	
Recruitment	Trial status	
Numbers analysed	Number of participants analysed in each group	
Outcome	For the primary outcome, a result for each group and the estimated effect size and its precision	
Harms	Important adverse events or side effects	
Conclusions	General interpretation of the results	
Trial registration	Registration number and name of trial register	
Funding	Source of funding	

*This item is specific to conference abstracts. doi:10.1371/journal.pmed.0050020.t001

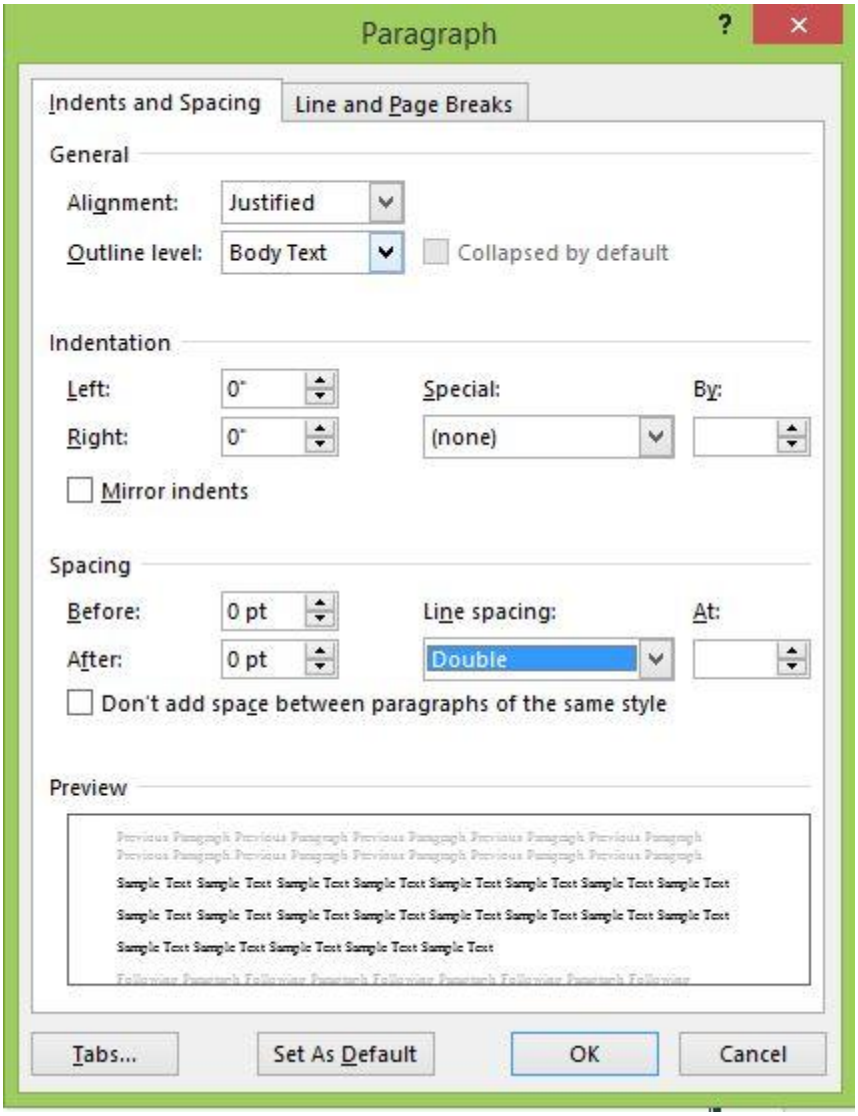
Source: Hopewell S, Clarke M, Moher D, Wager E, Middleton P, et al. CONSORT for Reporting Randomized Controlled Trials in Journal and Conference Abstracts: Explanation and Elaboration. PLoS Med. 2008; 5 (1): e20. Doi: 10.1371/journal.pmed.0050020. Available [online] at URL: http://journals.plos.org/plosmedicine/article/file?id=10.1371/journal.pmed.0050020&type=printable Accessed on 3rd October, 2017.

