Prace poglądowe | Reviews

# PUBLISHING WITH IMPACT FACTOR -A BLESSING OR A CURSE?

Publikowanie ze współczynnikiem impact factor – błogosławieństwo czy przekleństwo?

# CHRISTOS LIONIS<sup>E,F</sup>

MD PhD FRCGP (Hon), Professor of General Practice and Primary Care at the School of Medicine, University of Crete, Greece\*

A – przygotowanie projektu badania | study design, B – zbieranie danych | data collection, C – analiza statystyczna | statistical analysis, D – interpretacja danych | data interpretation, F – opracowanie piśmiennictwa | literature search, G – pozyskanie funduszy | funds collection

#### SUMMARY

Reporting and publishing research from a country with limited research capacity experiences from an editor Christos Lionis as chief and associate editor that serves certain European and International biomedical journals presents key issues that researchers need to be aware when they prepare, present and submit their work to maximise their chances of publication. Sufficient reporting and all the steps: (a) Planning ahead or thinking about the type or research, (b) Choosing a suitable journal, (c) Considering what before submission – are discussed in the article. However, a successful publication with an impact factor in a well-recognized journal is not only

achieved by the fundamental steps that the author needs to undertake but also by certain "secrets" which are presented within the paper. Common pitfalls when research is reported will be highlighted by the author, while recommendations for a successful reporting of the research findings. To what extent publishing with impact factor is a blessing or a curse would be also approached within the paper. The information that this article provides is based on personal experiences of an editor in certain biomedical journals but it is important not to forget that in clinical practice it is critical to be passionate about discoveries to make an effect in regards to the patients' benefits.

Keywords: publishing, impact factor, research capacity

#### **STRESZCZENIE**

Na podstawie doświadczeń w przygotowywaniu i publikowaniu materiałów w kraju o ograniczonym potencjale badawczym Christos Lionis, który jako redaktor naczelny i zastępca współpracuje z kilkoma europejskimi i międzynarodowymi czasopismami o tematyce biomedycznej, przedstawia istotne trudności, z których powinni zdawać sobie sprawę naukowcy przygotowujący, prezentujący i zgłaszający wyniki prac do publikacji, jeśli chcą zwiększyć prawdopodobieństwo opublikowania swoich tekstów. W pracy zostały opisane sposoby prawidłowego zgłaszania wyników badań oraz poszczególne kroki: (a) myślenie perspektywiczne lub myślenie o rodzaju badań, (b) wybór odpowiedniego czasopisma, (c) rozpatrzenie konkretnych kwestii przed przekazaniem badań. Skuteczne publikowanie ze współczynnikiem

impact factor w znanym czasopiśmie jest osiągane nie tylko dzięki podjęciu przez autora niezbędnych kroków podstawowych, lecz również dzięki pewnym "tajnikom", które zostały przedstawione w niniejszej pracy. Autor opisał przykłady najczęstszych pułapek pojawiających się na etapie zgłaszania publikacji oraz swoje zalecenia dotyczące skutecznego omawiania wyników badań. Zakres, w którym publikowanie ze współczynnikiem impact factor jest błogosławieństwem lub przekleństwem, również został opisany. Informacje zawarte w niniejszej pracy są oparte na osobistych doświadczeniach redaktora czasopism biomedycznych, jednakże należy pamiętać, że w praktyce klinicznej niezbędna jest pasja odkrywcza w celu osiągania rezultatów przynoszących korzyść pacjentom.

Słowa kluczowe: publikowanie, impact factor, potencjał badawczy



# Introduction and aim of this opinion paper

Many lines in papers and books have been dedicated in providing guidance and consultation to practitioners and researchers on how to report and publish their research [1]. The aim of this paper is to illustrate the key issues that researchers should consider for the preparation, presentation and submission of their work to scientific journals; to increase their chance to publish research in a well-recognized journal. It highlights certain issues of one presentation that has been included in the programme of the 2nd International Conference of the HIGHER SCHOOL'S PULSE, Opole 7–8 May 2015, "From ideas to publications".

# Building a strategy – three pillars/steps

Sufficient reporting can follow the steps below [2]:

- (a) Planning ahead or thinking about the type or research
- (b) Choosing a suitable journal
- (c) Considering what before submission

One **essential planning technique** is to check for simple recommendations available in your context or in the literature. In this manner, **type and content of the intended research** should be earlier explored and common pitfalls could be searched. Top decide whether it is an experimental or observational study could be designed, it is an important question that needed to be clarified before conducting clinical research.

