# MEDICAL HODEGETICS - ALMOST FORGOTTEN ART AND SCIENCE OF UPBRINGING MEDICAL DOCTORS

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#### **SUMMARY**

Introduction: Education in medicine faces a number of challenges and dilemmas and the onus is on Medical hodegetics, an important but almost forgotten discipline, to address them effectively. The task and final goal of education in medicine is to coach students into professionals, effective and ethical practitioners of medicine, giving them the best available knowledge, skills and attitudes and providing them with a professional identity so that they are able to think, speak, act and feel like medical doctors. During the life course human beings organize their experiences into a meaningful narrative that involves their personal, private, public and professional selves. The self can be defined as a distinct principle of identity, as a narrative construction and as an experiential dimension.

*Aim:* The aim of this paper is to address the actuality and vitality of the hodegetic approach in medical education and professionalism. *Methods:* By cross-sectional study authors of the paper searched on-line scientific data-bases and analyzed references about Medical hodegetics subject.

**Results:** Drawing on the literature on psychology of self, identity formation and personality styles as well as on own experience in medical education, the authors stress the increasing importance of medical hodegetics, very useful, but almost completely forgotten discipline. Medical hodegetics which involves all evidence-based medicine, values-based medicine, narrative medicine and person-centered medicine can significantly improve the quality of medical education. The identity of any person in any moment reflects its three domains: individual identity, relational identity, and collective identity, all relevant to medical education. The concept of professional identity formation has recently emerged and attracted great attention in literature on medical education and professionalism. Hodegetics, as a discipline that trains it, seems to us that the essential part of life and what every person should follow.

**Concluson:** Medical hodegetics is an important pillar of the triad of medical deontology as well as it could be an important discipline in medical education and professional identity formation.

Key words: medical hodegetics - deontology - professionalism - art and practice of learning organization - professional identity

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#### **INTRODUCTION**

"You should know that every separate person possesses the special nature inherent in him personally. It seldom happens, or it is absolutely impossible, that somebody would have the nature identical with his"

Ibn Sina - Avicenna, 980-1037

Education in medicine is immensely challenging, sometimes immensely rewarding, sometimes disappointing. The task of schools of medicine is to coach students into physicians giving them the best available knowledge, skills and attitudes and providing them with a professional identity so that they think, speak, feel and act as medical doctors (Crues et al. 2015). Due to huge advances in science and technology aimed to improve the individual health care and public health, there have been drastic changes in medicine over the last decades. Medical education and its tenets are challenged and its form and context are considered a changeable construct in association with dramatic changes of the concept of medical professionalism. Education in general, particularly medical education has always represented more than knowledge and skills and has been predicated on role models and mentors thus ensuring continuity with the profession (Crues & Crues 2017). A famous actor from Belgrade with a life story that is to say at least interesting, in one of his interviews stated that he had one professor, a genius in pedagogy, who convinced the students that each of them should have a diary in which he would note everything he taught that day, and that should be done also on a free day. Doing that writing and learning became a routine. Routine leads to efficiency, and efficiency is a sign of quality. Quality is what we strive for. Quality cannot be achieved without clear steps in carrying out any activity. Each step can be led by ethical standards, but that does not have to be the case. Probably both ways can lead to the goal. The only goal that matters is the one that is ethical (Masic 1997, 2010).

If the goal is not achieved by ethical standards it has no personal significance, it is not appreciated, is not an important to individual, although the society can look at it, as something exceptional, with high quality and uncommon. Yet, the social laurels and the recognition of the society are short-lived, pass, are forgotten, but individually, it fulfills one's life and makes him satisfied. What the hodegetics is describing is exactly that, the moral responsibility at every step, and what is supreme, without cost and without a genuine scale of valuation. Hodegetics can be described as "the way to know how to lead and to have courage to lead, to show the direction, to go ahead and to feel capable, competent and experienced enough to help other people to grow up, to find their own way in life" (Glazewski 2011) as well as in profession.