Please Also Refer Guidelines to Authors for Submission (Version: December, 2016): http://aiota.org/Ijot/AuthorG

Please Note the Instructions:

1. Include only 1 or 2 key references (references should strictly follow the citation method as given in the recent IJOT guidelines and in the below examples)
2. No illustrations (tables/graphs/figures) are needed for OTICON abstract submissions
3. Formatting: In MS Office Word Format (2010-2013 or higher version in .doc or .docx format only) **(Please see the Figure below)**

- Font style: Times New Roman
- Font size: 12
- Line spacing: Double
- Alignment: Justified



- Title and Abstract Headings: **Bold** and **C**apitalize **E**ach **W**ord style (e.g.) **K**ey **W**ords
- Use Colon (:) after the Headings
- Please run a grammar and spelling check before submission (Language: American (US) English)

Title: Efficacy of Virtual Training as an Adjunct to Conventional Occupational Therapy Program in Adults with Complex Regional Pain Syndrome: A Randomized Controlled Study

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Background: Complex Regional Pain Syndrome (CRPS) is a chronic pain condition which commonly occurs after trauma to an upper limb. Recent evidence suggests that body perception disturbance (BPD) is becoming an increasingly recognized feature of CRPS with a reported prevalence ranging from 54.4% to 84%. The literature suggests emerging therapeutic approaches that target central mechanisms for the resolution of BPD. Virtual training is one of the methods of treatment which is less explored in this condition.

Objectives: To ascertain the efficacy of virtual training program as an adjunct to conventional occupational therapy in adults with post traumatic type I complex regional pain syndrome in upper limb

Study Design: Randomized double-blinded treatment controlled study

Methods: Thirty adult (both males and females, aged 25 to 55 years) patients diagnosed with type I complex regional pain syndrome (CRPS) in post-traumatic upper limb conditions, were randomly assigned either to experimental group (virtual training and conventional occupational therapy) or to control group (conventional occupational therapy) after screening on their first visit to an outpatient department. The patients were assessed prior to therapy and at weekly intervals for a period of four months. Patients in experimental group received virtual training four days a week along with conventional therapy for six days a week with each therapy session lasting for one hour, whereas patients in control group received only conventional therapy for six days a week with each therapy session lasting for forty-five minutes. The outcome measures utilized were: quadruple visual analog scale (VAS) for pain intensity, and the Bath CRPS Body Perception Disturbance Scale for BPD. The patients and the treating therapists were blinded to treatment group assignment, which was assigned by sealed envelope.

Results: Number of patients randomized and analyzed in experimental group were N=14 and control group were N=16. No difference between the groups was found for pain intensity with mean score ± 2SD for experimental group vs. control group as: 2.45 ± 1.23 vs. 4.78 ± 1.56 (P=0.34, 95%CI: -1.16 to 3.32), however, the treatment group showed significantly more improvement in BPD after the virtual training program than the control group. The difference in the Bath CRPS Body Perception Disturbance Scale for BPD between the two groups was significant with mean score ± 2SD for experimental group vs. control group as: 18.45 ± 2.23 vs. 24.78 ± 3.56 (P<0.03, 95%CI: 44.50 to 55.32). Virtual training program is safe if appropriate eligibility criteria is followed, and no adverse reactions to therapy were observed.

Conclusions: Virtual training program is efficacious as an adjunct to conventional occupational therapy in post-traumatic type I CRPS, especially for improving body perception disturbance.

Key Words: Body Perception Disturbance, Occupational Therapy, Pain, Type I Complex Regional Pain Syndrome, Virtual Training

Trial Registration: Not applicable

Funding: Study was funded by ABC Company

Acknowledgements: We would like to thank the Director of ABC Company for kind permission and funding for the conduct of this project and our patients and their care-givers for informed written consent to participate in this study.

References:

1. Lewis J, McCabe CS. Body Perception Disturbance (BPD) in CRPS. Current and emerging therapeutic approaches including desensitization techniques and mirror visual feedback, together with the introduction of a new clinical tool for the early identification of BPD. In: Moskovitz P Eds. Practical Pain Management. PPM Communications, Inc. 2010. p. 60-66. Available [online] at URL: http://rsds.org/wp-content/uploads/2015/02/PPM_April2010.pdf Accessed on 3rd October, 2017.

2. Giummarra MJ, Gibson SJ, Georgiou-Karistianis N, and Bradshaw JL. Mechanisms underlying embodiment, disembodiment and loss of embodiment. *Neurosci & Biobehav Rev*. 2008; 32(1):143-160.