SYSTEMATIC REVIEW

Macedonian Association of Medical Editors Initiatives to Advance the Integrity of Science and Publishing

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ABSTRACT

Background: In the early 20th century some unfavorable conditions and trends in science and publishing in R. Macedonia and other countries in the South Eastern Europe (SEE) Region were recognized and it became necessary to act to protect the integrity of science and publishing. The increasing number of scientific journals in biomedicine and published papers in them has not always been matched by increased quality in publishing due to lack of information and education of the scientific community, especially of the young scientists, about ethical principles in research and publishing. In addition, some unethical behavior, fraud and attempts by experts for increasing their scientific productivity in research and publishing their results in scientific journals was recognized. **Objective:** To present the initiatives, chronology of activities and leading role of Academician Momir Polenakovic towards the establishment and initial development of the Macedonian Association of Medical Editors (MAME) which has a mission for advancing the integrity of science and publishing. **Method:** A retrospective study based on review of the relevant literature, archive materials, minutes from organizational meetings and workshops and other documentation related to activities in the initial process for establishing and defining the mission and objectives of MAME. **Results:** The expansion of higher education and inappropriate implementation of the Bologna Declaration and the European Credit Transfer System in R. Macedonia from 2004/2005 contributed to a decline of the study criteria for obtaining higher education diplomas and postgraduate education degrees, as well as numerous frauds in scientific research and publishing activities in biomedicine and other fields. The first meeting of the Initiative Board for organizing an SEE Conference on research and publishing integrity and a workshop for editors of scientific journals was held in the Macedonian Academy of Sciences and Arts (MASA) on Nov. 1st, 2013. In April 2014 two preparatory meetings of the Organizational Board were held and the Workshop for editors of scientific journals and the Constitutional meeting for establishing MAME were held on Apr. 25, 2014. The first President of MAME (with a two-year mandate) was Academician Momir Polenakovic and in 2016 he was elected as the first Honorary President of MAME. **Conclusion:** The establishment of MAME in April 2014 was an important initiative and strategic decision toward raising awareness among editors of scientific journals and other stakeholders for preventing scientific and publishing misconduct and for educating the scientific community for creating an ethical research environment.

Keywords: Scientific journals; publishing; research and publication ethics, research fraud.

"Search for the truth is the noblest occupation of man; its publication is a duty"
–Madame de Stael (1766-1817)

1. BACKGROUND

In the early 20th century some unfavorable conditions and trends in science and publishing in R. Macedonia and other countries in the South Eastern Europe (SEE) Region were recognized and it became nec-

essary to act to protect the integrity of science and publishing. For more than 20 years the network of high school/university level education in R. Macedonia has been expanded with many additional public and private universities, faculties and high

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1. There is a highly recognized need and interest in MASA and beyond for organizing such a conference and workshop in Macedonia and MASA has the interest and readiness to take the leading role and host a SEE conference and workshop, in partnership with the universities in Skopje, Bitola, Tetovo and Stip, under the auspices of the Ministry of Education and Science and the Ministry of Health of Macedonia;

2. The first two invited internationally renowned experts in this field, who expressed readiness to participate as lecturers to the conference and workshop would be: Prof. Ana Marusic, from the University of Split School of Medicine, Editor-in-Chief of the Journal of Global Health (www.jogh.org); and Prof. Elizabeth Wager, Managing Director of Sideview-International Publications Consultancy (www.lizwager.com), Bucks, UK;

3. The term April 2014 is realistic only for organizing a one-day workshop for editors of scientific journals (preliminary agreed date is 18.04.2014, Friday, alternatively on 25.04.2014), and the holding of the Conference to be postponed to 2015. so that there would be enough time for its preparation and organization;

4. The workshop for editors of scientific journals would be held in the afternoon, in order for the invited lecturers to hold one-hour lecture each at MASA for a wider audience on the same day in the morning, ie 10-12. The titles of the presentations would be further defined, and would be related to some of the possible main topics for the conference listed in the attached document, ie appropriate

introductory presentations and debate on research and publishing integrity for the upcoming SEE Conference at MASA in 2015. The presentations and discussion would result in conclusions and suggestions for the term and program of the SEE Conference to be held at MASA in 2015, as well as for additional 2-4 experts who would be invited as introductory lecturers, preferably from international journals with a high impact factor (IF);