# MEDICINE, EDUCATION AND THE WORLD THAT WE LIVE IN

Digital revolution from the start of 21<sup>st</sup> century is changing significantly all fields of society, science, education and medicine. Digital technologies have a huge potential to change current regimes and methods of knowledge production, publication and education, generally speaking as well as specifically in medicine. With digitalization we are entering more and more in the age of interdependence and in our post-truth age with the truths, alternative truths and fake news it is very easy to be bewildered by information overload. In education process emphasis is still commonly based not so much on knowing the knowledge, but more on knowing data and information. Data and information (set of data, structured and formatted) are explicit and easily transferable, but knowledge (ability to interpret data and information and use them) and wisdom (higher level of knowledge) are tacit and contextual and their transfer needs learning. The concept of learning as a one-way process is abandoning more and more and a learner-centered approach with an active role of the learner is preferred. In our digital society the transformation of the prevailing system in education is an emergent issue and requires profound knowledge of hodegetics. The directive role of teacher is modifying in being more of guide or mentor practicing learning organization. The learning organization promotes the three core learning capabilities: fostering aspiration, developing reflective conversation, and understanding complexity (Senge 2006). Learning organization has leaned heavily on human's epistemic nature, need to learn as well as on their love to learn (epistemophilia). Through the learning organization learners continually expand their capacity to create results they desire through new and expansive patterns of reflection and learning. Metanoia is an important part of learning which involves a fundamental shift or movement of mind from seeing fragments to seeing wholes, from reactivity to the present to proactivity and creating the future, from seeing learners as passive receivers of information to

seeing them as proactive participants in shaping their knowledge, skills and attitudes (Senge 2006).

It is well known fact that medicine has been determined by the structure of the society and its general conception of the world (Bloom 2002). We live in the age of entitlement (Twenge & Campbell 2009) and in world that is colored by the colors of injustice, false glamor, false representation, and many titles, for which we do not know the meaning. Growing trade in all areas of human activity that are otherwise regulated by nonmarket values and norms is one of the most important determinants of our consumer culture time. This phenomenon is known as a process of commodification (Sartorius 2016) and it involves symbolic, discursive and institutional changes through which some activity, service or product that was not intended for sale come into the sphere of money and the market. So today health, truth, love, science, education, ethics, etc., are merchandise, like any other that is on the market. Commodification of health care is result of the selfish genes, self-interest and legitimization of profit-making inherent to ethos of marketplace, competition, and commercialization. Being a doctor is no longer a call or vocation, and it becomes just a profession as all others, and the health care services and academic institutions became "goods" that can be bought, whose quality depends on the price and which cannot be given if it is not paid for. Medical doctors are commonly conflicted between the values, interests and needs of patients and medical institutions as their employers (Byyny 2017). Commodification, a millennial phenomenon is in constant growth and struggle against it, is a central theoretical and practical component in the struggle to preserve and promote common, universal values. The perception of man as a rational animal whose rationality is determined solely by personal interests and the effort to achieve the greatest profit on the market governed exclusively by regulations without any ethical responsebility has led to the crisis of disintegration of all the bonds of the social community, from family to the country and the world community. Hence, commodification is extremely important from the ethical and moral perspective in medicine and health. It seems important to differentiate the moral principles that determine the behavior of certain communities at certain times and the ethical principles that should in their essence be timeless and ensure the development of society. The result of commodification is also the increasing number of doctoral studies in the form of "local schools where students learn by heart and reproduce knowledge from basic and master studies" (Info AcademLink 2018). The black market for academic papers is growing, both for graduate and postgraduate thesis. Narcissistic decorating titles without scientific and professional coverage, increasingly present banalization, intellectual mediocrity and arrogance threaten the academic culture and professionalism. At the end of day it is important to stress that education and health care are social goods and they should be social rights, but not pure commodities.

