

Patient satisfaction with the level of being informed about the changes in Slovenian healthcare system

Satysfakcja pacjentów z poziomu otrzymywanych informacji dotyczących zmian w słoweńskim systemie opieki zdrowotnej

Barbara Zupanc Terglav¹, Špela Selak², Mitja Vrdelja², Boris Miha Kaučič³,
Branko Gabrovec²

¹College of Nursing in Celje, student of the Nursing care dr. Špela Selak, National Institute of Public Health

²National Institute of Public Health

³College of Nursing in Celje

ORCID:

Špela Selak: 0000-0002-0346-8296

Mitja Vrdelja: 0000-0003-2486-9053

Boris Miha Kaučič: 0000-0002-9708-3214

Branko Gabrovec: 0000-0002-3885-1308

CORRESPONDING AUTHOR:

Branko Gabrovec

National Institute of Public Health

Trubarjeva cesta 2, 1000 Ljubljana, Slovenia

Phone: 00386 1 244 14 92

e-mail: branko.gabrovec@nijz.si

STRESZCZENIE

SATYSFAKCYJA PACJENTÓW Z POZIOMU OTRZYMYWANYCH INFORMACJI DOTYCZĄCYCH ZMIAN W SŁOWEŃSKIM SYSTEMIE OPIEKI ZDROWOTNEJ

Wprowadzenie. Satysfakcja pacjentów jest niezwykle ważna jeśli chodzi o wprowadzanie reform w służbie zdrowia, które mają na celu polepszenie stanu zdrowia oraz optymalizację kosztów. Poziom informowania pacjenta jest jednym z czynników, które wpływają na jego satysfakcję.

Cel pracy. Zbadanie poziomu zadowolenia mieszkańców Słowenii z obecnego systemu opieki zdrowotnej oraz poziomu posiadanych przez nich informacji dotyczących projektu zmienionej ustawy o opiece zdrowotnej i ubezpieczeniu zdrowotnym o którym debatowano publicznie w 2017 roku.

Metody. Zastosowano metodę losowego doboru próby (metoda kuli śnieżnej). Jako narzędzie pomiarowe wykorzystano ustrukturyzowany kwestionariusz. Został on w całości wypełniony internetowo przez 488 osób. Dane zostały przeanalizowane za pomocą programu SPSS, wersji 21 (poziom istotności $p < 0.05$) z zastosowaniem statystyki opisowej, analizy korelacji, testu t-Studenta oraz analizy regresji liniowej.

Wyniki. Mieszkańcy Słowenii nie są usatysfakcjonowani obecnym stanem systemu opieki zdrowotnej. Długie kolejki najbardziej wpływają na ich brak zadowolenia z systemu, a także poziom zaufania do decyzji dotyczących leczenia podejmowanych przez lekarzy, oraz poziom szacunku w komunikacji pracowników służby zdrowia z pacjentami. Mimo, iż respondenci są słabo poinformowani o proponowanym projekcie zmian, w dużej mierze go popierają. Postrzegają otrzymane informacje dotyczące tych zmian jako relatywnie zrozumiałe, oraz oceniają je pozytywnie. Telewizja stanowi najważniejsze źródło informacji odnośnie zmian w służbie zdrowia.

Dyskusja i wnioski. Mieszkańcy Słowenii w bardzo dużym stopniu popierają państwowy system opieki zdrowotnej, natomiast są mniej przekonani do prywatnego systemu opieki. W przyszłości, więcej uwagi powinno się poświęcić komunikacji strategicznej oraz wyborowi kanałów komunikacji w sprawie planowanych zmian w służbie zdrowia.

Słowa kluczowe:

satysfakcja pacjenta, poziom informacji, komunikacja, reforma zdrowotna

ABSTRACT

PATIENT SATISFACTION WITH THE LEVEL OF BEING INFORMED ABOUT THE CHANGES IN SLOVENIAN HEALTHCARE SYSTEM

Introduction. Patients' satisfaction has a very important role regarding reforms of the healthcare system, which aim at improvement of health and optimisation of costs. Informed patient is one of the factors which notably influences patients' satisfaction.

Aim. To determine the level of satisfaction of Slovenian residents with the current healthcare system and how well informed they are about the draft law changes to the Healthcare and Health Insurance Act, debated in public in 2017.