5. The workshop for editors of scientific journals would be held on the same day in the afternoon, ie from 2 to 6 pm, and in addition to the two invited lecturers with an hour of lectures for each of them, the program would include several other lectures of 15 min. to be delivered by the editors of scientific journals from R. Macedonia. Acad. M. Polenakovic expressed readiness to present the situation with scientific journals in biomedicine in Macedonia;

6. Sponsorship for the workshop, and later for the conference, including the cost of airfare, hotel and local costs for the invited lecturers, would be requested and provided by the Rectorate of the University "St. Cyril and Methodius"—Skopje, Faculty of Philosophy—Skopje, Institute of Public Health—Skopje, Ministry of Education and Science and additional national and, if possible, international sources for sponsorship of the conference;

7. The initiative and the proposal for holding a Workshop (and subsequently the SEE Conference) should be forwarded to the Department of Medicine and the Presidency of MASA and then official invitations should be sent to the invited lecturers.

Box 1. Conclusions from the first meeting of the Initiative Board for organizing SEE Conference on research and publishing integrity and Workshop for editors of scientific journals, held in MASA on Nov. 1st, 2013.

schools established throughout the country in all areas of education including biomedical sciences. Many young people now have attractive opportunities to study and continue with further postgraduate training including masters/MS and doctorates/PhD studies. However, the expansion of higher education and, in particular, the introduction and inappropriate implementation of the European Credit Transfer System in R. Macedonia, from 2004/2005, contributed to a decline of the study criteria, with increased ease of passing from one academic year to another and easier ways of obtaining higher education diplomas, even the so-called "buying of diplomas", especially at some newly established and private universities. Numerous frauds in passing written tests of colloquia and exams, plagiarism and other forms of unethical conduct in drafting seminar papers, master thesis and doctoral dissertations, both in undergraduate and postgraduate education became apparent, which the academic community could not accept and or tolerate [1-6].

On the other hand, the introduction of additional and higher criteria in the academic community for career development and election into educational and scientific titles, as well as for granting various other recognitions and awards according to the number of published papers in scientific journals, contributed to an expansion of publishing in biomedicine, with an increasing number of scientific journals in R. Macedonia and the number of papers published in them. But, the increased quantity has not always been matched by increased quality in publishing. The reasons for this are related to lack of information and education of the scientific community, espe-

cially of the young scientists about ethical principles in research and publishing, and a number of attempts by experts for increasing their scientific productivity by unethical behavior and fraud in research and publishing their results in scientific journals [7, 8].

The measures undertaken by the Ministry of Education and Science of R. Macedonia, the editors of scientific journals and other relevant factors were mainly aimed at detecting fraud and plagiarism. Little attention has been paid to the additional structured education to raise the ethical standards and awareness about the principles of scientific communication and an ethical approach to research and publishing results in scientific journals. After prolonged observations of adverse trends and developments in the field of scientific publishing in biomedicine, in 2013 Academician Momir Polenakovic, along with members of the Department of Medicine and other members of the Macedonian Academy of Sciences and Arts (MASA) and beyond, recognized the need for awareness raising and additional specific education, and undertook activities to organize a conference and/or workshop in MASA, Skopje, for editors of scientific journals, on research and publishing integrity and misconduct [6].

2. OBJECTIVE

The aim of the article is to present the initiatives, chronology of activities and leading role of Academician Momir Polenakovic towards the establishment and initial development of the Macedonian Association of Medical Editors (MAME) which has a mission for advancing the integrity of science and publishing.

