

South Eastern Europe Health Sciences Journal

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7th International Scientific Conference Udine-C group in Osijek, Croatia: Possibilities of
Scientific Research in the Process of Mentoring in Nursing – Increase of the Effectiveness of
Mentoring Through Education

&

2nd International Scientific Conference in Health Sciences

Osijek, Croatia

19th-21th. September 2013.

FINAL PROGRAMME AND ABSTRACTS

Editors:

Nada Prlić

Ivana Barać

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Important days:

Deadline for sending conference participation form with abstract and with registration fee: 20th of July

Deadline for submitting paper for publication in the conference proceedings: 20th of July

Congress venue

Faculty of Agriculture, Kralja Petra Svačića 1d, Osijek 31000, Croatia

www.pfos.hr

Language of the conference:

Croatian and English. Simultaneous translation will be provided.

Other information:

Conference will be certified according to the rules of the Croatian Nursing Council.

Conference fees:

- accompanying persons 55 EUR / 400,00 kn

- Pensioners and Students of Postgraduate Doctoral Study NO FEE

Conference fee way of paying:

Payment on account number of tourist agency

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**7th International Scientific Conference Udine-C group in Osijek, Croatia: Possibilities of Scientific
Research in the Process of Mentoring in Nursing – Increase of the Effectiveness of Mentoring
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&
2nd International Scientific Conference in Health Sciences**

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Welcome Remark

Dear Colleagues and Friends,

The UDINE C (Understanding Development Issues for Nurse Educator Careers) Meeting 7. Jointly with the Conference about Improvement of Nursing Education, with the participation of the Croatian Nursing Council and the Editorial board of the South East European Health Science Journal (SEEHSJ), will be held in Osijek, Croatia on the 19th to 21th September 2013. It is a great pleasure to announce and invite you to be present and participate in this Conference /Meeting.

The conference will be in the main building of the Faculty of Agriculture of the Josip Juraj Strossmayer University Osijek (Aula Magna hall). It is a modern unit, built within the University Campus, with very good logistic conditions for such scientific event. The UDINE-C network was formed at an initial meeting in Udine, Italy in November 2007. Udine - C is an informal group which promotes friendship, respect and intellectual exchange with health professionals interested in the development of nursing research; education and practice skills across all member countries. There is no payment associated with membership other than the expectation that members will collaborate to produce outputs in the form of papers/reports/resources in the following areas: Research in Nursing, Nursing development projects, Annual conference and meetings and Exchange of ideas, skills and people. All accepted papers will be published in a peer Scientific journal SEEHSJ. Once again, on behalf of the Organization Committee I proudly invite You to participate and with your presence magnify this conference. We believe that this conference represents an opportunity for a fruitful discussion on the direction in the development of nursing education, as well as the further development of research in nursing.

Truly yours !!!

Organization Committee

Introduction to the Scientific Programme

Oral Session

This session composed of abstracts selected for oral presentation (15 minutes), which are indicated by the prefix "O" in the front of the programme number.

Poster Session

Most of the accepted abstracts (which are indicated by the prefix "P") are scheduled for poster presentation.

The posters are displayed in Hall, and is open to all participants during all day. Posters will be presented during the specified time period. Author's presence is kindly requested from 11:00 to 12:00. Posters will be assessed and evaluated by the members of UDINE C group according to the elements and criteria of evaluation of poster presentations. The authors of the three best posters will give a talk about the topic of the poster, on Saturday. They are not obliged to have a MS Powerpoint presentation. In addition to poster presentation, research and the results of research will be presented and discussed.

Instructions to Authors

Lecture hall is equipped with a PC and digital projector for PowerPoint presentations. Presentations must be handed in using a CD-ROM, a zip drive, a memory stick or your personal laptop one hour before start of the meeting.

Please allow enough time for a thorough check of the presentation and the transfer of the data to the presentation system by the staff.

Credits and certificates

For all Conference participants will be provided the Certificate of attendance.

Publication of Abstracts

All accepted abstracts will be published as a supplement to South Eastern Europe Health Sciences Journal, the official publication of the Faculty of Health Care and Nursing, University of "Vitez", Travnik (Bosnia i Hercegovina) and School of Medicine, University Josip Juraj Strossmayer Osijek (Croatia). The Abstract Book will be handed out to all participants upon registration at the congress and included in the registration fee.

Academic Careers: The Value of Individual Mentorship on Research Career Progression

Christine Sylvia Jackson¹, Roslyn Kane¹, Ian McGonagle¹
¹University of Lincoln UK

The paper discusses how individual mentoring may impact positively on career pathway development for potential and future clinical academic researchers in nursing and allied health professions.

Methods: The paper draws on a number of data sources and methodologies in order to fulfil the aims. Firstly, international literature provides an insight into mentoring processes and impact on career development. This is followed by a review of the mentoring experiences based on a UK study on the professorial populations in nursing and allied health professions. The final section reports on results of interviews with early and advanced researchers on their experiences of mentoring.

Results: Individual mentoring is valued highly by health care professionals at all stages of career development. It is considered particularly useful when people are in transition towards a more challenging career role. Individuals in receipt of mentoring both formal and informal, report improved confidence in their ability to achieve their career goals. Mentees report improved levels of competence achieved through knowledge acquisition, networking and ability to problem solve.

Conclusions/Summary: Mentoring is considered an important process for health care professionals at all stages of their career.

Opportunities to access and receive mentoring support for health care staff in the UK remain limited and sporadic in nature. There are examples of excellent mentoring schemes in place within some institutions and organisations but a national strategy to support mentoring has yet to be developed

Key words: Clinical academic careers, mentoring, nursing, allied health professions

Self-Assessment of Master of Nursing Mentorship Competencies through Education Process

Nada Prlić¹, Robert Lovrić^{1,2}, Ivana Barać¹, Jadranka Plužarić¹

¹University of J.J. Strossmayer, Faculty of Medicine, the University Graduate Study of Nursing, Osijek

²University Hospital Centre Osijek, Pediatric Clinic Osijek

Aim: To evaluate competencies of students before studying for a master's degree and after completing a master's programme and to determine whether there are differences between areas of competencies.

Subjects and methods: Subjects were students of university graduate programme in nursing at J. J. Strossmayer University of Osijek, Faculty of Medicine Osijek. The study was conducted in two parts in years 2011 and 2012. In the first part the students did self-evaluation of their own competencies before they started the master's programme and in the second part they evaluated the same competencies at the end of the master's programme. The research instrument was a questionnaire that contained seven competency areas (27 criteria based on learning outcomes) and was designed specifically for this research. The data were presented in absolute and relative frequencies. Differences between the groups were analyzed by Wilcoxon test. Significance level was set at 0.05.

Results: The study included 64 subjects, average age 44 (+8) years, out of whom 57 (89.1 %) were women and 7 (10.9 %) were men. 18 subjects (59.4%) had more than 20 years of work experience. The results showed the lowest value for research competencies (MV=2.6, SD= 1) and pedagogic competencies (MV=2.8, SD=1.1), while the highest value was for nurse manager competencies (MV=3.6, SD=0.9) at the beginning of the master's programme. At the end of the master's programme the results showed significantly higher values in all seven areas of competencies ($p < 0.001$). Self-evaluation of professional-pedagogic competencies, including planning, organizing and conducting nursing care in form of lectures, seminars and practical training showed MV=2.8, SD=1.1 at the beginning and MV=4.4, SD=0.6 ($p < 0.001$) at the end of the master's programme.

Conclusion: There are differences between areas of competencies. The subjects have achieved mentorship competencies through education process.

Keywords: mentorship competencies, master of nursing

Interpersonal relationship - the most important element of the mentoring process

Mateja Lorber¹, Barbara Donik¹, Majda Pajnkihar¹
¹Faculty of Health Sciences, University of Maribor

Introduction: The mentoring process is a guided relationship with mutual benefits and cooperation between the mentor and the student. The reflection is the main source or element of the mentor's power. There cannot be any reflection if there is no feedback from the student or if the student has no will to learn. Important factors for succeeding in mentorship-based learning are therefore also the readiness and motivation of students to study. The aim of this study was to find out impact factors of mentorship process in learning process of nursing.

Methods: The sample included 91 registered nurses which are employed in University Teaching Hospital in Maribor, and they are mentors in clinical practice of nursing students of Faculty of Health Sciences in University of Maribor. Questionnaire was designed only for the purpose of this study. Cronbach's alpha was 0,898.

Results: The Pearson's correlation coefficient show that older mentors assign more time for explaining how nursing students should work and what is student's role on clinical practice. With factor analysis we got six factors of mentorship process. With this factor's we can explain 63% of total variability of mentorship process. The most important factor is mentor-student relationship which explains 36% of total variability of mentorship.

Conclusion: Mentors have to establish mentorship process as support of students. Quality teaching skills in clinical environment should be supported by different teachings methods. Consideration and adapting to different didactic approaches are assuring quality teaching in nursing practice.

Evaluating Nursing Theory in Clinical Practice: What Criteria do Slovenian Mentors use?