# MEDICAL HODEGETICS AND PROFESSIONALISM IN MEDICAL EDUCATION: WHO ARE GOOD DOCTORS AND EDUCATORS

Education in medicine faces a number of challenges and dilemmas and the onus is on medical hodegetics, an important but almost forgotten discipline, to address them effectively. Hodegetics (greek hodos - way, guidance, indicator of the way, pointing the way) is closely associated with medical professionalism and deontology (Masic 1988, 2008, Masic et al. 2010). Medical deontology (greek deon - duty or obligation; logos - meaning. opinion) is a discipline for the study of norms of conduct for the health care professionals, including moral and legal norms as well as those pertaining more strictly to professional performance. The "Triad of Medical Deontology consists of 3 inter-related divisions: Medical law, Medical ethics and Medical hodegetics (Masic et al. 2010). According Pinditrao (2014) the term medical hodegetics refers to the "the guidelines for the study of medicine which cover the ideal principles which students of medicine must learn as were once envisioned by the ancient Fathers of Medicine". Six of the values/principles that should be respected and practiced in medicine are: 1. Autonomy (Voluntas aegroti suprema lex) – the patient has the right to refuse or choose their treatment - "nothing about patients, without patients"; 2. Benevolence (Salus aegroti suprema lex) medical doctors should act in the best interest of the patient); 3. Non-maleficience ("Primum non nocere") – first do not harm the patient; 4. Justice (fairness and equality) - refers to the distribution of scarce health resources; 5. Dignity involves both the patient and his physician; 6. Truthfulness and honesty related to the informed consent (Pinditrao 2014). Pinditrao, (2014) adds 4 other principles; 7. Medical privacy (the right of keeping medical records from being revealed to others), 8. Confidentiality (the principle of physician's secret prevents physicians from revealing others their conversations with patients); 9. Fidelity (the principle of physicians being faithful or loyal to their patients), 10. Veracity (the principle that refers to truth telling or obligation to full and honest disclosure).

Medical professionalism refers to establishing "an interlocking structure among physicians, patients, and society that determines medicine's values and responsibilities in the care of patients and improving public health" (Byyny & Thibault 2017). Professionalism in medicine can be conceptualized as a list of values or a belief system (Al-Eraky & Marei 2015) as well as the expected and desired behaviors, attributes and attitudes defined in the contract between medical profession and society. It is based on the physicians understanding and practicing their obligations and commitment to serve and care for health of people, and according to the Physicians charter involves three fundamental principles: 1. Patient welfare at the first place, 2. Patient autonomy and 3. Social justice, and ten professional responsibilities: 1. Commitment to professional competence, 2. Honesty with patients, 3. Patient confidentiality, 4. Appropriate relationships, 5. Quality of care, 6. Access to care, 7. Just distribution of finite resources, 8. Scientific knowledge, 9. Managing conflicts of interest, and 10. Professional responsibility (Sox 2002, Spandorfer et al. 2010, Jakovljevic & Ostojic 2013, Byyny & Thibault 2017). Principle of primacy of patient welfare dates from ancient times and is intuitive and acceptable to most physicians. Altruism and dedication to serving the interest of suffering person contributes to the trust that is crucial to the physicianpatient relationship. Market forces, societal pressures, and administrative exigencies must not compromise this principle. Principle of patient autonomy is a product of the past century post-modern Western ethics. Physicians must be honest with their patients and empower them to make informed decisions about the way how they will be treated, cured or healed ("No decision about me, without me"). Principle of social justice is at first glance the most contradictory principle, but achievable and very important one. Physicians should promote justice in the health care system and work actively to eliminate discrimination based on race, gender, socioeconomic status, ethnicity, religion, or any other social category.

Drawing on the literature on education in medicine as well as on long experience of the authors as medical educators, here are some practical suggestions that could help students of medicine and physicians to be truthfully the professional and good doctors (Table 1).

# **BE CAREFUL WHICH WOLF TO FEED: HODEGETICS, NEUROETHICS AND NEUROPLASTICITY OF THE BRAIN**

During the life course human beings organize their experiences into a meaningful narrative that involves their personal, private, public and professional selves. The self can be defined as a distinct principle of identity, as a narrative construction and as an experiential dimension (Zahavi 2003). The identity of any person in any moment reflects its three domains: individual identity, relational identity, and collective identity, all relevant to medical education. The concept of professional identity formation has recently emerged and attracted great attention in literature on medical education and professionalism. Drawing on the literature on psychology of self, identity formation and personality styles (Model 1996, Stevens & Wetherell, 1996, Zahavi, 2003, Arciero & Bondolfi, 2011) and neuroethics of changing the mind (Levy, 2007) as well as on own experience in medical education, the authors stress the importance and usefulness of medical hodegetics in medical education and professional identity formation.