Methods. A descriptive, non-experimental sampling method was used (snowball method). A structured questionnaire was used as a

measurement tool. The number of 488 persons finished the entire online questionnaire. The data were analysed using the SPSS programme, version 21 (significance level $p < 0.05$), and using descriptive statistics, correlation analysis, t-test and linear regression analysis.

Results. Slovenian residents are fairly (un)satisfied with the current healthcare system. Waiting lines affect satisfaction with the current health care system the most, followed by the level of trust in a doctor's decision concerning treatment and the level of respectfulness in the communication of healthcare workers with patients. Although respondents are less informed about the proposed changes, they support the draft law changes to a high degree. They perceive the information provided on the proposed changes in healthcare as relatively understandable and evaluate them positively. Television is the most important source of information on law changes in healthcare.

Discussion and conclusions. Slovenian residents support the public healthcare system to a very high degree and are less in favour of private healthcare. In the future, more attention needs to be directed towards the related strategic communication and the choice of communication channels with the planned changes in healthcare.

Key words: patient satisfaction, informedness, communication, health reform

INTRODUCTION

In the healthcare system, the belief that patients must be treated not only as patients but as system users is gaining relevance. The user's satisfaction with the healthcare services, which must be checked is important [1]. The satisfaction of users with healthcare services which is commonly disregarded in developing healthcare systems [2] is becoming an important indicator of the development of a healthcare system [1, 2]. It describes a level where the needs of patients and their expectations meet the quality of the services. The most important satisfaction factors are: quality of healthcare services, care process and health outcome [3]. Mihailović and associates [4] think that self-assessment of the medical condition of an individual, and the user satisfaction rating with the healthcare system are the two most frequent subjective indicators of the quality of a healthcare system. The latter indicator checks the level of satisfaction, to which a healthcare system or its components meet the expectations of the complete population or any subgroup of patients within it [5]. It presents a ratio between the anticipated and received healthcare service which is an important basis for reforms in several European, Asian and American countries [6, 7, 8, 9].

The most frequent determinants of patient satisfaction with the healthcare system are the following: age, health status, earnings, type of service according to operator (public or private sector), communication, attitude of personnel and the environment in the medical institution [10, 11, 12, 13, 14].

Due to the lack of a universal tool to measure patient satisfaction with the healthcare system and the lack of analysis of correlation between the satisfaction and economic power of the healthcare system, the level of patient satisfaction is determined indirectly, especially in the field of waiting lines, service quality and communication with medical personnel [15, 16]. The situation in Slovenia is similar but there is still little information available and little research has been carried out in this field. That is why our research focused on determining the level of satisfaction of Slovenian residents with the current healthcare system and how well informed they are about the draft law changes to the Healthcare and Health Insurance Act debated publicly in 2017. Our research sought to establish the level of satisfaction of residents of the Republic of Slovenia with the current healthcare system.

METHODS

We applied a quantitative, non-experimental sampling method of research. The research tool used was a structured survey questionnaire.

It was designed, based on an overview of past research [6, 7, 12] and the following research: a questionnaire for measuring patient satisfaction with the work of a general practitioner – EUROPEP [17, 18], national survey on the experiences of patients in hospitals [19] and user satisfaction with medical services of basic healthcare at the primary level [20].

The rating and progress of patient satisfaction with the healthcare system can be evaluated with satisfaction questionnaires with high reliability [21].

Description of the tool

The survey questionnaire included 38 questions and statements, divided into the following four segments: 1) Doctor's appointments in the last 12 months and self-assessment of the medical condition (4 questions), 2) Questions about the availability of the treatment, communication and service quality (15 questions), 3) Questions about satisfaction with the healthcare system and familiarity with changes to the Healthcare and Health Insurance Act, held in public debate (14 questions), and 4) Demographic data (5 questions). This article presents answers to the third segment of questions (questions about the satisfaction with the healthcare system and familiarity with changes to the Healthcare and Health Insurance Act, held in public debate).

We used a descriptive Likert scale: 1 (strongly disagree), 2 (mostly disagree), 3 (indecisive), 4 (mostly agree) and 5 (strongly agree). The survey questionnaire was tested on a focus group of healthcare students. It turned out that the survey questionnaire content was valid with from satisfactory to very satisfactory reliability of internal consistency [22] with a Cronbach coefficient α 0.80 (segment 3).