Metka Harih¹, Majda Pajnkihar¹

¹Faculty of Health Sciences, University of Maribor

Aim. In order to precisely identify which nursing theory in a particular environment is the most appropriate, the selection and use of the theory and its application into the practice from which it originates is crucial. The purpose of this study was to develop the criteria for the evaluation in order to establish the consistency of theory and practice, knowledge, philosophy and values of nursing practice.

Methods. In the research an interpretative paradigm with qualitative methodology and the method of grounded theory have been used.

Results. Interviews with nurses provided the base for formulating three main categories: uniqueness of nursing care, interpersonal relations and communication, and the selection of a theory for the support of practice in nursing care. Nurses pointed out nursing, caring, support, autonomy, an active role and teaching a patient as key elements inside the uniqueness of nursing care category. Within the interpersonal relations and communication category nurses pointed out respect, dignity, equal treatment, trust, communication, and a person. Inside the selection of theory for support of practice category they pointed out the simplicity of use, intelligibility, adequacy of theory selection, application of the theory to practice, an integrated treatment of a patient, communication and interpersonal relations, and an individual who is actively involved in medical treatment.

Conclusion. A good theory of modern nursing care according to nurses emphasizes orientation to the patient, his active role, the importance of interpersonal relationships and communication, and the integrated treatment of an individual who takes part in it.

Key words: nursing theory, criteria for evaluation, clinical practice, nurse.

The development of students' competences from the perspective of clinical environment and mentor's role

Vesna Čuk¹, Irena Trobec¹, Boštjan Žvanut¹

¹University of Primorska, Faculty of health sciences Izola, Slovenia

Aim: Clinical settings and mentor's role are relevant for successful clinical practice, and thus, for the quality of nursing study. The aim of this study was to determine the effect of clinical environment on the mentor's role.

Methods: A combination of qualitative and quantitative research design was implemented. A survey was performed with mentors in four Slovenian psychiatric hospitals or departments of psychiatry, where clinical practice for nursing students was performed. The final sample consisted of 52 clinical mentors. Furthermore, 15 randomly selected clinical mentors participated in focus groups, where the aforementioned effect was discussed.

Results (main, with numbered data): Survey results indicate a strong, statistical significant correlation between clinical environments and mentor's role ($\varphi = 0.732$, $p < 0.001$). Qualitative analysis of focus groups transcripts confirm this correlation and indicate different categories, relevant for improving the mentor's role: e.g. lack of mentor's knowledge, unpreparedness of the organisation for encouraging the mentor's role.

Conclusion: This study shows that a clinical environment has a strong effect on mentor's role. Hence, special attention should be put to the identification of those factors who have direct effect on the quality of clinical environment, relevant for the development of mentorship, at the organisational and national level.

Key words: clinical practice, mentor's role, clinical environment

Conscientious objection – does it apply also to nursing students?

Beata Dobrowolska ¹, Roslyn Kane ², Paul Linsley ², Anna Pilewska-Kozak ¹

¹ Medical University of Lublin, Poland

² Lincoln University, England

Introduction. The conscientious clause in nursing can be defined as a kind of special ethical and legal regulation which gives nurses right to object to actively perform certain medical procedures which are against their personal system of values. Usually these values are associated with nurses' religious beliefs, but not always. Scope of this regulation differs throughout the world. However, it is emphasized that right to the conscientious objection is not absolute and this regulation can not be used in cases of danger to life or serious damage to the health of the patient.

Medical procedures to which nurses hold conscientious objection are often within reproductive health services. However, we can also find reports on the use of this right i.e. in end-of-life care and in the process of the implementation of medical experiments. The main issue underlined in the discussion regarding practising conscientious objection in the clinical setting is the collision of two human rights: the right to conscientious objection of medical personnel and the right of patients to specific medical procedures which are legal in their country. If a procedure is legally available in a country it means that patients can expect to receive it, on the other hand, all citizens, including health care workers, have the right to protect their moral identity and the right to object to the implementation of a procedure to which they have a specific objection. It is very difficult to find good ethical and legal balance between these two perspectives.

Aim. The aim of this presentation is the analysis of the nursing students' status in case of participation in medical procedures to which nurses hold conscientious objection.

Methods. Ethical and legal and professional guidance documents will be analyzed. Polish and British examples will be taken as a background for the analysis.

Conclusions. The right to conscientious objection for medical personnel is one of the fundamental principles of the system of human rights protection in the world. Nursing students have the right to object to actively perform medical procedures which are against their conscience but they cannot object to being educated about these procedures.

Key words: conscientious objection, nursing students, nursing ethics, nursing education

Key elements in the structure of academic motivation for nursing students

Dragana Terzić Marković¹, Sanja Stanisavljević¹, Radmila Ranković Vasiljević¹

¹Higher Health School of Professional Studies in Belgrade, Belgrade, Serbia

Introduction: Academic motivation pertains to inner processes instigating and maintaining activities of students in order to achieve certain academic goals. Three key dimensions of motivation are defined: intrinsic, extrinsic motivation and amotivation. Within the education system, motivation has direct and indirect influence on the process of learning and knowledge gaining.

Aim: Establish key elements determining type of academic motivation of health care students.

Method: Research has been done by the type of cross-section study on the sample of 286 nursing students. Academic motivation of nursing students is tested by Academic Motivation Scale (Vallerand 1992), by which levels and types of students' motivation were established. A questionnaire on socio-demographic characteristics of respondents, designed for the purpose of this research, was added to the scale.

Results: Obtained data show highest mean values on the subscale of extrinsic motivation 3,63 (SD=0,64). Mean value of parameters on the subscale of intrinsic motivation is 3,32 (SD=0,70), and it is lowest on amotivation subscale 1,79 (SD=0,86).

Statistically, significant differences were found between employed and unemployed students on a subscale of extrinsic motivation regulated by identification ($t=-3,764$; $p=0,000$), and on a subscale of extrinsic motivation externally regulated ($t=-2,660$; $p=0,008$).

AMS has good internal consistency for this sample and in this research it was calculated that Cronbach's alpha coefficient has value 0,80.

Conclusion: Results of the research show domination of extrinsic academic motivation, while amotivation is of the lowest intensity. Presence of extrinsic motivation with tested students is not desirable, because their behavior is motivated and regulated by external sources. Obtained results indicate the need to test samples of less intensive intrinsic motivation, as well as monitoring and comparative analysis of students' motivation during their three years studies.

Key words: academic motivation, nurses, students

Satisfaction of graduates with the quality of mentoring methodology at the faculty of health studies of the University of Mostar

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Introduction: Mentoring at the Faculty of Nurses should have a clearly structured relationship defined by the needs and concerns of nursing with respect to the development of the profession, but also the personal satisfaction of graduates, who through the process of mentoring acquire additional knowledge and skills important for productivity and professionalism. It is important to mention that the mentors at the Faculty of Health Studies in Mostar are exclusively doctors, and at the College of Health Sciences, Slovenj Gradec, nurses with the required academic titles for mentoring.

Objective: to examine the satisfaction of graduates with the quality of mentoring methodology at the Faculty of Health Studies of the University of Mostar

Subjects and methods: The study group consists of graduates of the Faculty of Health Studies, University of Mostar, who graduated within the past 18 months, and the control group consists of graduates High School of Health Sciences, Slovenj Gradec, Slovenia, who graduated within the same period. The research was conducted through surveys and questionnaires according to the Likert scale, range 1-5, in which 24 questions were asked related to the evaluation of the satisfaction of students during work on their theses. The parameters in question were: the satisfaction of graduates with the quality, methodology and outcomes of their graduate theses in the graduate-mentor correlation.

Results: Satisfaction with the quality of graduates methodology mentoring the School of Health Studies, University of Mostar is less than the graduates High School of Health Sciences Slovenj Gradec. Graduates of the Faculty of Health Studies were significantly less satisfied with relationships and communication in relation to mentor graduates High Sole of Health Sciences Slovenj Gradec.

Conclusions: Satisfaction with the quality of graduates methodology mentoring the School of Health Studies, University of Mostar was significantly less compared to graduates High Sole of Health Sciences Slovenj Gradec.

Key words: Satisfaction, graduates, quality mentoring.

Students satisfaction with organisation of practical teaching at the Neurology Clinic

Ivana Nešić¹, Milijana Matijević¹

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Health care as applicative discipline in applied practice of nursing represents the profession and the professional activities of nurses. As part of the reform of the Health care system and improvement of quality of Health care and harmonization with European streams, the Neurology Clinic, realized a new framework in the field of health care.

Comprehensive treatment of patients requires the need for coordination and harmonization the work, which can be quality obtained only with new and constantly renewed knowledge and skills, along with building up the high ethical attitudes and continuous planning, conduction and control of all work processes in the fields of health care and support services. The result of these interventions is quality new attitude towards the students in practical training. Continuity of care, personal responsibility, active participation of users / patients and families, improved communication, the ability to research, striving for excellence and evidence-based practice are the main principles of health care at the Neurology Clinic.

Reform of the education of nurses and the inclusion nurses from practice in the practical training of students contributed that affirmed nurses of Neurology Clinic became part of the process. The focus of this work is that the learned professional principles and doctrines of good professional practice, students can apply from the beginning of learning through practical training. Due to some discrepancies in the educational and career development of nurses practitioners and nurses mentor, as well as standards and regulations for work place for nurses-associates we made the Procedure for students training.