1. The need and interest to organize a workshop for editors of scientific journals in biomedicine in Macedonia was highly recognized, in MASA and beyond, in order to improve the editorial policies and publishing integrity, as well as raising the level and quality of scientific journals and published papers in them. Therefore MASA expressed interest and willingness to retake the leading role, to be the organizer and host of such a workshop as the first step towards possible organization of a broader international conference on research and publishing integrity and misconduct;

2. Invitations for the morning lectures to be sent widely to all interested parties i.e. universities and faculties in the area of biomedicine and other relevant institutions, associations and chambers, as well as students enrolled at master's and doctoral studies at relevant faculties in biomedical field in R. Macedonia;

3. Invitations for the afternoon workshop for editors of scientific journals in biomedicine, with selective approach, to be sent to all editors-in-chief and members of editorial boards of scientific journals, as well as to the deans and vice-deans of the Faculty of Medicine, Dentistry and Pharmacy, the Faculty of Veterinary Medicine, the Faculty of Natural Sciences and Mathematics at University "Ss Cyril and Methodius" in Skopje and other relevant universities and faculties in R. Macedonia;

4. Invitations for the morning lectures and the afternoon workshop to be sent to the Ministry of Education and Science and the Ministry of Health of R. Macedonia, and to other relevant institutions;

5. Research and publishing integrity, and the quality of published

articles in scientific journals in biomedicine, is closely linked to the conditions and support to the scientific research in R. Macedonia in general, funding of scientific research projects, financial support for researchers to present the results to international professional conferences and financial support for publishing scientific papers in journals with impact factor (IF). All scientific journals in biomedicine in R. Macedonia should tend to reach higher qualitative level and IF, providing support and subsidies to promote the editorial and publishing practices of journals through Open Journal System, Versita and other electronic systems for on-line submission of manuscripts, confirming authorship and more successful managing the process of peer review, editing and publishing;

6. After the workshop, the participants-lecturers to be asked to prepare and submit manuscripts upon their presentations, according to the instructions for authors, in order to prepare a thematic issue of the MASA Journal "Prilozi/Contributions", entitled "Publishing Integrity and Good Practices in Editing";

7. Workshop participants to establish an Association of Medical Editors, as an NGO, which will coordinate further activities for dissemination of information and exchange of experiences in editorial policy and publishing practices, new knowledge and international standards for scientific and publishing ethics and integrity, and continuous education of the scientific community in R. Macedonia, in cooperation with relevant ministries, universities and faculties, professional associations and chambers, as well as with relevant international organizations and associations.

Box 2. Main conclusions from the first meeting of the Organizational Board of the Workshop for editors of scientific journals, held in MASA on Apr. 3rd, 2014.

3. MATERIAL AND METHODS

A retrospective study based on review of the relevant literature, archive materials, minutes from organizational meetings and workshops and other documentation related to activities in the initial process for establishing and defining the mission and objectives of MAME, as well as the main organizational and educational activities undertaken in the first seven years of existence of MAME.

4. RESULTS AND DISCUSSION

4.1. The first meeting of the Initiative Board for organizing an South East Europe Conference on research and publishing integrity and Workshop for editors of scientific journals

The first meeting of the Initiative Board was initiated by Acad. M. Polenaković and held on Nov. 1st, 2013, in MASA, Skopje. Beside him, the meeting joined academicians Vlado Matevski, Gligor Jovanovski, Ilija Filipče and Nada Pop-Jordanova, as well as Prof. Dijana Plašeska-Karanfilska and Prof. Doncho Donev. The meeting was opened and led by Acad. M. Polenaković explaining the initiative and importance of the meeting, as well as the aim of the conference and the workshop to be organized with the proposed main topics and fields of interest for defining their final programs. Then he asked Prof. D. Donev to give a brief introduction about the history of the initiative and the previous activities for organizing the Workshop. Prof. D. Donev clarified that with the invited lecturers from abroad, Prof. Ana Marusic (from the University of Split, Croatia) and Prof. Elizabeth Wager (a UK-based consultant, also Visiting Professor at the University of Split), spoke almost two years ago during the Workshop

for editors of scientific journals, held in Split in July 2012, when they expressed readiness, in principle, to come to Macedonia as lecturers. In the discussion that followed all participants contributed with their comments and ideas and the following conclusions were adopted (Box 1).

At this first meeting, the Initiative Board was transformed into an Organizing Committee of the Workshop for editors of scientific journals in biomedicine, with Acad. M. Polenakovic as its President.