 Table 1. Some practical suggestions for medical students and professionals (Jakovljevic & Ostojic 2013, modified)

- Strive to practice the highest standards of honor and ethical behavior: "Do right, avoid wrong, do good and do not harm.
- Strive to develop medical knowledge and skills with love to the best of your ability (epistemophilia and homophilia are pillars of good medicine).
- Strive for excellence, and practice humility. Recognize the limits of your competence. Ask for help whenever you really need it. Be able to say: "Sorry, I can't do this", whenever it is an appropriate response
- Be observent and reflective, honest and trustworthy. Listen carefully to people/patients and respect their view.
- Show in your behavior and speech respect for all people and communicate with them in a courteous and considerate manner. Strive to create rapport and empathy.
- Be punctual, reliable, conscientious and truthful in fulfilling clinical responsibilities: "Do the right thing in the right way at the right time".
- Tell the truth in a careful and the most appropriate way. Give patients information in a way they can understand.
- Under no circumstances record false information or statistics, never purposely falsify information or misrepresent a situation.
- Ask for, be open to, and be grateful for feedback about professional performance.
- Say you are sorry when you heart someone or make a mistake. Learn from your mistakes lest you repeat them.
- Practice your resilience, develop healthy self-care behaviors and coping skills. Find time to decompress after an emotional stress instead suppressing emotions and battling on. Work on your good sense of humor.
- Remember that the best physicians are those who communicate well with their patients and their families and thus get their confidence and trust.
- Maintain a professional appearance, hygiene and demeanor with attire that is appropriate to the medical setting.
- Clear identify your role as a medical student, future MD or resident to each patient and do not undertake any clinical procedure unless you have been judged competent or are supervised by a qualified tutor.
- Remember William Osler's (1849-1919) paraphrased words that a good MD will treat the disease, while the great MD will treat the person with disease.
- Attainment of medical professionalism is a long term process of learning, experience and personal maturation for which a good start at the undergraduate period with explicit rather than implicit attention is very important.

A young man at the beginning of his studies has a brain that is ready to be shaped, regardless of the origin, tradition and different personality traits. Although the fact is that the family and the upbringing influence human beings, education is what models both personality and identity. The young brain is ready, with a really high ambition, ready to be formed, and it can be influenced by many things. If the environment is more important than the educational institution, if the person is more interested in the things that are given by the society and not the education, the young brain will follow it. If an educational institution has something that is attractive without a really big reason, the young brain will follow it. A key step in this is the figure that provides knowledge. The figure must be different from the environment, attractive, the model to one can aspire, a model that symbolizes everything that is important in that profession, a model whose lifestyle drives the young brain to that path. This figure is a professor. Each figure is condemned to comments, of those who are similar, better or worse figures, but also to comments of young unformed brains. Comments are usually not directed towards professionalism, but ethical form of professional and personal action. In case that this ethical form is recognized as the correct one, it will be monitored. If a professional life is filled with ethics and quality, it will be followed. If this professional life comes with some steps, which are not ethical, with high-quality, and are affected by the influence of everything that is not a place in it, then it is not appreciated, and that figure cannot be what will attract the young brain to follow that direction.

Place of activity, institution, religion, color of the skin, eye color, political option to which he belongs are not important, if his action are fulfilled by ethics. If one's action is not fulfilled with ethics, everything else becomes important, and what is more important is not the most important, but it is secondary and not attracted, it does not shine and it is not a model for someone to follow it. From the mass of young unformed brains, there will be one part, which will come to a title, profession and position, without design and ethical norms. Such ones are forgotten, and are not appreciated.

Their titles are important to the wider masses, who do not understand what they are doing, even they are often financially justified, they do not mean anything, and they are not a sign or a figure. From the mass, one part, due to the influence of the other components,