In order to achieve the desired quality of practical training, students acquire adequate proficiency of knowledge and skills associates daily conduct a self-evaluation and evaluation by the students. In order to view student satisfaction with organization of practical training we conducted a survey with students.

The role of nurses associates in the practical teaching is active and purposeful, inevitable in the process of socialization and integration of students into the nursing profession.

Problem Based Learning - an educational method in clinical practice

Vida Gönc¹, Jasmina Nerat¹

¹Univerersity of Maribor, Faculty of Health Sciences

Problem based learning is focused on problem solving. However, the learning goal does not aim to solve the problem, but rather it utilises the problem in order to transfer knowledge in the educational process. By emphasising learning instead of teaching, the students are enabled to internalize the subject and achieve higher, transferable, and complex competences.

The goal of the present study was to comprehend how students in clinical practice respond to learning with the problem based learning approach. In order to collect results, the method of survey (a questionnaire) was employed, followed by quantitative and qualitative analysis at the end of the clinical practice.

The clinical practice involved 104 students. During the four week of clinical practice each student received two problem tasks. According to the results of the survey students consider problem solving approach as a pleasant and encouraging. The students estimated their levels of motivation to be higher, the approach offered them more independence, and teamwork was considered more effective. Overall, the students considered such environment to be conducive for learning. On the other hand, the results of the students' perspective wield some shortcomings, such as lack of confirmation and direction on the learning material, variability of expectations by different mentors, lack of efficiency (regarding the availability of the mentor versus students' learning process).

Problem based learning is a helpful approach in clinical practice, especially in efforts to interlink theory and practice and stimulate professional development. In order to fully benefit from problem based learning, there is a need for continuous training in the approach, as well as for sufficient and adequate support to students and clinical mentors.

Key words: Problem based learning, clinical practice, educational method

Evaluation of clinical practice - nursing students perspective

Barbara Kegl¹, Mateja Lorber¹, Barbara Donik¹, Majda Pajnikihar¹

¹Faculty of Health Sciences, University of Maribor

Introduction: Responsibilities for education of nursing care students have educational and health care institutions. Students, on clinical practice need mentor's help by transferring theoretical knowledge which students have obtained in the theoretical lessons. At first nursing care students are building a theoretical knowledge with the help of simulations, where they are learning analytical decision-making. In clinical practice students start to gain experience with initiative decision-making. Therefore, the student's satisfaction and self-assessment of clinical practice is very important. With this study we wanted to find out the satisfaction of nursing care students on clinical practice.

Method: The sample included 250 nursing care students of first, second and third- year of study of the Faculty of health Sciences, University of Maribor, in academic year 2012/2013. We used a quantitative research approach. The questionnaire used was structured and includes 20 claims. Cronbach Alpha was 0.941. We analysed the data with the help of the SPSS 20.0 computer program, calculating the descriptive statistics and with the Factor analysis we formulate factors, which represent the characteristics of the measured variables, and ANOVA, which was used to determine statistically significant differences in the studied variables.

Results: The factor analysis gave us four factors, which may explain the 76% of the total variability of students' satisfaction with clinical practice. The first factor, which we named "support and assistance of team members" we can explain 48% of the total variability of satisfaction with clinical practice, with second factor, which we named "support and assistance of faculty" we can explain 8% of the total variability, with the third factor "organization and professional development" we can explain 6% and with fourth factor, which we named "mentors support and help" we can explain 5% of the total variability of satisfaction with clinical practice. With ANOVA we found statistically significant differences in the first three of the four obtained factors of satisfaction with clinical practice according to year of study.

Discussion and conclusion: The student's satisfaction with clinical practice increases quality of clinical training. Experiences in the clinical practice of nursing care students are very important in nursing education. In education in the clinical training mentors and whole team members have an active role. Mentors have to monitor, educate, teach students and lead them at clinical practice.

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The Importance Of The Introduction Of Ergonomic Principles To The Study Of Nursing

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The LBP problem is a very complex one. The battle against spinal diseases should include several professions and multidisciplinary approaches. We see two crucial areas where the most important work against LBP in nursing personnel must be implemented. Firstly, nursing schools should include knowledge about occupational spinal problems, risk factors, and prevention strategies in their educational programme. Secondly employers should be aware of the cost-benefits of LBP prevention and take account of optimal work organisation and ergonomics, with the employment of proper technical equipment for the diminution of heavy physical work in nursing personnel.

Key words: Ergonomic principles, study of nursing, prevention strategies

The Influence Of Mentorship To Professional And Personal Development Of Nurses – Mentors

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Aim. To explore influence of mentorship to professional and personal development of nurses - mentors.

Subjects and methods. From June to September 2012 prospective research was performed on J.J. Strossmayer University of Osijek, Faculty of Medicine Osijek University Nursing Undergraduate Studies, where nursing clinical mentors were examined. The research was performed on clinical and educational centers of faculty of Medicine osijek, located in Clinical Hospital Osijek. Research instrument was a questionnaire modified from „Mentorship evaluation form“ (School of Medicine, University of Virginia), „Mentor evaluation form“ (Connecticut Mentoring Partnership, *Bussines Guide To Youth Mentoring*) and “Mentoring in nursing education: Perceived characteristics of mentors and the consequences of mentorship“

(*Department of Healthcare Sciences, Artresis University College Antwerp, Belgium*). Criteria for including clinical mentors into the research was: active clinical mentor during 2011/2012.

Results. Clinical mentors with experience of mentoring for 5 to 7 years think that most significant indicators of their personal development is a developing skills. Others indicators did not show any kind of significance.

Clinical mentors with clinical experience for 21 to 30 years think that most complicated things regarding the mentorship are personal factors, while clinical mentors with working experience for less then 20 years think that about professional factors. Clinical mentors with clinical experience for more then 40 years think that they don't have any kind of complicated factors regarding their mentorship as well as professional and personal development.

Conclusion. The mentorship have a big influence at professional and personal development of nurses – clinical mentors.

Key words: mentor, mentorship, nursing, personal and professional development

Effective Feedback: An Essential Part Of A Successful Mentoring In Nursing Practice

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Introduction. Effective feedback is defined as any information, process or activity which affords or accelerates student learning based on comments relating to either formative or summative assessment activities. It is an integral and essential component of any teaching and learning; and one of the key roles of the nursing mentor. Unfortunately, despite the great importance of feedback within the learning process, there seem to be an inconsistency in the amount, type and timing of feedback providing to students.

Aim. To review the nature, importance and type of feedback to nursing students during mentoring. The general principles, the benefits of and the barriers to feedback explored and finally the elements of effective feedback were outlined.

Methodology. Three electronic databases were searched for original and review articles on the feedback published in English. Search strategy included the utilization of two or three key words based on the MeSH index. In addition, reference lists in included articles and secondary sources were searched manually.

Results. It was confirmed by review of the literature that effective feedback to students should be constructive, consistent, and actionable and student focussed. Namely, students would like feedback (verbal or written) that underlines positive and negative characteristics of their practice so that they can identify progress and any areas that require further improvement. When providing negative feedback to student, it should be used the “sandwich” technique. Then, feedback needs to be concise, and provided in a timely manner. Some study indicated that the timing of feedback was significant different. Feedback is traditionally offered at the end of the learning process, but this is often too late. Therefore, midway feedback to students can be much more productive. Finally, feedback should focus on evaluating behaviour and work performance and not on the student’s character.

Conclusion. In general it is noted insufficient knowledge in concept of a feedback process and its significance as essential part of a successful mentoring in nursing practice. Awareness and knowledge of the basic components of feedback delivery can give support to the learning process and ensure that both mentor and student have a positive interactive experience.

Key words. Feedback; Mentor; Nursing student, Assessment

Contribution of mentors to the learning process and the acquisition of competences of bachelors of nursing - students' attitudes

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AimTo examine students' attitudes about healthcare mentors' contribution to learning, knowledge, skills and attitudes of students, and to investigate the connection of contribution of certain mentors' competences.

Subjects and MethodsThe subjects were a third year students from the undergraduate course of nursing, University of Medicine in Osijek (N = 45). The instrument used in this study is a questionnaire for students with five questions about the general characteristics of the respondents, and five statements for the assessment of the overall contribution of the mentor competencies for bachelor's competences. The second part of the questionnaire contains 52 specific characteristics divided into 6 healthcare mentors' competence categories, taken and adapted from: The Nursing Clinical Teacher Effectiveness Inventory (NCTE) and Observations of Nursing Teachers in Clinical Settings (ONTICS). Students were assessing on a five- point Likert scale how much individual characteristics of mentor's competences contributed and helped them in learning, acquisition of theoretical knowledge, practical skills and organization and change of attitudes.

