GAVIN PUBLISHERS

Yoga practice & Physiotherapy

Harnagle R. Yoga Practice Phys Ther 2017: J-130.

Research Article

Journal Article: Scrutiny Points Guidelines

Rajendra Harnagle

Department of Community Medicine, Sakshi Medical College, Madhya Pradesh, India

*Corresponding author: Rajendra Harnagle,Community Medicine and Medical Superintendent Sakshi Hospital, Guna, India. Tel: +07542-247803; E-Mail: rajendra.harnagle@gmail.com

Citation: Harnagle R (2017) Journal Article Scrutiny Points Guidelines. Yoga Practice Phys Ther 2017: J-130.

Received Date: 26 May 2017; **Accepted Date:** 30 May 2017; **Published Date:** 6 June, 2017

Purpose of This Paper

The purpose of this paper is to help give comprehensive knowledge & practical step by step procedure starting from the Title to Bibliography. All aspects of the paper have been taken from quality work accepted worldwide. This will be of great help to the younger scientist on one hand & on other hand for accessing the paper by the reviewer. To summarize, this paper has been divided into several group for easy approach to a specific point.

- Major 7 group of a scientific paper.
- Title group:2.
- Abstract :11 groups.
- Introduction:2groups.
- Material & Methods:2 groups.
- Methods:6 groups.
- Results:3groups.
- Table: 1group.
- Figure:1 group.
- Dicussion:3 groups.
- References: 3.

The first 10 paragraphs deal with Tittle & Abstract of the paper.

7 -Parts of A Scientific Paper

- Title of the paper.
- Abstract of the paper.
- Introduction of the paper.
- Material and Methods
- Results of the study including Tables.
- Discussion
- References

Title of the Paper

- Should convey the research question which is to be tried in the current paper.
- The paper is to made Interesting to attract attention.
- Attract attention by stating facts as well as the likely outcome.
- Objective of the paper should be clear & measurable.
- Key features, if any, should be mentioned.

Title-Checklist

- Are the title and research question closely related?
- Is the title objective in tone?
- Are special features of the study mentioned?

Abstract Structure

- Introduction/Background/Research question.
- Methods.
- Results.
- Conclusions
- Key words.

Abstract-Introduction

- Answer the question, "why study done?"
- Should use Plain English.
- No jargon, to be avoided.
- No abbreviations, acronyms used.
- End with one line research question in form of the study's objective.

Abstract-Methods

- Mention the study design in brief.
- Subjects are needed to describe for inclusion & exclusion Criterion.
- What was measured?
- Analysis of data need to be summarizes.

Abstract-Results

- Emphasize main findings.

- Focused rather than broad based.
- State key results in words, followed by numbers.
- Use confidence intervals and P values.

Abstract-Conclusions

- Should be specific.
- Mention implications of the results.
- Should not be a repetition of the results.
- Gold Reference test.

If the conclusion could have been written without accesses of the results than nothing has been concluded from the study.

Abstract-Checklist

4 points Are ThereBackground, Methods, Results, Conclusions sections along with key words?

- Are the four or five main features of the study mentioned?
- Are the key results of the study stated in words?
- Do the conclusions follow from the results?
- Is it as per the guidelines of the journal?

Causesfor Rejection of Abstract

- Dull topic with lots of previous research.
- No context of the research.
- Small sample size.
- No numbers all talk.
- All numbers, no talk.
- Too short/Too long.
- Poor readability.
- Sloppiness/Abbreviations.

Introduction

- Purpose to be included in detail in introduction.
- The content should attract readers.
- Tell the readers what to expect.

Content of Introduction

Four elements should be included:

- Background of the research question
- Previous research in the area
- Problems or limitations in earlier research
- Additions in the present paper?
- Any information which does not fit in any of the above categories is redundant.

Background of Research Question

- Should start introduction with few words about the overall topic of the research.
- Should avoid too many details.
- Should be focused.
- Should avoid triviality - should tell something newor tell in a novelway.
- Should be reader friendly.

Previous Research in the Area

- No need for complete literature review.
- Summary should suffice.
- Should be synthetic instant of pedantic.
- If no earlier research, should explain why.
- Discuss existing beliefs and their origins.

Problems with Past Research

- Be specific in limitations of past research-Sample, measurements, etc.
- Should not criticize unless present work is an improvement.
- Should not be hypercritical.
- Sometimes there may be nothing wrong with previous research but studies may show conflicting results.

Introduction-Additions in The Present Paper

- Introduction should conclude by telling the reader about improvements in present paper.
- Innovative features of:Design, Sample, Measurement methods.
- If it expands on previous work, should mention so.

Introduction - Checklist

- Are the four major elements covered in four paragraphs (background, existing research, problem with previous research, your improvement).
- After reading introduction can reader understand why the study was done and how it is an improvement on previous studies?
- Was objective tone used when criticizing previous research.
- Did it address how the study addressed previous problems.
- Is there anything superfluous in the introduction?

Material and Methods

- What type of study (Design)?
- Whom/what were studied (Subjects)?
- What were measured (Measurements)?
- How was data analyzed (Analysis)?

Material and Methods-Continued

- Close link between the results section and the methods

- If some findings are mentioned under results, then how they were measured should have been described in the methods section.

Methods-Design

- The study design should be mentioned.
- If more than one design used each should be described and justified.
- Unnecessary words in describing the study design for e.g., "Prospective" Randomized Trial should not be used.