with great influence of tradition and personality, will not be able to be molded, and will find himself elsewhere. A part of the mass, will refuse to be molded, will be happy with what they have already, unformed, and one part of that mass will follow these ethical norms, although this path is harder, not often recognized, financially honored, but it contains quality. Quality despite everything comes to expression. Quality and work will lead to a title that will ultimately make sense and which will be recognized by new young unformed brains, who seek a roadmap in their own world. The student of medicine must be under the influence of ethics from the beginning of the studies. Each step, each partial exam, and each exam, must be a quality benchmark, of the student and what he is. This is the only path leading to the fact that the title of a general practitioner makes sense. Post-graduate, doctoral studies (and later additional programs) specialization, sub-specialization, must be addressed by ethics, and this is possible only if the foundations are addressed by ethics, and if there are figures that they know to lead through this process goes the other way. The title must come methodologically, gradually, slowly, with the maturation of the person, otherwise this title is not important, it is not appreciated, it does not matter to it, colleagues with the title are not appreciated, they do not respect each other, and they do not know how to manage it. If you do not know how to run the position and the title, that leads to misconceptions, and often runs away from the position and title, and seek rescue in populism, which is often attractive because it is financially viable. Populism in the contemporary world leads to a false image of success, satisfaction, but is often addressed by personal dissatisfaction and personality disorders, which ultimately have a very dubious end.

The young brain can and must be shaped well, but the existence of a figure that will lead this brain through this process is something that must exist, because without it the process itself cannot be performed. The figure, the actions of the figures, must be ethical, methodologically oriented, methodologically evaluated and divided so that they are sufficient, and gradually taking into account the maturation of the young brain. This process is the only correct one, and tomorrow only can bring something good, the brain itself, the figure and the community. That's what the hodegetics suggests, and what the meaning of the hodegetics is. The definition of hodegetics is often inseparable, and it again comes down to the personal understanding of ethics and morality, and the general notion of walking is derived from the word «hodegeo», which in Greek means showing the way ("instructions on the teaching of medicine", then "rules on learning medicine "; didactics, as a science, enlarges the same significance in learning about educational leadership or the significance of upbringing, versus theory or teaching about educational instruction) (Masic et al., 2010). This personal understanding is what disappears from modelling, from the earliest years in the family, and later to the educational institution and figures in that institution. Titles, numerous master, doctoral and postdoctoral studies, are essentially meaningless, without ethics in all this, because they will not serve either society or even individual. They have no purpose then they are ridiculed and not important. Effort, knowledge, methodological and gradual maturation in person and education is what the essential meaning of everything is. Hodegetics, as a discipline that trains it, seems to us that the essential part of life and what every person should follow.

# HODEGETICS: MOVING FROM PROCLAMATIONS TO PROFESSIONAL CULTURE, IDENTITY AND ETHICAL BEHAVIORS IN PRACTICE

One of the wide-spread claims about medical education is that professional values are "caught and not taught", which implies that learners integrate important values and form their attitudes in a way that resist formal teaching one-way efforts. We believe that medical hodegetics which involves all evidence-based medicine, values-based medicine, narrative medicine and person-centered medicine can significantly improve the quality of medical education. According Hafferty et al. (2017) medical education and medical educators must ask themselves some important questions: "If being a good doctor is learned within a dynamic interplay of professional, bureaucratic, and market messaging, where do we encounter a framing of professionalism as something other than top-down, sheep-like messaging (rules)?". The authors think that "bureaucratic and market forces will continue to battle for the hearts and minds of the 21st century professionals essentially unopposed by the ethos, ethics, and practice of professionalism" (Haferty et al. 2017). As medicine is in an intimate relationship with business and government, the phenomenon of commodification and more and more commercialized nature of medical education and health care pose a major threat to medical professionalism. That's why here appears the importance of hodegetics as an essential part of medical professionalism and deontology. Hodegetics was applied widely in German pedagogic at the turn of century to determine the scientific methods within education and to distinguish them from dealing with didactic issues (Glazewski 2011). It involves also ethical development of pupil's personality. Professional formation in medicine is the process by which some individuals become physicians who serve the calling of medicine by their knowledge, attitudes, skills and behaviors. Today we can recognize three models of professionalism: 1. the virtues model based on humanism, virtues, and ethics; 2. the behavioral