Certain recommendations that are suitable here include [2]: (a) written clinical protocol, (b) agreement of contributions by the authors at the beginning, (c) bio-ethical approval, (d) permission from the developers for implementing any questionnaire or tool, (e) present to the community the study's aim and objectives, (f) closely reading the publication history on your subject and (g) agreement on a suitable journal.

The next step in **choosing a suitable journal** is not an easy choice, and authors are suggested to consider various factors which influence their paper and among others the impact of the Journal (impact factor), the relevance and the content of the Journal, the type of the readership, the speed of peer-review and its visibility [2]. Although, the editor's policy differs per journal, the authors should take into consideration the usual patterns that editors check and review. Certain patterns are the following [2]:

- Whether the manuscript is in line with the journal's scope and content,
- Whether the manuscript addresses a subject that interests the journal's wider readership,
- The extent to which the manuscript addresses a subject interesting and pertinent,
- The extent to which the manuscript comprises clear research questions and objectives and
- The extent to which the English language is at least readable.

There are many ways to check the suitability of the journal; either traditionally by checking the journal's aims and objectives or by using electronic tools such as BioMed's Central Journal selector (http://www.biomedcentral.com/authors/authorfaq/findout). Additionally, onecan browse on the Journal Citation Report

(Web of Science) (http://wokinfo.com/products\_tools/analytical/jcr/) where the journals have been accumulated, to check the list of categories.

The **time of submission** of the manuscript is essential for the successful reporting of research findings in a biomedical journal. Even in cases where the authors are certain that everything is accounted for, a last check of solid items is strongly recommended in order to avoid possible misunderstandings and pitfalls [1].

The following recommendations are relevant for this step:

- (a) Check whether the contribution of all co-authors has been requested and whether they provide their approval,
- (b) Check if the international statements for reporting have been followed,
- (c) Note whether the final manuscript reports all relevant disclosures and
- (d) Edit and finalize the manuscript's language, references list, order and titles of the tables and figures and the author's order and affiliations.

Many journals provide a step-by-step process to assist authors regarding their manuscript preparation and conduct a last check prior to the submission of their manuscript. To that direction, certain journals recommend the authors to check the journal's editorial policies and amongst other things, invite the authors to visit the journal's policies, to check the authorship, the ethics, the trial registration, the subscription of systematic review and the standards of reporting. It is essential to stress the point on checking the standards of reporting and the authors can find all the available reporting guidelines in the EQUATOR network website (http://www.equatornetwork.org/) where checklists relevant to randomized controlled trials (CONSORT) (http://www.consort-statement.org/), systematic reviews (PRISMA) (http://www. prisma-statement.org/), diagnostic accuracy studies (STARD) (http://www.stard-statement.org/) and economic evaluations (CHEERS) (http://www.biomedcentral. com/content/pdf/1741-7015-11-80.pdf) are available.

However, in this short report it is difficult to extensively discuss all the key points that have an impact on the quality of any substantive manuscript. However, the authors need to focus on [2]:

- the title of the paper (to be short and include key words).
- the abstract (structured or not).
- the introduction (with research questions, theoretical insights and a clear aim and objectives),
- the figures, tables and their legends.

The authors also should take into consideration the journal's policies, including the standards of Ethics (certain journals are members of the Committee of Publication Ethics (COPE) (http://publicationethics.org/) and the processes of editorial decision (as are proposed by the World Association of Medical Editors (WAME) (http://www.wame.org/). It is also essential for the author to invite an experienced researcher or colleague to offer his/her advice and guidance on the manuscript, before its final submission

The above mentioned, consist of technical recommendations which are useful for the avoidance of common pitfalls that might arise when reporting research findings. However, publishing in a journal with

an impact factor is difficult, especially when the task of reporting research findings is allocated to inexperienced researchers or to practitioners who serve rural and isolated areas. In this case, published guidance from the Rural and Remote Health Care Journal could be also utilized [3,4]. In addition, certain times clinical research is designed in settings of poor research capacity and limited resources. Based on the above, a stepwise model has been published in Family Practice, which outlines a set of empirical steps and results to develop family practice research in countries with limited resources [5]. The particular model may also assist and provide guidance to healthcare practitioners and researchers to follow similar direction.