ResultsStudents in general, rate highly the importance and contribution of mentors towards the development of their own bachelor's competences (4.1 ± 0.8). Mentoring competency student evaluation mostly contributed to the learning process (4.3 ± 0.8), the acquisition of theoretical knowledge (4.2 ± 0.9) and practical skills (4.3 ± 0.9) of students. The biggest contribution for students' attitudes have a mentoring competence of relationship with the student (4.4 ± 0.9). There is a strong positive correlation between the mentors' competences which contribute to learning and knowledge of students ($r_s = 0.893$, $n = 52$, $p = 0.00$) and a medium strong positive correlation between contributions to learning and acquisition of skills ($r_s = 0.761$, $n = 52$, $p = 0.00$). Mentors' competences which contribute to the acquisition of knowledge are in the strong positive correlation with competencies that contribute to the acquisition of practical skills ($r_s = 0.844$, $n = 52$, $p = 0.00$).

ConclusionAccording to student's attitudes, healthcare mentors have a strong contribution and they give assistance in the learning process and acquisition of competences of bachelors of nursing.

Keywords Healthcare mentor's competences, bachelor's of nursing competences

Development of Mentoring at the University Graduate Study of Nursing, Osijek in the Last 10 Years

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The first mentor education in nursing started in the year 1997 when 30 nurses from University Hospital Centre Osijek received training for mentors at their Hospital Departments. For the most part, the training comprised the education in process of nursing healthcare. In the following year one generation of students enrolled in a three-year study programme (Bachelor of Nursing). At that time it was a satellite Nursing Study in Osijek (seated in Zagreb).

Education of nurses to become experts in the field of nursing healthcare started at the Faculty of Medicine in the academic year 2003/2004 when a three-year Professional Study of Nursing was launched. Only 9 mentors held Nursing Healthcare practices at Clinical Departments, with the total of 120 hours of tuition. With the development of the study programme the education of competent teaching staff at the Faculty of Medicine in Osijek continued. In the year 2010 the Professional Study of Nursing transformed into University Undergraduate and Graduate Study of Nursing. The proposed Study Programme contributed to progress and advancement in organisational structure of the Faculty of Medicine Osijek and remained at the same time the important prerequisite for maintaining as well as enhancing the quality of Nursing Study programme, especially in development of mentor competences. The aim of the University Graduated study of Nursing is to produce sufficient number of experts who will acquire competences for independent teaching in the field of Nursing Healthcare, competences to participate in research or to continue the training towards doctoral dissertation. Currently, there are 15 mentors for the subject Nursing Healthcare in the 1st year of Undergraduate Study of Nursing.; 95% of them have either finished or are finishing the Graduate Study of Nursing.

Key words: nursing, study programme, mentorship

The importance of understanding the techniques for reflection on clinical practice in nursing education

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Introduction: Reflective practice is an important element of critical thinking in nursing education. That is why nurses must actively participate in the process of gathering, interpreting, analysing and evaluating the data of a patient, which demands various cognitive skills from them. It is very important that nurses as mentors are helping nursing care students on clinical practice to obtain those skills. The purpose of this study was to determine the self-assessment of reflection and critical thinking among nurses.

Methods: We carried out a quantitative study. The sample included 144 nurses from different health institutions in and around Maribor. We used structured questionnaire. Cronbach Alpha was 0.970. We analysed the data with the help of the SPSS 20.0 computer program, calculating the descriptive statistics and with the Factor analysis we formulate factors, which represent the characteristics of the measured variables, and ANOVA, which was used to determine statistically significant differences in the studied variables.

Results: We found that the self-assessment of reflection and critical thinking is relatively high (3.84 ± 0.67 to 4.59 ± 0.58). With the factor analysis, we got three factors, which may explain the 60% of the total variability of reflection and critical thinking. The first factor, which we named “understanding” we can explain 38% of the total variability of reflection and critical thinking, with second factor, which we named “recognizing” we can explain 12% of the total variability, and by the third factor “analysis” we can explain 10% of the total variability of reflection and critical thinking. With ANOVA we didn't found statistically significant differences in self-assessment of nurses' reflection and critical thinking, regardless of age, length of service and level of education.

Discussion and conclusion: Through encouraging and teaching reflecting, critical and theoretical thinking skills, in nursing we can increase the interest for education and lifelong learning of nurses, which have consequently impact on the systematic development of knowledge and research, as well as to ensure quality of nursing practice in nursing education.

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Assessment and Self-Assessment of Mentoring Effectiveness at the Pregraduate Nursing Study of the Department of Health Studies at the University of Zadar

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Introduction: Mentoring represents a form of progress in the profession of nursing, and, therefore, it is extremely important that a nurse critically and objectively considers what the role of mentor implies. Most of the mentors at the Study of Nursing at the Health Department of Zadar's University have completed the pregraduate professional study of nursing, and thus, during their education, have not acquired an adequate level of technical knowledge in the field of mentoring. Generally, they gain education in the area of mentoring from their lecturers, in the form of written and oral instructions (formally and informally), and through their own observations during the subject course which they mentor, as well as through the process of self-education via professional literature.

Aims:examination of self-assessment of mentors'/ nurses' abilities at the Study of Nursing

- students' assessment of mentors'/nurses' abilities at the Study of Nursing
- assessment of professional values of mentors, shown during clinical practice, on the basis of the collected questionnaires of nursing students
- examination of the difference between self-mentor and student assessments

Subjects:The subjects are nurses, mentoring at the Pregraduate Study of Nursing at the Department of Health Studies of Zadar's University, employed in the General Hospital in Zadar, as well as the students of the Pregraduate Study of Nursing.

Research instruments:The standardized questionnaire, created by the Department of the quality of studies of Zadar's University, was used. It contains the questions on self-mentor assesment of the quality of practice performance.

The questionnaire for students contains eighteen, and the one aimed at the mentors seventeen questions, as well as three additional questions on mentor's age, work experience and professional qulifications.

Stastical methods:Statistical analysis was performed by means of Statistica software package. Criterion of significance was $p < 0.05$.

Results:The results, obtained by statistical analysis, as well as their interpretation, will be represented at the Conference.

Reliability testing of a theory-based assessment tool in clinical nursing studies

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Aim. The assessment tool aims at maximum efficiency of the clinical field study and minimal effect of the assessment's subjectivity.

Methods. The main themes in the assessment tool reflect the nursing theory of caring constructed by Halldorsdottir (1996) which provides the framework for the nursing programme at the University of Akureyri, Iceland. To validate the assessment format, cognitive debriefing interviews were taken with 15 clinical teachers. The interviews' revealed a need for changes and a new assessment tool and instruction manual was designed. Reliability was tested after the use of the new assessment tool and the assessment from students on the 2nd, 4th and 6th semester in clinical training were analysed using SPSS and Excel.

Results. The assessment tool is set up in rubrics, which is defined as a scoring tool that lists the assessment criteria for the students' performance. Clinical teachers and clinical expert teachers assess the student's performance as excellent, very good, good, satisfactory or unsatisfactory. In addition, the student himself evaluates his own clinical competences, according to the personal learning objectives and the course objectives.

Conclusion. Clinical teachers have expressed their satisfaction with the use of rubrics. The new arrangement where the minimum performance for each study year defined by the faculty have made the whole assessment process easier. The students' clinical performance improvement each year is more clear now. Daily feedback and formative assessment is maybe time consuming for the clinical teachers, but the students are satisfied because they learn more when they get constant feedback each day.

Positioning of mentorship in the nurses educational system in the Republic of Serbia

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Introduction: The design of mentoring in education of nurses Serbia derives from the needs duality to enable both the professional development of nurses, and the development and improvement of the health and educational institutions. Needs of the practice, mentoring based on current educational and health policy, and the social situation as a whole, taking into account the scientific knowledge and the experience of other countries.

Objective: Scientific description of the Concept of mentoring institute in Serbia and a critical review of its implementation in practice.

Methods: descriptive - analytical and survey.

Results: The paper is a sublimation of the basic assumptions of the concept of mentoring, through the definition of its key determinants and the basic principles.

Part of the work has been dedicated to the view of teaching assistants role, as an important element of the mentoring system. Presented the key results of a pilot study that was conducted by interviewing teaching assistants of Higher Health School of Profesional Studies in Belgrade, as part of improving the quality of teaching and co-operation teaching bases and schools. The results were incorporated into the showed "Profile of teaching assistants."

Conclusion: Although the Institute of mentoring in educational system of nurses in Serbia tends to become a means of improving not only the personal and professional development of the individual (student and supervisor), but also the quality of the health sector as a whole, there are obvious gaps in its implementation in practice, and generally low interest medical workers to download mentor role.

Promoting engagement in the role of mentor, more appropriate evaluation and appropriate legal regulation are necessary external stimulus that we have to attend in the future.

Keywords: mentoring, nurse, teaching assistant

Nursing care values in clinical practice

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Aim: The aim of this study was to investigate to what extent nurses accept nursing care values in clinical practice. It was investigated with regard to their level of education and years of work experience.

Subjects and methods: The study included 129 nurses working at Clinic of Surgery, Clinical Hospital Centre Osijek. The research instrument was a standardised Caring Nurse-Patient Interactions Scale: 70-item Version (Nurse Version), (CNPI-70). To determine the difference in measured parameters between two groups of subjects Mann-Whitney test was used, while Kruskal Wallis test was used to determine the differences between three and more groups. To determine the significance of the obtained results, significance level $\alpha = 0.05$ was chosen.

