



SCIENTIFIC WRITING

"Education for community development"

1st & 2nd March 2014

Dr. Faraj O. Alkizim

Objectives

Types of publications

Structure of a Scientific Paper

Publishing process



Types of Publications

- Original Research
- Case Reports / CaseSeries
- Workshop reports
- Systematic Reviews

- Meta-analysis
- Short communications
- Commentaries
- Letters to the editor



Case Report



Open Access

Case report

Malaria complicated by gangrene: a case presentation and review

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¹School of Medicine, University of Nairobi, PO Box 30197-00100, Nairobi, Kenya, ²Department of Human Pathology, University of Nairobi, PO Box 30197-00100, Nairobi, Kenya



Review



Open Access

Review

Childhood Diarrhoea: Failing Conventional Measures, what Next?

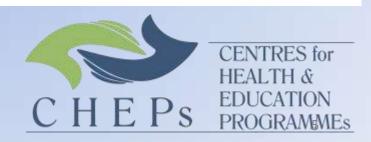
Faraj Alkizim^{1,8}, Duncan Matheka¹, Anne Muriithi¹

¹Department of Medical Physiology, University of Nairobi

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Key words: Diarrhoea research, faecal biotherapy, Gastroenteritis, Infant mortality, MDG, Nonconventional treatment

Received: 23/02/2011 - Accepted: 03/04/2011 - Published: 24/04/2011



Original Research

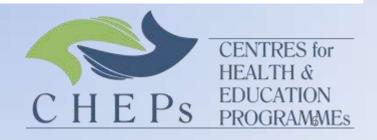
Matheka et al. Afr. J. Pharmacol. Ther. 2012. 1(1): 30-34

African Journal of Pharmacology and Therapeutics Vol. 1 No. 1 Pages 30-34, 2012

Open Access to full text available at http://www.uonbi.ac.ke/journals/kesobap/

Research Article

Peculiar glycemic patterns in alloxaninduced diabetes animal model



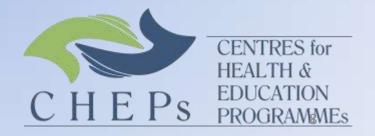
Paper Title

- 3 common types:
 - Question: Can PF Correction Increase Profits?
 - <u>Summary</u>: Design and Testing of a Small Power Company
 - 2-Part: Power System Operation: How to Survive an Emergency



Paper Title 2

- How long is it?
- Ensure that it is <u>appropriate</u> after reading the paper.



Other components?

Journal of Diabetes and Endocrinology Vol. x (x), pp. xxx-xxx, May 2012 Available online at http://www.academicjournals.org/JDE © 2010 Academic Journals

Full Length Research Paper

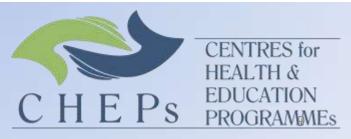
Complementary and alternative medicine for type 2 diabetes mellitus: Role of medicinal herbs

Duncan Mwangangi Matheka* and Faraj Omar Alkizim

Department of Medical Physiology, School of Medicine, University of Nairobi, P. O. Box 30197-00100 Nairobi, Kenya.

Accepted 7 August, 2012

Complementary and alternative medicine (CAM) with glucose-lowering effect is increasingly being



Authors

- How many?
- Institutional affiliations?
- Significant contribution to the work



Journal

- Where was the work published?
 - Open access journals etc
 - Different impact factors



Abstract - structured

Background: Laboratory investigations on diabetes mellitus (DM) have employed various animal models. Alloxan, a β-cell toxin, has widely been used to induce DM in animals. The current study reports peculiar glycemic patterns during alloxan DM induction.

Method: Thirty eight, six-month old *Sprague Dawley* rats were assigned to two groups: control (n=14) and experimental (n=24). Alloxan (125 mg/kg) was administered intraperitoneally to the experimental group, and an equal volume of normal saline to the control. Using a glucometer, fasting blood glucose (FBG) levels were assessed on days 0, 3, 6, 13, 20 and 27.

Results: At day 3, FBG levels were higher in the experimental group $(19.26\pm1.77 \text{ vs. } 3.21\pm0.04 \text{ mmol/l}, \text{ p<0.01})$. Thereafter, FBG levels in the experimental group reduced gradually till day 27, though remaining higher than the control $(7.59\pm0.86 \text{ vs. } 3.22\pm0.13 \text{ mmol/l}, \text{ p<0.01})$. The FBG levels in the control oscillated between 3.14 ± 0.04 and $3.26\pm0.05 \text{ mmol/l}$. Out of the 24 rats administered with alloxan, only 10 were diabetic at day 27.

Conclusion: Induction of diabetes in rats using alloxan (125mg/kg) leads to variability in glucose levels. A number of animals greater than required may be necessary to accommodate failed diabetes induction. Follow-up for at least one month is necessary before confirming induction.

Key words: animal model, alloxan, diabetes induction



Abstract

• Short (100-500 words)

- Includes:
 - Introduction (goals and objectives)
 - Methodology
 - Results
 - conclusions.
- Usually one of the last parts of the paper to be written



Original Research

Main Structure of a scientific paper

IMRAD

- Introduction
- Methods
- Results
- Discussion



Introduction 1

3 main purposes:

- Background and motivation for your topic (review of current literature on the topic).
- Describes the focus and purpose of the paper you are writing
- Overview of what is contained in the paper's various sections.

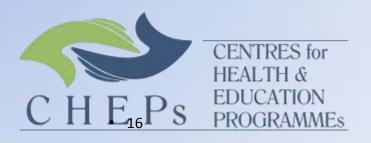


Introduction – Ask your self?

What is known in this area of study?

What is the knowledge gap?

Research question?



Methodology

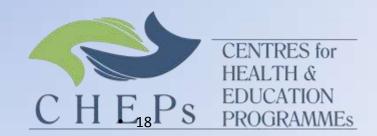
 The goal is to give the reader sufficient information to be able to repeat your work if desired

 Sample calculations, diagrams and circuits, and descriptions of equipment.



Methodology

- How was it studied? Where? When? What?
- What was the study design?
- Are the methods new? ("standard techniques" can be simply referenced)
- Ethical considerations
- Statistical analysis



Results

- What was found? Data! Data!
- Tables and Figures
- Description or guide to help reader recognize

important points



Discussion

- Major findings of the study
- What do the findings mean? Are they of any practical importance?
- Relate the findings to those of a similar study (studies)
- Consider alternative explanations of the findings
- Clinical relevance of the findings
- Acknowledge study limitations
- Make suggestions for further research



Conclusion

- Take home message
- Major accomplishments of the work
- Interesting observations, new questions, and future work here.



References/ Bibliography

- References used in the work & writing the paper
- What system was used?
 - Vancouver
 - Havard system XXX et al.,



Acknowledgements

Who funded the research work etc

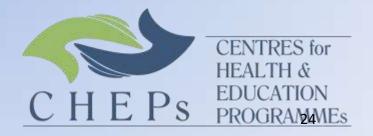
Other contributions that don't qualify co-

authorship



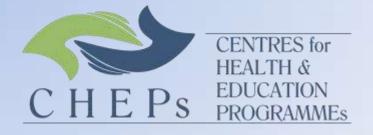
Take Away Message

- Title
- Abstract
- Introduction
- Methodology
- Results
- Discussion
- Conclusion
- References



Publication process

- Select target journal based on area of interest, impact factor, and accessibility.
- FOLLOW AUTHOR'S GUIDELINES!!!!
- PROOF READ!!! Yourself and colleagues.
- Submit only when ready: online system or as attachment depending on instructions.



Publication process





Questions?