4.2. Meetings of the Organizing Committee for organizing a workshop for editors of scientific journals

Later on, two meetings of the Organizing Committee were organized, together with the potential presenters at the workshop from Macedonia, both held in MASA, on 3rd and 22nd of April, 2014, in order to agree on the program and to plan other organizational and operational aspects of the workshop, scheduled to be held on April 25th, 2014.

The meeting of the Organizing Committee, held on Apr. 3rd, 2014, with increased number of 13 members, was attended by: Acad. Momir Polenakovic, Acad. Vlado Matevski, Acad. Gligor Jovanovski, Acad. Nada Pop-Jordanova, Prof. Jovan Tofoski, president of Macedonian Medical Society, Prof. Kocho Chakalaroski, president of Doctors' Chamber of Macedonia, the journal editors Prof. Zoran Zdravkovski, Prof. Mirko Spiroski, Prof. Goce Spasovski, Prof. Aziz Polozani, Prof. Dijana Plašeska-Karanfilska and Prof. Doncho Donev as the Organizing secretary, as well as M-r sci. Lence Danevska, chief of the Central Medical Library at the FM-Skopje, and Goce Aleksoski, sci. assistant. The meeting was opened and chaired by Acad. M. Polenakovic, who gave a brief introduction about the importance of the initiative and the support extended from

Morning Session Programme

Chairs: Acad. Momir Polenakovic, Acad. Ljupcho Kocarev, Acad. Vlado Matevski

10,00 Welcome addresses - Acad. Vlado Kambovski, president of MASA - Acad. Momir Polenakovic

10,15 Presentation by Prof. Ana Marusic: "Editing in the Digital Age—Editors and Editorial Research"

11,15 Presentation by Prof. Elizabeth Wager: "Ethical issues in academic publishing and responsible publication of research"

12,00 Discussion

Scientific Workshop for journal editors in biomedicine: "Publishing integrity and good practices in editing in biomedicine"

Chairs: Acad. Momir Polenakovic, Acad. Nada Pop-Jordanova

14:00 Introductory speech—Acad. Momir Polenakovic

14:15 Editorial policies in journals from the scientific (semi) periphery—Prof. Ana Marusic

15:00 Biomedical Journals in R. Macedonia—Current State—Acad. Momir Polenakovic, M-r sci Lenče Danevska

15:15 Open Journal Systems: Editor's Perspective—Prof. Zoran Zdravkovski

15:30 New international developments in publishing related to authorship – Prof. Doncho Donev

15:45 Coffee break

16:05 The road to the Impact Factor—Prof. Zoran Guchev

16:20 Biomedical Scientific Impact of Institutions, Academic Journals and Authors in R. Macedonia – Prof. Mirko Spiroski

16:35 Editorial policies and good practices in editing of Macedonian Medical Review and Bantao Journal—Prof. Goce Spasovski

16:50 Editorial policies and good practices in editing of the journal Medicus—Prof. Aziz Pollozhani

17:05 Editorial policies and good practices in editing of the Balkan Journal of Medical Genetics—Prof. Dijana Plasheska Karanfilska

17:20 Does peer review work and how to improve it? New models in journal peer review – Prof. Elizabeth Wager

17:45 Discussion and concluding remarks

18:00 Constitutive Meeting for establishing Macedonian Association of Medical Editors, adoption of the Statute and election of President and Executive Board members

18:30 Issuing of certificates

Box 3. Morning Session and afternoon Workshop lecturers and presentations, MASA, April 25th, 2014.

the Department of Medicine and the Presidency of MASA for organizing the Workshop for editors of scientific journals in biomedicine, as well as about the official letters with invitation sent to the invited lecturers, Prof. Ana Marusic and Prof. Elizabeth Wager. Acad. M. Polenakovic clarified that the travel and accommodation expenses of the invited lecturers would be covered by MASA and gave a brief overview of the goal of the Workshop—introducing the journal editors and other participants interested in these issues to the current state of international progress regarding research and publishing integrity, discussion and exchange of experiences for new challenges and for national and international reactions/responses. Also, the offered Draft-Program for the Workshop was presented, to be held on Apr. 25th, 2014, the plan for sending invitations and preparation of certificates, as well as a package with professional materials and samples of scientific journals in biomedicine in Macedonia for the participants to the Workshop, which need to be provided by the editors-in-chief of the scientific journals. At the meeting, a conclusion was reached to continue the activities for organizing the Workshop for editors of scientific journals in biomedicine, on the topic "Publishing integrity and good practices in editing", planned for Apr. 25th, 2014, and the organization of a wider international SEE conference on scientific and publishing integrity and misconduct to be discussed and decided during or after the Workshop.