Results: The highest scores were given to nursing care values in the subscales of clinical skills: Assistance with the gratification of human needs (4.7), Environment (4.7) and Teaching (4.3), while the lowest score was given to Cultivation of sensitivity to one's self and others (3.8). The level of education of nurses does not have influence on their humanistic-altruistic values ($p < 0.95$), as well as on other nursing care values. Nurses who have over 30 years work experience gave significantly lower score to the item Accepting patients as they are without prejudice ($p = 0.006$). Nurses who have more work experience gave higher scores to Allowance for Existential-Phenomenological-Spiritual Forces regarding the scale in total ($p < 0.001$), as well as single items, while there is no significant difference in other nursing care values according to work experience.

Conclusion: This study showed that nurses attach more importance to clinical skills necessary for solving a patient's health problems in relation to other nursing care values. There are no significant differences in accepting attitudes and nursing care values in clinical practice according to level of education of nurses. Nurses who have more work experience gave higher scores to Allowance for Existential-Phenomenological-Spiritual Forces, while there is no significant difference in other nursing care values according to work experience.

“The troubles of an apprentice”

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Purpose. The methods and requirements for obtaining an apprenticeship in high school education in Croatia are regulated by the Ordinance on taking the professional exam for teachers and expert associates in elementary school education and teachers in high school education. The apprentice’s mentor is a teacher in the same profession. Formal mentoring is regulated by a plan and process schedule and is in force during the internship.

This paper gives the personal experience of an apprentice in a school of nursing with an emphasis on the role of mentor. The personal perception of the apprentice’s priorities regarding their expectations of the role of mentor has also been put forward.

Methods. The apprentice’s perspective of the importance of certain roles of the mentor is displayed using a case study and detailed examples.

- Role model
- Intuitive person (understands and explains the meaning of professional nursing and its potential)
- An energetic person
- Investor (invests time and energy into the apprentice’s professional growth)
- Supportive person (gives emotional support and strengthens self-confidence)
- Someone who is consistent about standards
- Teacher-trainer
- Someone who gives feedback (honest, positive and negative feedback on progress)
- An eye opening person (broadens horizons, opens perspectives and provides opportunities for the apprentice to look at situations from new aspects)
- A door opening person (ensures new possibilities and experience)
- A person open to the apprentice’s ideas (listens to the ideas and discusses them)
- A problem solving person (helps take stock of the problem and defines possible solutions)
- Career adviser (helps build short-term and long-term career plans)
- Explorer (encourages the apprentice to critically observe)

Results. The apprentice has singled out the mentor’s support as the most important role.

Conclusion. Even though all the mentor’s roles are of the utmost importance in the mentoring process, the mentor’s support encourages carrying out tasks better during the apprenticeship and is a requirement for the continuation of an informal mentorship.

Key words: apprentice, mentor, support, case study

Comparing problem-based learning with lecture-based learning in teaching diagnoses procedures to nursing students

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Introduction: Traditional didactic lecture-based learning (LBL) is the most common teaching method in the Serbian nursing school. Problem-based learning (PBL) is one of the active and student-oriented learning strategies which have gained attention in the recent decades. The use of PBL resulted in students' greater engagement in learning, more self-direction, and higher levels of satisfaction.

Aim: To compare the effect of PBL and lecture-based learning (LBL) on the learning progress and satisfaction of nursing students.

Methodology: This was a quasi-experimental study conducted in secondary Medical school "7 April" in Novi Sad. Randomized sample included of one hundred and two students in two different groups. One group (experimental group) received PBL in addition to LBL and the other one (control group) received traditional LBL. "Diagnoses procedure: Lumbar puncture" lecture was selected for this purpose. The PBL package was developed by the authors, based on an analysis of appropriate learning content. Knowledge post-test was performed by an objective test developed by the investigator and it was filled in for both groups. A satisfaction questionnaire was filled in only for the experimental group.

Results: The level of knowledge in the PBL group was significantly higher than that of students in the lecture group ($p < 0.05$). PBL increased learning motivation and enhanced educational activity in class. Two-thirds of students considered PBL the more suitable and better method, but most students (79.3%) were interested in the application of PBL.

Conclusion: Based on the obtained results is not difficult to conclude that we should devote more time to PBL. According to these advantages, the quality of nurse's education in Serbia can be improved via this method.

Key words: Problem-based learning; Nursing student; Lumbar puncture, Quasi-experimental study

Education of Mentors: One More Tool for Experienced Mentoring Nurses and Technicians

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Mentoring represents a complex and interactive process between professionals with different levels of expertise and experience. Although the primary mentor's role is the professional training of young nurses and technicians and nursing students, the mentors are expected to be opened to new ideas, to encourage creativity, productivity, self-confidence and ambition, to build constructive interpersonal relationships, to contribute to a better professional and personal relationship and to manage conflictious and stressful situations.

The education of mentors has been done in the Republic of Croatia since 2011 which is regulated by two books of rules for specialist training for nurses – technicians, and it is carried out at the Ministry of Health. Training is conducted in time duration of six days for three weeks (39 hours of classes, 200 hours of consultations which are carried out via e-mail or directly with the teacher).

The goal of education is the acquisition of basic knowledge and skills in order to carry out the education.

The theoretical framework consists of five education modules: legal and ethical aspects of nursing activities, social and communication skills, learning theories and their application, teaching methods, and evaluation and self-assessment of accomplishments.

Over the period of three years (2011-2013) 153 nurses and technicians employed in the Croatian health care institutions were educated in 11 specialist areas for which formal specialist training exists. Most participants were women (77.7 %), the average age of participants was 47.6 years , and the response to the course was 100%.

Data obtained from course evaluation shows that 88.19 % of participants marked lecturers with the grade "excellent". More than a third of participants estimates contents involved in social and communication skills and knowledge transfer skills as the most important, and as a suggestion for change of the contents, almost half of them pleaded in favour of increasing the number of hours of classes.

In conclusion we can say that there was a great interest for courses, and the need for additional training hours was expressed, which indicates that the courses were useful for improving the quality of the mentor's work.

Keywords: education of mentors, medical nurses and technicians, mentors.

Presence of stressors in education programs' structure and processes in formal education of working nurses

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Objective: The aim of this study was to examine the presence of stressors related to the structure and programs' processes, their severity and impact on stress of nurses during formal education and work.

Subjects and Methods: Subjects were graduate students of nursing (67) who are also working nurses. As a survey instrument, a standardized questionnaire was used which, in its original form, has 51 items. Nurses-students responded to a 5-items Likert scale (stress-free, low stress, mild stress, high stress, extreme stress). Statistical analysis was performed using SPSS for Windows (version 9.0, Carry, New York, USA) with a significance level of 0.05.

Results: In the field of program structure, 43.3% (29) of the respondents found attempting to maintain a balance between work commitments, obligations at home and time of study, extremely stressful, and 32.8% (22), highly stressful. This area had a total estimated average grade of 4 (high-stress). The presence of continuous lectures over two weeks is extremely stressful for 52.2% (35) of the respondents, while 25% (17) find it highly stressful. This area had an estimated total mean score of 5 or extremely stressful. In the field of program processes, lectures that last until 7 PM are extremely stressful for 44.85% (30) of the respondents and 14.9% (10) consider it highly stressful. This area had a total estimated average grade of 4 (high stress). Coping with the amount of study work is highly stressful for 35.85% (24) of respondents. Results within the age groups show a difference in the stress intensity in the overall program process ($p = 0.038$), morning lectures ($p = 0.036$) and commuting to lectures ($p = 0.033$). Respondents who finished their undergraduate study 6-15 years ago estimated lower levels of stress in the field of program structure and processes (3.3 M).

Conclusion: During formal education of working nurses, stressors related to program structure and processes lead to medium to high levels of stress. This information is important, not only to nurses, but also study administrators.

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Pain Among Hospice Patients

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Many challenges are experienced in the care of cancer patients like how to reach the painless condition and how to improve the quality of life. The intensity of pain, the distress caused by the pain and the pain's experience are affected by many factors and these factors should be considered during the multidisciplinary care. We supposed that in case of hospice patients the circumstances, the place of the care and family support are such significant factors. In our presentation we would like to introduce a cross-sectional study among hospice patients cared by home-hospice service or hospice department, we would like to compare them regarding pain and functional capability.

E-Care As A Possibility Of Scientific Research In Nursing

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Introduction: Vukovar County General Hospital has been using the nursing documentation in writing since July 2011 and in electronic form since December 2011. The nurses and medical technicians have recognised the importance of e-Care system and implement it in their everyday practice. The inquiry carried out on 120 respondents in April 2013 shows that an advantage is given to e-Care as compared to the in writing form. The aim of this paper is to show the possibilities of the research in nursing by means of the e-Care information system in terms of selecting the data from the data base of the system.

Methods: An electronic form of nursing documentation and a database that this system provides were used. The system enables us to follow all relevant data regarding the health care for patients. In this paper the graphs are used to present the selected data from e-Care throughout the period between 1st January and 1st June 2013 collected on the 242 inpatients at the Department of Psychiatry. The average number of stay at the department is 12 days and the average age is 55.