Sample description

The research was carried out with an online survey. We asked healthcare students, the Slovene Federation of Pensioners' Associations and different patient and patient rights organizations to fill out the survey. The snowball method was used.

A total of 693 persons responded to the online survey questionnaire, 488 of them completed the entire survey questionnaire.

The complete sample of the research included 156 males (32%) and 332 (68%) females. The average respondent age was 41.98 years ($s = 20.53$). The oldest respondent was 85 years old and the youngest 12. Table 1 presents detailed information on the demographic data.

■ Tab. 1. Demographic data of the respondents

Gender and Education level		N	%
Gender	Male	156	32
	Female	332	68
Education level	Primary school	42	8.6
	Vocational or secondary school	215	44.1
	Higher or tertiary education	177	36.3
	Master's degree/PhD	54	11.1

Legend: n – number, % – percentage

The largest proportion of the respondents lives in the Savinja region (41.2%); 17% of them come from Central Slovenia and 10.2% in the Drava region. The proportion of the remaining respondents is distributed among the other 9 statistical regions.

Course of the research and data processing description

The survey was carried out from 6th January 2017 to 9th January 2017. It was carried out according to the Code of Nursing Ethics of Slovenia [23] and the Declaration of Helsinki: Ethical Principles for Medical Research Involving Human Subjects [24]. The data was analysed with descriptive statistics, correlation analysis, T-test and linear regression analysis. The data was processed with a statistical program IBM SPSS v. 21.0 and IBM SPSS Amos v. 21.0 using a significance level of $p < 0.05$.

RESULTS

We wanted to determine the level of satisfaction of the respondents with the current healthcare system and the level of being informed about the changes to the Healthcare and Health Insurance Act (2017).

On a scale from 1 to 5 (1 – I strongly disagree, 5 – I strongly agree), the respondents most frequently said that they supported the public healthcare system ($=4.36$). Support for private healthcare is lower ($=3.18$). Dissatisfaction with the current healthcare system was confirmed with a low middle rating ($=2.86$) as the respondents thought that the actual healthcare system needed changes ($=4.32$). The respondents support changes to the Healthcare and Health Insurance Act ($=4.17$), although they were not informed enough about the proposed changes ($=2.91$). Despite being dissatisfied with the healthcare system, the respondents are not willing to pay more for healthcare than they currently do ($=2.71$).

We received mediocre values for questions on their state of being informed. The following questions: "Information on the proposed changes in healthcare are provided in an understandable way" ($=3.12$), "Based on information on the proposed changes in healthcare, I know what these changes mean for me" ($=3.26$), "Based on information on the proposed changes in healthcare, I can form an opinion on the proposed measures in the field of healthcare system" ($=3.35$) received the following answers: "The information I received about the current healthcare system is positive" ($=3.35$) and "Information I received on the proposed changes to the healthcare system is positive" ($=3.44$), which indicates that the respondents do not differentiate between the changes of the current healthcare system and the proposed changes.

The strongest positive links were found among the following variables: "Based on the information on the proposed changes to healthcare, I know what these changes mean for me" and "Based on information on the proposed changes in healthcare, I can form an opinion on the proposed measures in the healthcare system" ($r=0.765$; $p<0.01$); "Pieces of information on the proposed changes in healthcare are provided in an understandable way" and "Based on information on the proposed changes in healthcare, I know what these changes mean for me" ($r=0.643$; $p<0.01$). A strong negative relation was established between the next variables: "I am satisfied with the current healthcare system" and "The current healthcare system needs changes" ($r=-0.275$; $p<0.01$).

We checked whether satisfaction with the healthcare system depended on the age of respondents in two age groups (up to 50 years of age and 50 years and more). We established that those who are older than 50 are more satisfied with the healthcare system on average ($=2.92$; Std. dev.=1.310) than those who are younger than 50 ($=2.83$; Std. dev.=1.263). This difference is statistically significant $t(486)=-0.693$, $p < 0.05$. When sorting satisfaction with the healthcare system by gender, we established that females evaluate the healthcare system better than males on average, but the difference is not statistically significant $t(486)=0.486$, $p > 0.05$.

The respondents most frequently came across the proposed changes on television (68.2%), on online and social media (41.8%) but also in printed media (32%) and via the radio, friends, family and acquaintances (19.5%).