In the discussion that followed, there were contributions from Acad. Gligor Jo-

vanovski, Acad. Nada Pop-Jordanova, Prof. Jovan Tofoski, Prof. Kocho Chakalaroski, Prof. Zoran Zdravkovski, Prof. Mirko Spiroski, Prof. Goce Spasovski, Prof. Aziz Polozani and other participants at the meeting, and the following main conclusions were reached (Box 2).

Meanwhile a Draft-Statute of the Macedonian Association of Medical Editors (MAME) was prepared following the examples of statutes and documents of the Association of Medical Editors of South Korea, the World Association of Medical Editors and the European Association of Science Editors. The Draft-Statute was explored at the

Figure 1. Academician Momir Polenaković and two invited speakers, Prof. Ana Marušić from Split and Prof. Elizabeth Wager from UK, MASA, Skopje, Apr. 25th, 2014.

Figure 2. Some of the participants to the Workshop in MASA on Apr. 25, 2014: Prof. Aziz Pollozhani, Prof. Dijana Plašeska-Karanfilska and Academician Živko Popov

Executive Board Members: 1. Acad. Momir Polenaković, President 2. Acad. Nada Pop-Jordanova, President Elect 3. Prof. Aziz Pollozhani, Vice President 4. Prof. Mirko Spiroski, Vice President 5. Prof. Goce Spasovski, Vice President 6. Prof. Dončo Donev, Secretary General 7. Assist. Prof. Silvana Markovska-Simoska, Treasurer 8 Mrs. Blagica Trencheska, Administrative Secretary/ Registrar		
Honorary members: 1. Prof. Ana Marusic, Split, Croatia 2. Prof. Elizabeth Wager, Bucks, Great Britain		Supervisory Board Members: 1. Acad. Živko Popov, chairman 2. Prof. Nikola Jankulovski, member 3. Mrs. Elizabeta Kolčakovska, member
Commission for Planning and Evaluation: 1. Prof. Goce Spasovski, coordinator 2. Acad. Gligor Jovanovski 3. Prof. Zoran Gucev 4. Prof. Mihail Kochubovski	Commission for Education and Publication Ethics: 1. Prof. Aziz Pollozhani, coordinator 2. Acad. Vlado Matevski 3. Prof. Dijana Plasheska Karanfilaska 4. Prim. Dr. Ilija Gligorov	Commission for Information: 1. Prof. Mirko Spiroski, coordinator 2. Acad. Doncho Dimovski 3. Prof. Vladimir Trajkovic 4. Prof. Vladimir Trajkovski

Box 4. Presidents and members of the Executive Board, Supervisory Board and three permanent commissions, and honorary members elected at the Constitutional Assembly for establishment the Macedonian Association of Medical Editors, MASA, April 25th, 2014.

meeting of the Initiative Board for establishment of the Association (M. Polenakovic, N. Pop-Jordanova, D. Donev, D. Plasheska Karanfilaska, A. Pollozhani, G. Spasovski and M. Spiroski), held in MASA on Apr. 16th, 2014, and modified and amended in accordance with the given remarks and suggestions.

One more meeting of the Organizing Committee, held on Apr. 22nd, 2014, was a continuation and confirmation of the previously adopted conclusions regarding the Workshop and upgrading the Draft-Statute of MAME, as well as planning the next steps for establishment the Association with proposals given for members/functions in the Executive Board and other bodies, registration and further functioning in accordance with the annual Program of activities.