Results: On the basis of the selected data the analysis shows that the most common diagnosis was PTSD with 55 inpatients; nursing diagnosis was anxiety with 96 inpatients and the most frequently provided nurse's action was to help and educate the patients for self-caring and diminishing anxiety. Categorisation of the patients indicates that there are 227 patients in the first category and 3 patients in the fourth category. Risk of falling is present with 8 patients, and reports of incidents indicate 2 falls and 2 cases of physically aggressive behaviour towards the medical staff. Upon dismissals, 21 patients have a need for a continual health care of which 15 live with somebody and 6 live alone. Only 8 patients use social care. Out of 21 patients, 1 patient is able to administer medicines independently, whilst the others are dependent on the help by others.

Conclusion: Nursing documentation is essentially important for both our everyday practice and profession in general. Nursing documentation is the foundations and predisposition for further development and enhancement of independency of nursing practice as well as recognition of our profession rooted in practice which is enriched with the evidence from research as a tool.

Influence of the „Ethics in Nursing“ course on the attitudes of the first year students of the Graduate Study of Nursing in Osijek

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Along with medical development, especially medical technology, we are faced with great moral dilemmas which cannot be solved unless we examine the very source of the problem. Therefore, we need better education in that field, which is why Ethics in Nursing is studied at Graduate Study of Nursing. But, the question remains, in what degree this course is influencing the first year students and their attitudes and reflections about the dilemmas?

The goal of our research was to find out how the students changed their attitudes while taking the course and how they are different regarding students gender, work status and area they live in, be it rural or urban.

70 first year students of the Graduate Study of Nursing, from the University of J. J. Strossmayer Osijek were questioned. Research was based on anonymous poll method which consisted of 32 closed type questions. Research was conducted in May, 2013.

Results showed that majority of students have positive attitudes and reflections about moral dilemmas. Comparing attitudes regarding rural and urban life area they are different when it comes to the claim that „Euthanasia is a justified act and every person has a right to decide about their life.“ 28% of the urban area students completely disagrees and 60% of the rural area students completely agrees with the claim. „Abortion is a justified act and it is a womans choice wheter or not to do it“ is another claim that has male and female students slightly divided in opinions. 28% of the female students disagrees and 33% of the male students are indecisive about it. As far as work status is considered, most of the unemployed students both agree and disagree about the claim that „Human cloning is a procedure which will, along with its benefits, bring a lot of disadvantages in the future.“

Key words. Modern medicine dilemmas, students, male-female, employed-unemployed, rural-urban

The importance of non-verbal communication in nursing care

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This paper discusses the importance of non-verbal communication in nursing care. Within her profession, the nurse is a participant and initiator of verbal and non-verbal communication on a day-to-day basis. We need to realize that the latter is often more important since patients, due to their illness or disability, are often helpless and sensitive, and find the tone of voice, hand gestures, facial expressions, etc. more important than verbal information. The nurse must take care to use correct and appropriate non-verbal communication, thus providing the patient with satisfaction and comfort that is needed.

The purpose of this study was to determine the impact of non-verbal communication on patients, how often nurses use non-verbal communication, and whether non-verbal communication can be replaced. In the study, we used the results of research findings in various areas of nursing care, which we integrated into a meaningful whole and highlighted the key answers to the questions.

We have found that non-verbal communication is irreplaceable, and that it is vitally important, since through non-verbal communication we communicate at least as much, if not more, as through verbal communication. This fact can be advantageously exploited in the opposite direction when the nurse identifies patient needs only by their gestures, tone of voice, moaning, etc. when they are not able to say what they want, or when hiding important information that they might be ashamed of.

Key words: non-verbal communication, impact, replaceability

The Difference In Sexual Behavior Of Adolescents In Medicine And Veterinarian School Dr. Andrija Štampara, Vinkovci, Croatia

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Aim: to determine whether there are differences in sexual behavior among subject adolescents, students of medicinal and non-medicinal school programs. Within the frame of this research under the term sexual behavior we considered: the age of participants when they engaged in sexual intercourses, the frequency of sexual intercourses, the number of sexual partners, use of protection and familiarity with protection and sexually transmitted diseases.

Participants and methods: 44 students participated in this research of Medicine and Veterinarian School Dr. Andrija Štampara, Vinkovci, Croatia. There were 23 (52.3%) students of medicinal program and 21 (47.7%) of non-medicinal program. The age of participants was 18 years. The research was conducted via anonymous questionnaire. The significance level was set at $\alpha=0.05$. For statistical analysis we used statistical software SPSS (version 16.0, SPSS Inc., Chicago, IL, SAD).

Results: based on the research we dismissed the set hypothesis that there is a difference in sexual behavior between student of medicinal and non-medicinal programs. We failed to see any difference between these two groups.

Conclusion: Since health workers believe that the school is the place where students should learn more about sexual education and protection during sexual intercourses, we see future masters of nursing as a competent teachers of Sexual education in the Republic of Croatia who would have the responsibility to inform students about sexual behavior during their elementary and secondary education.

Key words: adolescents, sexual behavior, school

Habit Of Reading Nursing Literature

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Aim: Is to affirm how many time in a week, pronouncedly in hours, nurses read professional literature, taking in consideration their professional acquirement.

Methods: In the researche participated 157 employed nurses / technicians, within 91 nurses with middle professional acquirement, 48 with firstgrade and 18 nurses with erolled or finished diploma study. As an instrument in analyzing we used a questionnaire about reading professional literature that we independently constructed.

Results: Nurses with higher education spend more time weekly reading professional literature than nurses with middle professional acquirement. There is no difference in time spendend reading professional literature among nurses with middle professional acquirement or firstgraded. They spend 2 hours weekly reading. Nurses in a Diploma study weekly spend 8.5 hours reading. The most used source in reading is internet, in all of three groups. Nurses in a Diploma study most often used Internet bases of scientific papers. Motivation factors the highest graded in all of three groups is eagerness to know and learn more about problems of the patients, to be in progress with nurses practice and to be in a rating with colleagues. As demotivating factors, the highest graded are lack of time, family obligations and tiredness.

Conclusion: We considere that, in the future, necessary is to secure working conditions, also devote more attention to organisations support trough better acces to a library with more proffesional literature, possibility of using a computers and acces to internet on place of work. With all that, the goal is to encourage the enthusiasm and eagerness to learn, read and improve their practice.

Key words: reading, nurse, proffesional literature

Differences in Infant's Cord Care

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The umbilical cord stump and wound in newborns represent a pathway for the entry and development of systemic infections. Over the years, the stated risk of infection has been the most common cause for changing the way the umbilicus is cared for. The differences in the umbilicus care method tend to create a sense of insecurity in healthcare professionals. In addition to this, the inconsistency of healthcare professionals' recommendations to parents in relation to umbilicus care method often further increases the existing maternal fear during the umbilicus healing period.

The aim of the research was to examine the incidence of the different newborn umbilicus care methods during the umbilicus healing period, among the healthcare professionals with regard to their work place as well as the need to create and coordinate the newborn umbilicus care method guidelines.

The anonymous survey designed for this research included 110 healthcare professionals from hospitals, community neonatal home care services and pediatric offices in the Osijek-Baranja County. The data underwent a descriptive and non-parametric statistical analysis.

Healthcare professionals cited 11 different ways of “dry” umbilicus care methods, whereby statistically significant differences per workplace were determined between the three care methods: alcohol-free disinfectant, antibiotic powder and sterile gauze pad ($p=.000$); alcohol-free disinfectant and sterile gauze pad ($p=.002$) and antibiotic powder and sterile gauze pad ($p=.004$). The respondents cited six “moist” umbilicus care methods, whereby statistically significant differences per workplace were determined between the three care methods as well: alcohol-free disinfectant, antibiotic powder and sterile gauze pad ($p=.000$); rubbing alcohol 70%, antibiotic powder and sterile gauze pad ($p=.001$) and 3% hydrogen peroxide, saline solution, antibiotic powder and sterile gauze pad ($p=.000$). Of the respondents, 104 (94.5%) stated that it is necessary to create written umbilicus care guidelines, whereby more than half are of the opinion that the guidelines need to be coordinated at the national level, 61 (55.5%).

The research has shown that healthcare professionals in hospitals, community neonatal home care services and pediatric offices in the Osijek-Baranja County apply different umbilicus care methods during the umbilicus healing period, implying that there is a need to create and coordinate umbilical care guidelines at the national level.

Keywords: newborn, umbilical care, guidelines

Identification Of Stress Sources In The Nurses' Workplace

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Aim: Aim is to question the potential difference of stress level amongst the nurses/technicians of the Osijek Medical Center and the General Hospital “Josip Benčević” in Slavonski Brod, as well as the total difference of stress level of nurses/technicians regarding their length of service and level of education.

Methods: Total of 107 nurses/technicians participated in the research. Standardized questionnaire “Workplace stress of the healthcare and hospital staff” was used, and it was modified for the purpose of the research.

Results: Comparison of the examinees of the Osijek Medical Center and the General Hospital “Josip Benčević” in Slavonski Brod, regarding the total stress grade, did not show a statistically significant difference ($p=0,109$; Student's t-test), and the same case occurred amongst the total number of examinees regarding their level of education ($p > 0,950$; Fisher Exact Test). The greatest difference occurred when comparing stressor and the length of service, however, it was also statistically insignificant ($p=0,063$; Fisher Exact Test).