We asked the respondents which field of healthcare needed more improvement. When it comes to 46.5% of them, they thought that more needs to be done to improve financing and 70.1% pointed to improvements to the organisation of the healthcare system. The respondents most often emphasised accessibility. As many as 78.3% of the respondents thought more needs to be done to shorten waiting lines.

We were interested in the influence of some variables on patient satisfaction. We used patient satisfaction (I am satisfied with the current healthcare system) as a dependant variable and the following as independent variables: waiting line (I receive an appointment with the doctor quickly), personal situation (the doctor wanted to know my personal situation), trust in the doctor (I comple-

tely trust the doctor's expert decision on my treatment) and polite communication (the doctor and medical staff address me with Sir/Madam and act in a respectful way). Fig. 1. shows the relations between the variables.

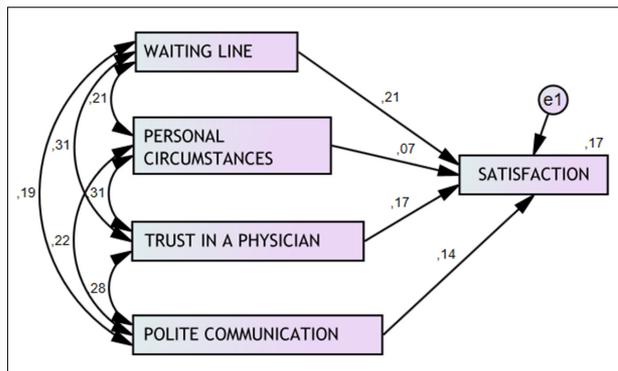


Fig 1. Relations between individual variables

The strongest relation to satisfaction with the current healthcare system is found in waiting lines ($r=0.210$; $p<0.01$); and in trust in the doctor's decisions ($r=0.170$; $p<0.01$). Positive relations can also be found among other independent variables. Variables: "Waiting line", "Personal circumstances", "Trust in a physician" and "Polite communication", present 17% of the variance "Satisfaction" with the current healthcare system (Fig. 1.).

DISCUSSION

Satisfaction of residents of the Republic of Slovenia with the current healthcare system is important information for the healthcare policy makers. Our research focused on determining the satisfaction of residents of the Republic of Slovenia with the current healthcare system and the level of their state of being informed about the proposed draft law changes.

The field of healthcare is the most important field for residents of the Republic of Slovenia (and the social field) as reported by the latest Europe-wide Eurobarometer study [25], which is why this field receives a lot of attention.

This research established that Slovenian residents support the public healthcare system to a very high degree but are less in favour of private healthcare. They are fairly (un)satisfied with the current healthcare system as opposed to the data from the international World Health Survey 2003 [26] which compared data from 70 countries. The majority of respondents from Slovenia were fairly or very satisfied with the healthcare system [6]. The evaluation of the respondents that the current healthcare system needed changes comes as a result of the dissatisfaction, established in our research. They were, however, not prepared to contribute more funds to it than they currently do.

Our research determined that satisfaction with the current healthcare system is mostly influenced by waiting lines or the waiting time for an appointment with the doctor. This is followed by the level of trust in a doctor's decision on treatment and the level of respectfulness in the communication of healthcare workers with patients. Many other researchers also determine the same elements

[27]. According to the respondents, the most important element that needs change is the organisation of waiting lines, followed by the healthcare system organisation, while the field of financing is important to less than half of respondents. When checking the standpoints by age, we determined that people older than 50 rate the healthcare system better than those who are younger than 50, while females rate the healthcare system better than males, but the difference is not statistically significant.

Interestingly, the respondents are less informed about the proposed changes but still strongly support the draft law changes to the Healthcare and Health Insurance Act.

The received information on the proposed changes in healthcare were perceived as relatively understandable. Based on the received information, the respondents could form an average opinion on what these changes meant for them and what the measures meant for the healthcare system. The received information on the current healthcare system and its changes was evaluated as positive.

When taking action to change the healthcare system, we also need to approach communication in a planned and strategic manner. This also includes choosing communication channels used by decision-makers to inform the public about legislative and other changes in the field of healthcare. Mass media are often used for this, which is why journalists have an important role in realising healthcare politics as an information channel between the policy makers and the general public [28]. Television is still a very important communication channel for political and healthcare communication by informing residents on topics related to healthcare [29]. Our research confirmed this by indicating that television is still by far the most important source of information on legislative changes in healthcare. Online and social media are not as important, while printed media have even less influence. The radio and friends or acquaintances were less important sources of information on the healthcare reform. It follows that the media and journalists are a very important source of information, especially regarding health and healthcare [30].