model based on adoption of professional competencies, and 3. the identity formation model based on progressive incorporation of the values, aspirations and missions of the medical profession into the personal identity (Radden & Sadler 2010, Irby 2017, Byyny 2017). Identity formation is a complex adaptive developmental process of achieving a consistent, coherent, and mature personality based on earlier positive influences and roles identification. Human beings have multiple roles they play and so shape their identity. A fundamental aspect of human conscious awareness is a sense of self or identity which involves personal identity based on experiences specific to individuals and their private reflection on these, and social identity associated with characteristics and roles attributed to them by others and society. Professional identity, an important component of the social identity, may be predicated on job and career definition or on discovering personal mission. Through hodegetics learners are supported to grow as persons, psychologically, socially and morally in their role identification. The role identification involves: a) Occupying the role, b) Recognizing that learner occupies the role, and c) Conceiving of learner as someone for whom the norms of the role have meaning of reasons and motivation. It is well recognized that habits happen through repetition and when the habits are good they are called virtues. The making link between medical student role and role-associated values, virtues and behaviors as well as the learning virtues through habituation predicate self-identity. Medical hodegetics represents an art and practice of learning organization for developing three core learning capabilities: fostering aspiration (personal mastery, shared vision), promoting reflective conversation (mental models, dialogue) and understanding complexity (systems thinking) - Senge, 2006) rather than a teaching organization with a set of rules and obligations ("do what I say, not what I do"). Hodegetics supports educated peoples to continually expand their capacity to create the results they truly desire through the mission discovery process, reviewing what they have learned, creating rapport and good and therapeutic relationships, discovering the values of others, understanding self-esteeming and building self-confidence, discovering positive intentions, making creative visualization, utilizing criticism comfortably, resetting the brain, securing positive mental attitude, modeling and achieving peak performance.

#### CONCLUSION

In addition to medical ethics and medical law, medical hodegetics is an important pillar of the triad of medical deontology as well as it could be an important discipline in medical education and professional identity formation.

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- Miro Jakovljevic, Izet Masic & Edin Begic gave substantialcontribution to the conception or design of the work and in the acquisition, analysis and interpretation of data for the work.
- Miro Jakovljevic, Ljerka Ostojic & Milenko Bevanda had rolein drafting and revising of article.
- Each author gavefinal approval of the version to be published and they agree to be accountablefor all aspects of the work in ensuring that questions related to the accuracyor integrity of any part of the work are appropriately investigated and resolved.

#### References

- 1. Al-Eraky M & Marei HF: Professionalism in medical education: A review article. Adv Health Prof Educ 2015; 1:37-40
- Arnold L & Thompson G: Defining, teaching, and learning professionalism. In Spandorfer J, Pohl CA, Rattner SL & Nasca TJ (Eds). Professionalism in Medicine. A Case-Based Guide for Medical Students, 7-21. Cambridge University Press, 2010
- 3. Arciero G & Bondolfi G: Selfhood, Identity and Personal Styles. Wiley-Blackell, A John Wiley & Sons, Ltd, Publication 2011
- 4. Bloom SW. Professionalism in the practice of medicine. The Mount Sinai Journal of Medicine 2002; 69.398-403
- Byyny RL. Introduction. In Byyny RL, Paauw DS, Papadakis M & Pfeil S (eds). Medical Professionalism Best Practices: Professionalism in the Modern Era, 1-7. Alpha Omega Alpha Honor Medical Society 2017
- 6. Byyny RL. Reflections on best practices for medical professionalism in the modern era. In Byyny RL, Paauw DS, Papadakis M & Pfeil S (eds). Medical Professionalism Best Practices: Professionalism in the Modern Era, 129-143. Alpha Omega Alpha Honor Medical Society 2017
- Byyny RL & Thibault GE. Preface: Medical professionalism in the modern era. In Byyny RL, Paauw DS, Papadakis M & Pfeil S (eds). Medical Professionalism Best Practices: Professionalism in the Modern Era, ix-xii. Alpha Omega Alpha Honor Medical Society 2017
- 8. Crues RL, Crues SR, Boudreau JD, Snell L & Steinert Y. A schematic representation of the professional identity formation and socialization of medical students and residents: A guide for medical educators. Academic Medicine 2015; 90:1-8
- Cruess S & Cruess RL. Transforming a medical curriculum to support professional identity formation. In Byyny RL, Paauw DS, Papadakis M & Pfeil S (eds). Medical Professionalism Best Practices: Professionalism in the Modern Era, 15-31. Alpha Omega Alpha Honor Medical Society 2017
- 10. Glazewski M: About usefulness of hodegetic. An attempt to reconstruct and deconstruct an unappreciated category of Herbart's pedagogics. Kultura i Wychowanie 2011; 2:63-74