4.3. Morning lectures by invited speakers and afternoon Workshop for editors of scientific journals

A workshop for editors of scientific journals in biomedicine, entitled "Publishing integrity and good practices in editing", was held on April 25, 2014, from 2 – 6 p.m., after the two lectures by the invited speakers, Prof. Ana Marušić and Prof. Elizabeth Wager, in the morning session, from 10.00 a.m. to 12.00 p.m. Beside Acad. M. Polenakovic as president, seven other academicians were members of the Organizing Board: Ljupcho Kocarev, Vlado Matevski, Bojan Šoptrajanov, Gligor Jovanovski, Nada Pop-Jordanova, Ilija Filipče and Živko Popov, as well as professors Jovan Tofoski, Kocho Čakalaroski, Nikola Jankulovski, Goran Ajdinski, Aziz Pollozhani and Dončo Donev as Organizing Secretary. The order of the topics and presenters in the morning session and in the afternoon Workshop are shown in Box 3.

Some photos from the morning Session and afternoon Workshop are presented in Fig. 1 and Fig. 2.

4.4. Founding Assembly of the Macedonian Association of Medical Editors

Figure 3. Presidency at the Constitutional Meeting of MAME on Apr. 25, 2014: Academician Momir Polenaković, Academician Nada Pop-Jordanova and Prof. Doncho Donev

Figure 4. Participants to the workshop "Publishing Integrity and Good Practices in Editing" and founding members after the Constitutional Meeting for Establishment of MAME, MASA, Apr. 25, 2014.

The Constituent Assembly of the Macedonian Association of Medical Editors (MAME) was held in MASA – Skopje, on April 25th, 2014, starting at 6.00 p.m., directly following the Workshop for editors of scientific journals. The meeting was attended by more than 30 members, and coordinated by the working Presidency of three members: Acad. M. Polenakovic, Acad. N. Pop-Jordanova and Prof. D. Donev. The founding meeting was opened and led by Acad. M. Polenakovic, who initially welcomed the participants and expressed his satisfaction with the preparatory activities, especially in the previous few weeks, for organizing the Assembly for establishment of MAME.

1. Create a forum for discussion and exchange of information, ideas and experiences among editors for the advancement of editing and publishing of medical journals in R. Macedonia;
2. Survey and evaluation of medical journals and development of guidelines to improve the quality of journals and published papers;
3. Monitor the scientific and publishing ethics of scientific papers and journals, develop tools for evaluation of medical journals and improvement of editorial standards;
4. Promotion of continuing education of editors of scientific journals and the wider scientific community through conferences, workshops, courses, etc. for preparation and screening of papers, writing medical papers and their evaluation, promotion of professionalism, self-criticism and self-governance in editing and publishing of academic journals in biomedicine;
5. Development of international program for the World Association of Medical Editors (WAME) membership and inclusion in other relevant international agencies and associations, collaborative exchange of information, knowledge and experience related to scientific and publishing ethics and integrity, acceptance and imple-

- mentation of international recommendations and standards in our scientific community;
6. Promotion and providing free access or special access to medical journals through HINARI and other initiatives and databases;
7. Promotion and assistance in registration of scientific journals in domestic and international indexed databases;
8. Other activities aimed at development and improvement of the quality of medical journals, for dissemination of medical information with high quality and improvement of health care in R. Macedonia, as well as increasing the productivity and contribution of authors and journals from the Republic of Macedonia to the international scientific community;
9. Lobbying in the competent ministries, primarily the Ministry of Education and Science and Ministry of Health, and the Government of R. Macedonia, for financial support from the budget for optimal functioning and implementation of the planned activities, as well as for establishing the MAME as an "association of public interest".

Box 5. Specific objectives of the Macedonian Association of Medical Editors according to the Statute adopted at the Founding Assembly on Apr. 25th, 2014.

Further explanations about the initiative and the meetings of the Initiative Board and Organizing Board, the Proposal-Statute and other documents being prepared and proposals for appointment of the President and other officials and members of the bodies of the Association were given by Acad. N. Pop-Jordanova and Prof. D. Donev (Fig. 3).