Methods-Subjects and Settings

- Where the study was done?
- How the subjects were chosen?
- Sample size.
- Sampling plan.
- Case definition.
- Inclusion and exclusion criteria
- How controls were chosen (in case control study)?
- How random allocation was done (in RCT)?
- How allocation concealment was done (in RCT)?

Methods-Measurements

- Should present in a systematic manner.
- Case definition.
- Predictors, outcome - how measured?
- Whether blinded?
- Observer error/instrument error – how reduced?
- Measures of observer/instrument agreement.

Weighing the Pig(Figure 1).

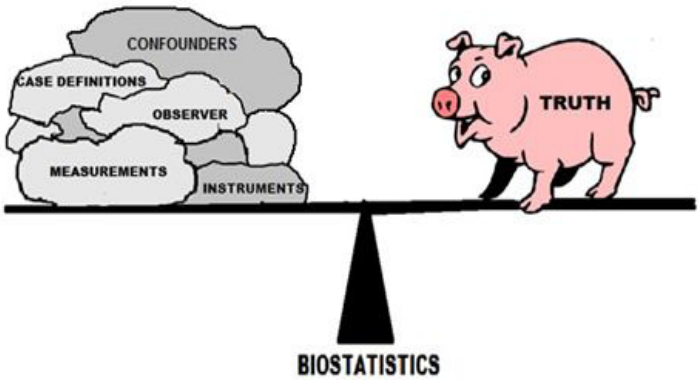

Figure 1:Weighing the Pig.

Methods-Data Analysis

- Statistical procedures used with adequate references should be explained.
- Statistical packages used.
- Power and sample size calculations.
- Effect size, variability, Type I and Type II errors.
- Tests of significance: Parametric/non-parametric/ Chi squares, RR/OR with 95% confidence intervals.

Methods-Checklist

- Could the reader replicate the study with given information?
- Was study design mentioned?
- Have measurements been described? Quality control?
- Has effect size, power and sample size/methods of sampling discussed?
- Data transformation discussed? (If used).

Results

- Major scientific contribution.
- Distinguish data from information.
- Are there irrelevant facts &figures?
- Results may be: Descriptive (summary statistics), Analytic (P values & confidence intervals).

Results-Continued

- Effect size the star of the show.
- May be multi-starrer with large number of effect sizes.
- "Triage" to pick up 5-10 relevant ones.
- Sort the predictor and outcome variables of each effect size.
- Measurement scales should dictate statistical tests of significance.

Results-Continued

- Commonly used measures of effect size: RR/OR, Mean difference, Coefficient of correlation.
- These are point estimates.
- Next step is 95% CI of these estimates to determine precision.
- Multivariate analysis if indicated.

Results-Writing Style

- Focus should be on main results.
- Simple style (target 10-year-old I.Q.).
- Should not be narration around tables and figures.
- Should complement tables and figures.

Results-Checklist

- Were basic results presented?
- Are main effect sizes easy to locate?

- Does the text complement the tables/figures?
- Is the level of precision commensurate with sample size?
- Unusual and surprising result put in proper context?

Tables 9 Points Checklist

- Title sufficiently descriptive.
- Rows and columns should line up neatly.
- Each column centered around heading.
- Denominators of column heading.
- Row units.
- Any superfluous data.
- Meaning of each item clear.
- Can few tables be combined?
- Are all tables cited in the text? Are they in order?

Figures-Checklist

- Does every figure make its point clearly?
- Are the axes, bars, lines, points labeled?
- Are the scales correcting?
- Does each figure have a legend?
- Are the figures numbered? In order as in text?
- Does the text complement the information in the figure?

Discussion

- Common pitfalls:
- Repetition of results.
- Boring summaries of previous studies.
- Mention of few limitations.
- Insipid conclusions.
- All adds up to a dull discussion

Discussion 6 Points for Appraisal

- What exactly did the study show? Relevance?
- How else could the results be interpreted?
- Have other studies come to same conclusions or there is disagreement in the field?
- What are the present study's strength and weaknesses?
- Now where do we go from here? Implications, conclusions and recommendations.
- Next step is linking the paragraphs bringing out the above aspects.

Discussion-Checklist

- Key findings presented with relevance?
- Strength of conviction?
- Alternative explanations?
- Limitations and strengths discussed?
- Recommendations?
- Has any new data emerged not mentioned in results? If so should be shifted to results section.
- Linking of paragraphs?
- Remove trivial and superfluous points.

References

- Indicates the author's familiarity with the field.
- Directs reader to more information on topic.
- May provide sources for methodology.
- Can also indicate referees for the paper.
- Vancouver system.

References-Fundamentals

- All statement of facts/figures should indicate a reference (except those of the study).
- May not apply to well established facts.
- Should read the whole article to grasp the context.
- They should appear in order as in text.
- Results section should not cite reference
- References should be updated periodically.

References

1. The CONSORT statements.
2. The STARD statement.
3. The STROBE statements.
4. MOOSE Statement.
5. PRISMA.
6. Uniform Requirements for Manuscripts Submitted for Medical Journals (2006) International Committee of Medical Journal Editors: 1- 35.
7. Browner WS(2012) Publishing and Presenting Clinical Research. In: 3. Wolters Kluwer and Lippincott Williams & Wilkins, Philadelphia:1-224.
8. Bowers D, House A, Owens D (2006) Understanding Clinical Papers. In: 2West Sussex, John Wiley and Sons Ltd., Reprint 2011: 1-244.