- 11. Hafferty FW, Michalec B, Martimianakis MA & Tilburt JC. Resistance and radicalization: retraining professionals for the modern era. In Byyny RL, Paauw DS, Papadakis M & Pfeil S (eds). Medical Professionalism Best Practices: Professionalism in the Modern Era, 59-72. Alpha Omega Alpha Honor Medical Society 2017
- 12. InfoAcademic Link 2018
- 13. Irby DM. Constructs of professionalism. In Byyny RL, Paauw DS, Papadakis M & Pfeil S (eds). Medical Professionalism Best Practices: Professionalism in the Modern Era, 9-14. Alpha Omega Alpha Honor Medical Society 2017
- 14. Jakovljević M: Professionalism in psychiatry and medicine: A hot topic. Psychiatr Danub 2012; 24:342-345
- Jakovljevic M & Ostojic Lj: Professionalism in contemporary medicine: If it is an important academic issue, then surely it is a "hot" issue as well. Psychiatr Danub 2013; 25(suppl 1); 6-17 (Medicina Academica Mostariensia 2013; 1:6-17)
- Jakovljević M i sur. Duševno zdravlje, kultura i društvo Psihijatrija pred izazovima (Mental Health, Culture, and Society – Challenges for and of Psychiatry. Pro Mente d.o.o., Zagreb, 2014
- 17. Levy N. Neuroethics Challenges to the 21<sup>st</sup> Century. Cambridge University Press, UK 2007
- Masic I. Medicinska deontologija (Medical deontology). Viša medicinska škola Univerziteta u Sarajevu (Higher Medical School University of Sarajevo), Sarajevo, 1988
- 19. Masic I. Ahlak i profesionalna etika liječničke profesije (Ahlak and professional ethics of medical profession). Med Arh.1997; 51:31-34
- 20. Masic I, Ridjanovic Z. Health Ethics and Data Protection. Avicena. Sarajevo, 2001
- 21. Masic I. Medicinska deontologia i medicinske pogreske u praksi (Medical deontology and medical errors in practice). Mater Sociomed 2008; 20:5-12

- 22. Masic I et al.: Medical Deontology Medical Low, Ethics and Hodegetics in Health Care, 179-184. Avicena. Sarajevo, 2010
- 23. Masic I: Medicine, Communication and Ethical Aspects. Mater Sociomed. 2010. 22: 6-13
- 24. Masic I, Hadzic A & Mulic S: Ethics in medical research and publication. International Journal of Preventive Medicine 2014; 5:1073-1082
- 25. Model AH: The private Self. Third pronting. Harward University Press, Cambridge, Massachusetts & London, England, 1996
- 26. Pinditrao MM: Are we truthfully the "good doctors"? Time for introspection: The forgotten science of medical deontology! UWI NICE Bulletin 2014; 1:6-9
- 27. Radden J & Sadler JZ: The Virtuous Psychiatrist Character Ethics in Psychiatric Practice. Oxford University Press, New York 2010
- 28. Sartorius N: Psychiatry and society, 2015. Swiss Archives of Neurology, Psychiatry and Psychotherapy 2016; 167:108-113
- 29. Stevens R & Wetherell M: The self in the modern world. Drawing together the threads. In Stevens R (ed). Understanding the Self, 339-369. SAGE publications, The Open University 1996
- 30. Sox H (ed) on behalf of the ABIM Foundation, ACP-ASIM Foundation, and European Federation of Internal Medicine: Medical professionalism in the new millenium: A physician charter. Annals of Internal Medicine 2002; 136:243-246
- Spandorfer J, Pohl CA, Rattner SL & Nasca TJ. Introduction. Professionalism in Medicine. A Case-Based Guide for Medical Students, 1-4. Cambridge University Press, 2010
- 32. Twenge JM & Campbell WK. The Narcissism Epidemic Living in the Age of Entitlement. Free Press, New York – London – Toronto - Sydney, 2009
- 33. Zahavi D. Phenomenology of self. In Kircher T & David A (eds). The Self in Neuriscience and Psychiatry, 56-75. Cambridge University Press, 2003

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