After some discussion about the procedure and documents to be considered for adoption, the Assembly made the following decisions by unanimous votes of the members who were present: **1)** Decision to establish the Macedonian Association of Medical Editors (MAME); **2)** Decision to adopt the Statute of MAME; **3)** Decision to elect the presidents and members of the Executive Board, Supervisory Board and three permanent commissions, as well as two honorary-special members (counsellors) of MAME (Box 4); and **4)** Decision to adopt the annual Action Program of MAME.

At the end of the meeting some explanation for the next steps in the procedure for registration of MAME in the Central Register of R. Macedonia were given, and other start-up activities for the functioning of MAME as a legal entity. Concerning preparing and publishing a Thematic Issue of MASA Journal "Prilozi/Contributions" on "Publishing Integrity and good practices in editing in biomedicine", in the Fall 2014, all presenters were kindly asked to prepare and submit papers based on their presentations, possibly by the end of May 2014. After the meeting closure Acad. M. Polenaković invited all participant to the Workshop, as founding members of MAME, together with two invited lecturers from abroad, now honorary members of MAME, for a group photo (Fig. 4).

4.5. Mission, aim and objectives of the Macedonian Association of Medical Editors

The Macedonian Association of Medical Editors (MAME) has been established in accordance with the Law on Associations and Foundations in R. Macedonia (Official Gazette of RM 52/2010 and 135/2011). Beside the

Decision on establishing the Association, the Founding Assembly adopted the Statute of MAME. Both documents define the aim and mission of MAME toward promoting cooperation among editors for improving the quality of medical journals published in R. Macedonia through networking, education, exchange of information and knowledge for editorial and publishing policies and practice, and through discussion about the editorial principles and international standards of scientific and publishing ethics and integrity. Specific activities include discussion on editing and publishing of medical journals, survey and evaluation, development of tools to evaluate medical journals, continuing education for writing scientific papers and their evaluation, and development of an international program for application for membership in relevant international associations, cooperation and exchange of information. Specific objectives of the Association are presented in Box 5.

4.6. Main activities of the Macedonian Association of Medical Editors in the period from 2014 to 2016 and beyond

The first year from the establishment of MAME, on April 25th, 2014, was mainly a period of consolidation with broadening the institutional and individual membership and inclusion of the Association in the legal and financial traffic/operations in R. Macedonia. Further activities of MAME took place in accordance with the Program and Action Plan toward organizing educational activities for publishing ethics with prevention of plagiarism and scientific and publishing misconduct, international standards for scientific communication and writing scientific papers, improving the editing and quality of medical journals, developing the Macedonia-Med database, facilitating indexing of scientific journals and applications for membership in international agencies and associations.

Special attention was paid to broader distribution of the Thematic issue of "Prilozi/Contributions" on "Publishing Integrity and good practices in editing in biomed-

icine", to join and celebrate the traditional manifestations each year in September "Peer Review Week" and in October "International Open Access Week" by organizing workshops for MAME members to share the information and experiences, activities for plagiarism prevention and spreading the information how to recognize predatory publishers and to avoid publishing manuscripts in predatory journals, as well as to inform the universities in R. Macedonia not to recognize the articles published in journals by publishers whose names can be found on the so-called Beall's List [6, 9-14].

The Elective Assembly of MAME, on Apr 13th, 2016, appointed Acad. Nada Pop-Jordanova as the new President of MAME, and Acad. M. Polenakovic was elected Honorary President of MAME. Prof. D. Donev, as Secretary General, on behalf of the members of the Executive Board and members of MAME, expressed thankfulness to Acad. M. Polenakovic for his leadership and contribution to the establishment and initial development and activities of MAME during the first two years of its existence. At the end, Acad. M. Polenakovic, thanking for the cooperation so far and for the recognition being appointed as Honorary President of MAME, concluded the meeting, congratulating the newly elected members to the leading functions, wishing them successful work and cooperation.

In the subsequent years Acad. M. Polenakovic continued his active contribution to the most of the activities of the Association and extended his support with advisory role to the president, when Acad. N. Pop-Jordanova, and then, from 2019, to the newly appointed president, Acad. Sashko Kedev, until the early March 2021 when Acad. M. Polenakovic passed away suddenly with severe Covid19 bronchopneumonia.