The research establishes that the satisfaction of healthcare system users depends most on the organisation of waiting lines, followed by regulation and organisation of the healthcare system and the field of financing. More attention needs to be focused on these fields in the future. Although the respondents are less informed about the proposed changes, they support draft law changes to a high degree. They perceive the provided information on the proposed changes in healthcare as relatively understandable and evaluate them as positive. Television is the most important source of information on law changes in healthcare. In the future, more attention needs to be focused on strategic communication and the choice of communication channels with the planned changes in healthcare.

Research limitations

The findings of this research confirm its purpose and aims. Limitations are seen in the use of solely quantitative methodology instead of a mixed research method, the small sample of respondents and uneven representation by location of residence and by gender.

REFERENCES

- Senić V, Marinković M. Patient care, satisfaction and service quality in health care. *International Journal of consumer studies*. 2013; 37(3): 312–319. <https://doi.org/10.1111/j.1470-6431.2012.01132.x>
- Yildiz Z, Erdogmus S. Measuring patient satisfaction of the quality of health care: A study of hospitals in Turkey. *Journal of medical systems*. 2004;28(6): 581–589. <https://doi.org/10.1023/B:JOMS.0000044960.53049.ba>
- Akbar FH, Pratiwi R, Samad R, Fanissa F. Proceedings of the health care science international conference. *Advances in Health Sciences Research*. 2017; 2: 92–99.
- Mihailović N, Kocić SS, Trajković G, Jakovljević M. Satisfaction with Health Services among the Citizens of Serbia. *Frontiers in Pharmacology*. 2017; 8: 50. <https://doi.org/10.3389/fphar.2017.00050>
- Busse R, Valentine N, Lessof S, Prasad A, van Ginneken E. Being responsive to citizens' expectations: the role of health services in responsiveness and satisfaction. [in:] Figueras J, McKee M, eds. *Health systems, health, wealth and societal well-being: assessing the case for investing in health systems*. 8. Maidenhead (UK): OpenUniversity Press; 2012. s. 175–208.
- Bleich SN, Özalpin E, Murray CK. How does satisfaction with the health-care system relate to patient experience? *Bulletin of the World Health Organization*. 2009; 87(4): 271–278. <https://doi.org/10.2471/BLT.07.050401>
- Browne K, Roseman D, Shaller D, Edgman-Levitan S. Analysis & commentary: measuring patient experience as a strategy for improving primary care. *Health Affairs (Millwood)*. 2010; 29(5): 921–925. <https://doi.org/10.1377/hlthaff.2010.0238>
- Rechel B, Ahmedov M, Akkazieva B, et al. Lessons from two decades of health reform in Central Asia. *Health Policy and Planning*. 2012; 27(4): 281–287. <https://doi.org/10.1093/heapol/czr040>
- Gupta D, Patel K, Lis CG. Self-rated health supersedes patient satisfaction with service quality as a predictor of survival in prostate cancer. *Health and Quality of Life Outcomes*. 2015; 13: 137. <https://doi.org/10.1186/s12955-015-0334-1>
- Friese CR, Lake ET, Aiken LH, et al. Hospital nurse practice environments and outcomes for surgical oncology patients. *Health Services Research*. 2008; 43(4): 1145–1163. <https://doi.org/10.1111/j.1475-6773.2007.00825.x>
- Aiken LH, Cimiotti JP, Sloane DM, et al. Effects of nurse staffing and nurse education on patient deaths in hospitals with different nurse work environments. *Medical Care*. 2011; 49(12): 1047–1053. <https://doi.org/10.1097/MLR.0b013e3182330b6e>
- Aiken LH, Sermeus W, Van den Heede K, et al. Patient safety, satisfaction, and quality of hospital care: cross sectional surveys of nurses and patients in 12 countries in Europe and the United States. *BMJ*. 2012; 344: 1717. <https://doi.org/10.1136/bmj.e1717>