Conclusion: We feel that it is important to dedicate greater attention in the future to the stressors that jeopardize the quality of work of the nurses on an everyday bases through a more extensive research of stress exposure. Target group of this research would be nurses/technicians.

Key words: nurse; workplace; stress

The Frequency Of Performing Episiotomy In General County Hospital Pozega

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Episiotomy is a gynecological surgical incision that allows the easier passing of the baby through delivery paths. This is one of the most frequent surgical procedures performed on women. In this paper, episiotomy types, their complications and wound saturation will be explained. Furthermore, a data will be examined via retrospective analysis of medical documentation for the periods between January 1st 1999 – December 31st 1999 and January 1st 2005 – December 31st 2010 in General County Hospital Pozega. Institution in which the research was conducted: General County Hospital Pozega, Croatia. Time of research: April 2011 – May 2011, Population: women, Age of participants: 14 to 45 years. Main result measures: episiotomy rates and laceration, perineum rupture levels and patient's age. **Aim:** to determine the changes in performing episiotomy since 1999. **Methods:** retrospective study, data obtained via examining medical documentation, calculation of arithmetic means and standard deviations.

Results: a tendency of decline in performance of episiotomy has been seen among first-time mothers and such results are confirmed across the sample. In years preceding 2008, episiotomy was performed during nearly 70% of childbirths, after which we see a tendency of decline in numbers of performed episiotomies. In 2008 we have episiotomy in 63% of childbirths, 57% in 2010 and 49% in 2010. Among women who did not undergo episiotomy, grade I lacerations occurred in 22% of cases, grade II lacerations occurred in 14% of cases and grade III lacerations in less than 1% of cases. In 64% of cases of women who did not undergo episiotomy there was no laceration.

Conclusion: The frequency of performing episiotomy has significantly declined in the last few years. The tendency of decline is seen among first-time mothers and such results are confirmed across the sample. It is necessary to further decrease the number of performed episiotomies in the coming period. The number of performed episiotomies can be decreased by additional education of pregnant women and midwives. By changing the positions in which women give birth and by developing the trust between midwives and obstetricians that number can be additionally reduced. By reducing the number of performed episiotomies we can decrease costs of treatment and contribute significantly to the recovery of women.

Satisfaction Of Operating Room Nurses

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Operating room nurses face unexpected work situations on a daily basis, this is very important for them to be completely committed to their work, to be efficient, dedicated and satisfied. With this work we wished to determine the job satisfaction of operating nurses, the presence of stress and burn-out syndrome in the operating room. Staff satisfaction at the workplace plays an important role because only good motivation and a beneficial work climate can lead to positive work conditions and interpersonal relationships. Quantitative research methodology was used. We gathered information using a questionnaire which was translated and adapted for the Republic of Slovenia by the Institute of Health Care, Faculty of Health Sciences. 94 questionnaires were distributed, of which 78.7 % questionnaires were returned. The data obtained from the sampling are shown in the form of graphs and tables, the data collected were analysed using the statistical program SPSS 20.0. Research results have shown that the answers statistically typically differ in the area of work satisfaction ($\chi^2 = 36.81$, $df = 3$, $p < 0,05$), we were thus unable to link differences in work satisfaction with most motivational factors. With this research we have shown, that good working relationships between employees in nursing are extremely important for natural communication, because only in this way, can we work with high quality and efficiency. We have found that workplace burnout occurs in operating room nurses.

Key words: Surgical nurse, job satisfaction, perioperative health care

Incubator – Source Of Noise Or Isolator At The Neonatal Intensive Care Unit

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Noise pollution has become a serious problem in the modern world. High noise levels have negative impact on human health and also affect children growth.

Purpose of this research was to examine the acoustic environment inside the incubator at the NICU Clinical hospital in Osijek and compare it with current recommendations and standards of American Academy of Pediatrics and World Health Organization.

Device which was used for quantitative data collection of sound levels was sound measurer Bruel&Kjaer, Danmark, model 2250 L. Surrounding sound levels (measured in decibels), were taken during 1-minute intervals over 24-hour period, during day shifts and night shifts. Three basic sound levels were measured: hourly equivalent noise level (Leq), hourly 10% exceeded noise level, and maximum noise level.

Noise levels of all three variables were found to be above the American Academy of Pediatrics recommended standards; Leq should not exceed 45 dB(A), L10 should not exceed 50 dB(A) and Lmax should not exceed 65 dB(A). Sound levels of all three parameters exceeded World Health Organisation recommendation for hospitals during day shifts and night shifts, lower than 35 dB(A) during day and lower than 40 dB(A) during night. The highest sound level were found during rounds and visitors presence. The lowest sound level were found before midnight and early in the morning. The highest Lmax was 80,0 dB(A), Leq 51,2 dB(A) and L10 54,4 dB(A).

It is important to measure sound levels and noise in incubators at the NICU all over the country. Future research is needed. It is also needed to establish protocols and methods to minimize the noise at the NICU. NICU have to implement structural and staff behaviour changes to minimize noise and potential harmful influence on patients.

Hearing Screening In County Hospital Požega

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Research goal: to determine the percentage of newborns in OŽB Požega which has been tested hearing and the frequency of unilateral and bilateral hearing loss as well as the most common difficulties in screening for hearing in newborns.

Patients and methods: In the period from 1.1.2003. - 31.12.2011. in OŽB Požega 5672 children were born. Specially trained nurses carried out the first stage of hearing screening by OAE method. The second level of screening is carried out by the same method, three weeks after.

Results: In the monitored period, the percentage of infants tested ranged from 82.87% -98.11%. Of the total percentage of untested newborns 7% not tested due to equipment failure. During the nine year period, unilateral hearing loss was found in 11 children while in 4 of them bilaterally hearing was found. Turnout in the second stage of screening ranged from 34% -65%.

Conclusion: The results confirm to us the importance and significance of carrying out impairment in newborns. The incidence of hearing loss in our population fits into the world determined incidence. Further efforts are aimed educating parents about the importance of hearing checks to get a greater response to the second level of screening.

Self-Perception of Health among the Elderly

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Aim: To question the self-perception of physical and mental health among the elderly

Methods: Research sample comprised of 121 respondent, 66 (54,5%) women and 55 (45,5%) men at the age of $65 \geq$ years. As a research instrument, a 9-item questionnaire was used with demographic data and the SF-36 Health Survey. For data assessment, significance level of 0,05 ($\alpha = 0,05$) was used.

Results: Self-perception of health according to gender; median value of the assessment of general physical health for women was 35,5 and men 43,3, $p = 0,048$; median value of the assessment of physical exercise for women was 45, and men 67,5, $p = 0,040$; in the aspect of limited activities due to physical health, median value for women was 6,3, and men 18,8, $p = 0,003$; median value of the general perception of health for women was 45, and men 50, $p = 0,047$. Self-perception of health according to professional qualification; median value of general mental health assessment for respondents with elementary school was 34,4, those with high-school 34, college degree 34,9, university degree 39,7, $p = 0,032$; in the aspect of limitations due to emotional problems, median value for respondents with primary school was 16,7, high-school 16,7, college degree 8,3, university degree 25, $p = 0,038$; in the assessment of mental health, median value for respondents with primary school was 50, high-school 44, college degree 48, university degree 64, $p = 0,013$. Self-perception of health according to monthly income; physical health assessment median value in terms of general self-perception of health for respondents with income higher than 2000,00 kn was 50, lower than 2000,00kn was 35, $p = 0,014$; in the aspect of mental health, median value for those with income higher than 2000,00kn was 52, those lower than 2000,00kn was 38, $p = 0,022$.

Conclusion: Men tend to have a more positive assessment of their physical health than women. Mental health is assessed higher by individuals with higher levels of education. Individuals with higher levels of monthly income are generally more satisfied with their health.

Key words: self-perception of health, elderly

Ethical judgment of nurses

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The discipline of bioethics systematically examines and evaluates human activity in the fields of life sciences, health, illness and death in light of ethical and moral values and principles.

The aim of this study is to determine the ethical judgment of nurses through the knowledge of ethics in nursing and current nursing ethical issues, as do nurses believe whether they are autonomous in their work. An anonymous questionnaire with ten open-ended questions was distributed to 100 randomly selected nurses.

Nursing ethics was considered a professional conduct by 29% respondents. Ignorance of ethical theories was reported by 62% of respondents. The ability to work autonomously was indicated by 23% of respondents as an important ethical issue. Ethical dilemmas were reported by 64% of the respondents. In order to clarify and familiarize nurses with nursing ethics, courses need to be organized with examples from the nursing practice and establish guidelines for ethical nursing activities.

Key words: bioethics, ethical judgment, nurses

The effects of shift work among nurses at University Hospital Osijek

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Objective: To determine whether there is a difference in disorders of sleep and rest among the nurses who work only in the morning shift and those who work in all shifts at University Hospital Osijek. Identify predictors of sleep disorders and rest with respect to age, and to determine which type of persons they are regard to morningness-eveningness.