5. CONCLUSION

Establishment of the Macedonian Association of Medical Editors, in April 2014, was an important initiative and strategic decision toward raising awareness among editors of scientific journals and other stakeholders for preventing scientific and publishing misconduct and to promote education of the scientific community for creating an ethical environment for research and publication.

- **Acknowledgement:** We, the members of MAME, express our appreciation and thankfulness to Academician Momir Polenakovic for his leading role and overall contribution to the establishment of the Macedonian Association of Medical Editors, as well as for the contribution and support he extended for the initial development and further activities of MAME. His legacy is a continuous motivation and obligation to the officials/executives and members of the Association to continue their activities and contribution toward further development and long-term fulfilling the mission of MAME for the benefit of the scientific and publishing community and biomedicine in general.

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REFERENCES

1. Baždarić K, Pupovac V, Bilić-Zulle L, Petrovečki M. Plagiarism as a violation of scientific and academic integrity. *Medicina* 2009, Vol. 45, No. 2, p. 108-117.
2. Trajkovski V. Ethics in publishing of professional-scientific papers. [In Macedonian]. Annual Proceedings of the Faculty of Philosophy at the University "St. Cyril and Methodius", Skopje, 2011: 453-67.
3. Donev D. Scientific and Publication Ethics and Misconduct. [In Macedonian]. *Vox Medici*, Dec 2012;77:235-40.
4. Trajkovski V. Plagiarism in scientific research. [In Macedonian]. Annual Proceedings of the Faculty of Philosophy at the University "St. Cyril and Methodius", Skopje, 2012: 262-73.
5. Zunic L, Donev D. Bologna model of medical education – utopia or reality. *Materia Sociomed.* 2016 Aug; 28(4): 316-19. Available at: <http://www.scopemed.org/?mno=237100>
6. Polenakovic M, Donev D, Guest editors of the Thematic Issue on publishing integrity. Overview of the Workshop held and establishing of the Macedonian Association of Medical Editors, in Skopje, on April 25, 2014. *Prilozi-Contributions, Sec. Biol. Med. Sci., MASA* 2014;35(3): 7-10. Available at: http://manu.edu.mk/prilozi/35_3/01-EDITORIAL.pdf
7. Marusic A, Editors as gatekeepers of responsible science. *Biochemia Medica*, Oct. 2010; 20(3): 282-7.
8. Committee on Publication Ethics. Promoting integrity in research publication. Available from: [http://publicationethics.org/Wager E. Defining and responding to plagiarism. Learned publishing 2014; 27\(1\):33-42](http://publicationethics.org/Wager E. Defining and responding to plagiarism. Learned publishing 2014; 27(1):33-42).
9. Wager E. Defining and responding to plagiarism. *Learned publishing* 2014; 27(1):33-42.
10. Donev D. Plagiarism as a problem in scientific publishing. *IMJ Medicus* 2015; 20(3): 319-24. Available at: <http://www.medalb.com/revista/medicus-dhjetor-2015.pdf>
11. Wager E. How should journal editors respond to cases of suspected misconduct? *Prilozi-Contributions, Sec. Biol. Med. Sci., MASA* 2014;35(3): 95-101.
12. Danevska L, Spiroski M, Donev D, Pop-Jordanova N, Polenakovic M. How to Recognize and Avoid Potential, Possible, or Probable Predatory Open-Access Publishers, Standalone, and Hijacked Journals. *Prilozi/ Contributions, MASA Sec. of Med. Sci.*, 2016 Nov 1; 37(2-3): 5-13. Available at: http://manu.edu.mk/prilozi/37_2/01%20L.%20Danevska.pdf
13. Masic I, Begic E, Donev D, Gajovic S, Gasparyan A, Jakovljevic M, et al. Sarajevo Declaration on Integrity and Visibility of Scholarly Publications. *Croat Med J* 2016; 57: 527-9. Available at: <http://www.cmj.hr/2016/57/6/28051276.htm>
14. Beall J. Dangerous predatory publishers threaten medical research. *Journal of Korean medical science.* 2016; 31(10): 1511-1513.