# Final key recommendations

However, a successful publication with an impact factor in a well-recognized journal is not only achieved by the fundamental steps that the author needs to undertake but also by certain "secrets":

- 1. A polite cover letter to the Editor is required, providing a clear description of what you want to say to the readers, describing how the paper is relevant to the journal' scope, the contribution to the literature, the acquaintance of your conflict of interests and the publication of the history of your paper (if any).
- 2. A good "story" is essential in order to convince and attract the Editor and the readers by explaining why your subject is important and what impact it has on the populations' health. The story could contain some key references to present: research hypothesis as an evidence-based approach, the groundwork of the research based on clinical work or other source observations and finally to show if the reasoning is built on a theoretical framework which could briefly be explained.
- 3. A *clear definition* is critical of the study setting and some well-argued statements that will justify that all pertinent information has been collected that addresses the target population.
- 4. Presenting the *validation of tools* is very essential to convince the readers that the tools were utilized in the search accurately and have been identified after a systematic search based on well-defined criteria. Additionally, efforts in testing the acceptance, understanding and feasibility of the tool in the study setting should be written and accounted for.
- 5. Although you will need some advice and guidance for data analysis, in my personal view, it

- is very important to document and attest that you have checked the normality of your data, the linear association of variables and if and to what extent it functions as a response to your research question.
- Avoid comments in the results sections and always leave space in the discussion section for this.
- 7. Seek the advice of a mentor and other experienced author either in research and clinical practice prior to any attempt to comment in the discussion section. A brainstorming discussion is always helpful to identify what the study findings say and what could be interpreted for the wider readership. It is suggested to not forget that the findings are reported for the medical community, where Scholars, researchers, policy makers and patients are included.
- 8. Take into consideration that sometimes results may not correspond to the truth and due to that reason, examining whether the *literature agrees with your findings* It is imperative. to provide potential well-based statements that could be clearly defined in the strength and limitations section.
- 9. This section is indicative of your *modesty*. An author must be modest and must check all potential discrepancies that could have an impact on the results.
- 10. The final, and probably the most important, the section of ones' training in writing is assessed in the *conclusion section*. The degree of certainty which is based on the evidence and the security that the results provided is seriously checked and the readers need to be assured that confidence is revealed in this section.

#### Conclusions

As already mentioned above, this opinion paper attempts to clarify some issues in relation to the reporting and publishing process of the research results. Techniques and 'secrets' that I deem essential in order for researchers to successfully report results to high-impact journals. The information that this paper provides is based on personal experiences of an editor in certain biomedical journals. Lastly, it is important not to forget that in clinical practice it is critical to be passionate about discoveries to make an effect in regards to the patients' benefits.

#### References

- Lionis C. Common pitfalls when reporting general practice/family medicine research: simple recommendations to prevent them. J Gen Pract 2013; 1: 117.
- 2. Twinning Population Health and Primary Care. Programme book & information. European Forum for Primary Care 5-th Biannual Conference; 2014 Sep 1–2; Barcelona, Spain. Barcelona: University Pompeu Fabra: 2014.
- Lionis C, Tatsioni A. Conducting research in rural primary care medicine: do we need more experimental research or guidance? Rural and
- Remote Health [online] 2012 Dec [cited 30.07.2013]. Available from URL: http://www.rrh.orq.au/articles/subviewnew.asp?ArticleID=2267.
- Matsumoto M, Bowman R, Worley P. A guide to reporting studies in rural and remote health. Rural and Remote Health [online] 2012 Oct [cited 27.11.2013]. Available from URL: http://www.rrh.org.au/ articles/subviewnew.asp?ArticleID=2312.
- Lionis C, Symvoulakis EK, Vardavas CI. Implementing family practice research in countries with limited resources: a stepwise model experienced in Crete, Greece. Fam Pract 2010; 27(1): 48–54.

#### Adres do korespondencji:

Prof. Christos Lionis
School of Medicine, University of Crete, Greece
University of Crete, Faculty of Medicine, Clinic of Social and Family Medicine
Voutes Heraklion Crete, PO Box 2208, Zip Code 71003
Tel: +30 281 039 4621, Fax: +30 281 039 4606
E-mail: lionis@galinos.med.uoc.gr

Received: 29.03.2015 Reviewed: 30.03.2015 Accepted: 31.03.2015

<sup>\*</sup> Christos Lionis as chief and associate editor serves certain European and International biomedical journals including BMC Family Practice (Section Editor in the domain of epidemiology and research methodology in primary care), Compassionate Health Care Journal (co-editor in chief), Family Practice (Associate Editor) and International Journal of Remote and Rural Health (European Section Editor).