- Al-Refaie A. A structural model to investigate factors affect patient satisfaction and revisit intention in Jordanian hospitals. *International Journal of Artificial Life Research*. 2011; 2(4): 43–56. <https://doi.org/10.4018/jalr.2011100105>
- Xesfingi S, Vozikis A. Patient satisfaction with the healthcare system: assessing the impact of socio-economic and healthcare provision factors. *BMC Health Services Research*. 2016; 16: 94. <https://doi.org/10.1186/s12913-016-1327-4>
- Sofaer S, Firminger K. Patient perceptions of the quality of health services. *Annual Review of Public Health*. 2005; 26: 513–559. <https://doi.org/10.1146/annurev.publhealth.25.050503.153958>
- Adang EM, Borm GF. Is there an association between economic performance and public satisfaction in health care? *The European Journal of Health Economics*. 2007; 8: 279–285. <https://doi.org/10.1007/s10198-007-0045-6>
- Grol R, Wensing M, Mainz J, et al. Patients' priorities with respect to general practice care: an international comparison. *European Task Force on Patient Evaluations of General Practice (EUROPEP)*. *Family practice*. 1999; 16(1): 4–11.
- Kersnik J. Bolnik v slovenskem zdravstvu. Monografija o zadovoljstvu bolnikov in organizaciji pritožnega sistema. Ljubljana: Združenje zdravnikov družinske medicine SZD; 2003. [in Slovenian language]
- Robida A. Nacionalna anketa o izkušnjah pacientov v bolnišnici. Ljubljana: Ministrstvo za zdravje Republike Slovenije; 2007. [in Slovenian language]
- Repolusk A. Zadovoljstvo uporabnikov zdravstvenih storitev osnovnega zdravstva na primarni ravni/User satisfaction with medical services of basic healthcare at the primary level: magistrska naloga. Celje: Mednarodna fakulteta za družbene in poslovne študije. [in Slovenian language]
- Vuković M, Gvozdenović BS, Gajić T, et al. Validation of a patient satisfaction questionnaire in primary health care. *Public health*. 2012; 126(8): 710–718. <https://doi.org/10.1016/j.puhe.2012.03.008>
- Cencić M. Kako poteka pedagoško raziskovanje: primer kvantitativne empirične neeksperimentalne raziskave. Ljubljana: Zavod Republike Slovenije za šolstvo; 2009. [in Slovenian language]
- Kodeks etike v zdravstveni negi in oskrbi. Uradni list Republike Slovenije št. 71; 2014. Available at: <https://www.uradni-list.si/glasilo-uradni-list-rs/vsebina/2014-01-2937/kodeks-etike-v-zdravstveni-negi-in-oskrbi-slovenije> [in Slovenian language]
- Declaration of Helsinki: Ethical Principles for Medical Research Involving Human Subjects. *World Medical Association*; 2008.
- Standard Eurobarometer 90 – Autumn 2018 "Public opinion in the European Union, First results"; 2018. Available at: <https://www.google.com/url?sa=t&rc=j&q=&esrc=s&source=web&cd=1&ved=2ahUKewiht5SU2ZLhAhWy-ioKHxWIA6kQFjAAegQIBhAC&url=http%3A%2F%2Fec.europa.eu%2Fcommfrontoffice%2Fpublicopinion%2Findex>
- World Health Organization. *World Health Survey – Slovenia; 2003*. Available at: <https://www.who.int/healthinfo/survey/whssvn-slovenia.pdf>
- Figueras J, McKee M, eds. *Health Systems, Health, Wealth and Societal Well-Being: Assessing the Case for Investing in Health Systems*. Maidenhead: The European Observatory on Health Systems and Policies; 2012.
- Fredriksson M, Tiainen A, Hanning, M. Regional Media Coverage Influences the Public' S Negative Attitudes to Policy Implementation Success in Sweden. *Health Expectations*. 2014; 18: 2731–41. doi:10.1111/hex.12247.
- Gollust SE, Franklin Fowler E, Niederdeppe J. Television News Coverage of Public Health Issues and Implications for Public Health Policy and Practice. *Annual Review of Public Health*. 2019; 40: 16.1–16.19.
- Grilli R, Ramsay C, Minozzi S. Mass Media Interventions: Effects on Health Services Utilisation. *Cochrane Database of Systematic Reviews*. 2002; 1.

Manuscript received: 15.03.2019

Manuscript accepted: 08.04.2019