Patients and Methods: The study included 471 nurses employed at the University Hospital Osijek. The instrument used was a questionnaire created for the purposes of this study, including standardized Pittsburgh's Scale of Sleep and Morning-Evening Scale. Descriptive and non-parametric statistical analysis were applied and the significance level was set at $\alpha=0.05$.

Results: Sleep efficiency in younger respondents were less than in the other age groups (hi2 test, $p=0.001$), they get up in the morning much harder than the others (hi2 test, $p<0.001$), after awaking nurses at the age of 31-40 years are very tired 21 subjects (38.2 %), and the same is at the 27 of respondents (49.1%) who work all three shifts. Nurses at the age of 31-40 which work in shifts feel impact on the mood in 35 subjects (45.5 %), the misunderstandings in the family can feel 16 respondents (64 %), and 89 of them (37.9 %) do not get enough sleep after a night shift. Older respondents and those who work in all three shifts have much more problems with the lack of sleep. Older respondents feel it because of the toilette needs (hi2 test, $p=0.017$), they can't breathe (hi2 test, $p<0.001$), cough or snore loudly (hi2 test, $p=0.005$), have a sense of heat (hi2 test, $p<0.001$), feel the pain (hi2 test, $p=0.037$), taking sleeping pills once or twice a week till the several times a week (hi2 test, $p=0.001$). Respondents who work in all three shifts have chills (hi2 test, $p=0.003$) and pain (hi2 test, $p=0.038$). Most of them wakes up during the night 88 respondents (40.9 %). 152 (32%) of respondents are morning type of a person, which is significantly more among older participants 44 of them (34.9 %).

Conclusion: Disorders of sleep and rest are more common in nurses who work in all three shifts and in participants at the age more than 50. Nurses at generally are morning types of people.

Keywords: shift work, night shift, sleep, rest, nurses

Impact of work shift and night work on nurses and technicians sleepiness

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Aim: This study was to compare the scores of sleepiness between nurses / technicians working in shifts with night shifts and those who work during regular office hours.

Methods: The study was conducted in March 2013 on a sample of nurses / technicians in General County Hospital Požega. The study included a total of 146 nurses / technicians. As a test instrument Epworth sleepiness scale was used. Categorical data are presented in absolute and relative frequencies. Numerical data were presented by median and interquartile range. Differences of categorical variables were tested by χ^2 test and Fischer's exact test. Differences in numerical variables between two independent groups that deviate from the normal distribution were tested by Mann-Whitney U test. The level of significance was set at $\alpha = 0.05$. For the statistical analysis statistical program SPSS 14.0 for Windows was used.

Results: A comparison of respondents who work in shifts with night shifts, and respondents who work during regular office hours, in regard to sleepiness there was no statistically significant difference ($p = 0.268$, Chi-square). Most respondents were in the category of severe drowsiness. There was a statistically significant difference between the groups of patients with regard to the average age ($p = 0.002$, Mann-Whitney U test). Respondents in regular working hours are much older and therefore have more seniority.

Conclusion: We have not confirmed the hypothesis that nurses and technicians who work in shifts with night shifts are sleepier than those who work in regular working hours. The disadvantage of our study is the small amount of data that could determine the existence of other factors that influence sleepiness. In the future it is necessary to pay more attention to research of the prevalence of sleep disorders in health care system and their impact on the quality of the individual's work.

Attitudes Toward Learning In The Elderly

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Aim. To investigate attitudes of elderly concerning learning and determine if there is a difference between those attitudes in persons who live in home for elderly and persons who live in their own or their family's home.

Methods: 60 persons above the age of 65 participated in this research, with 30 of them being residents of Home for elderly and disabled and 30 persons living at their own or their family's home. Research has been carried out by anonymous questionnaire comprised of general questions concerning basic demographical data and 20 questions concerning attitudes about learning with answers on a Likert scale.

Results: The examinees that live in home for elderly are mostly female and older than examinees that live in their own or their family's home. General attitude of examinees toward learning at old age is positive. Most examinees (41 of 60) consider learning at old age encourages socialization and meeting new people and that experience helps them in learning new content. Almost same amount of examinees (40 of 60) thinks that learning at old age expands knowledge and skills and maintains brain activity. Large number of them recognize the importance of lifelong learning (39 of 60) and using new technologies (36 of 60). Significant difference between learning related attitudes of home for elderly residents and those who live in their own or family's home was not detected.

Conclusion: Positive attitude of elderly towards learning is an important premise for engaging the elderly in processes of learning which are adapted for their age and experience, while contributing to quality of aging.

Key words: attitudes, learning, elderly

'Extra' Food Intake And The Prevalence Of Constipation In Seniors Living In Nursing Homes

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Aim. To investigate the prevalence of constipation in elderly people living in nursing homes and to explore the possible connection with eating extra food beside the daily menu.

Methods. The study included 30 residents of the "Atrium" care home (4 men, 26 women, Darda, Croatia). The research was conducted by using anonymous questionnaire consisting of general questions on basic demographics and specific items concerning daily fluid intake, extra food, and daily physical activity. Constipation was defined by the Rome criteria.

Results. The average age was 82 years. Twelve participants suffered from constipation. Constipated and non-constipated subjects did not differ by gender (Fisher exact test, $p = 0.632$), daily fluid intake (Fisher's exact test, $p = 0.858$) and daily physical activity (Fisher's exact test, $p = 0.437$). None of the participants reported taking the fruit as an additional meal. More than half of non-constipated respondents (10 out of 18) stuck to the daily menu, compared to just one sixth of constipated respondents (2/12 participants). Constipated and non-constipated seniors differed significantly by consumption of additional meals, mostly snacks and candies (Fisher exact test, $p = 0.008$).

Conclusion. In spite of well-balanced menus, designed by nutritionists, constipation remains a common problem in institutionalized seniors. The association of additional meals with constipation points to the needs for more education about proper nutrition of both senior residents and their families.

Key words. seniors, nutrition, constipation, nursing home, extra food

Family and the intellectually challenged child

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Introduction: Intellectual disability is not an illness, which could be cured by medications. It is a disorder characterised by a significant impairment of intellectual functioning and adaptive behaviour. It affects an individual's conceptual, social and practical skills to adapt. This paper focuses on the family and the daily struggles its members have to face in the presence of an intellectually challenged child. The goal of the research was to define the most common challenges and feelings parents of intellectually challenged children are confronted with on a daily basis.

Methodology: The quantitative research from this paper was based on the descriptive approach, whereas the data were collected using a survey with open-ended, partly open-ended and closed-ended questions. All survey participants were parents of intellectually challenged children which attend the Saša centre for individuals suffering from mental and physical developmental disorders.

Results: According to the survey, the hardest part for the family is realizing that their child is not completely healthy. Once the parents accept that their child is intellectually challenged, they completely adopt their lives to suit the needs of the child. They stop seeing this disorder as a problem, which would make their daily lives difficult. Instead, they embrace their new role – the role of a parent of an intellectually challenged child.

Conclusions: For individuals with intellectual disability it is important that they are diagnosed at an early age and that a proper treatment is introduced as early as possible. This treatment should focus on developing their skills as well as preparing them to function normally in the society. By treating them with love and encouraging specific activities parents on the other hand help their intellectually challenged children achieve greater independence. Being confronted with intellectual disability within one's own family usually brings family members closer together.

Key words. Family, intellectual disability, child

Quality of life of families with children suffering from malignant diseases

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Malignant diseases are one of the most difficult problems of modern medicine. In Croatia every year of some malignant diseases affect about 150 children, and that number is growing by about 1% per year.

Aim of this study was to examine the quality of life for families of a child who is suffering from malignant disease.

The study was conducted as a cross-sectional, measured prevalence (proportion of patients with a disease that currently exists in the population). Examining the impact of malignant disease of the Child on the quality of life for families included 32 respondents, or parents whose children suffer from cancer. The survey was conducted at the Clinical Department of Pediatric Hematology and Oncology at the Clinical Hospital Center Osijek, and in the Clinical Hospital Center Rebro in Zagreb, Department of Pediatrics, Division for Hematology and Oncology. The sample was designed in the period from August to October 2010. For the purposes of this survey, we used the modified questionnaire for assessing quality of life (Child Health Questionnaire Version CF-87 and Brown and Bayer Rehabilitation Question., Schedule for the Evaluation of Individual Quality of Life- SEIQoL) of parents with children suffering from malignant diseases. The questionnaire is anonymous and contains 41 questions divided into 9 domains.

Results: It is found that among 32 parents with children suffering from malignant diseases, the highest number of them – 12- are the children of the youngest age – 0 – 6 years old. Almost equal number of the children suffering from malignant diseases live in the city and in the country. The consequences of the physical and mental condition of their children limit a large number of parents in meeting their personal needs. They spend most of their time with their sick children in hospital, and in this way they neglect their other chores and sometimes even other children.

Conclusion: Bad health condition and the course of the illness may lead to mild or dramatic changes in some respects of the quality of life. The success of the relationship with the sick child means the continuation of life and communication which should be more similar to the way it was before the illness. Quality health care and unconditional support, care and love of the nurses will contribute to the quality of life of a child suffering from malignant disease.

Health behavior and prevention of risky health behaviors

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A typical way of life of most people involves many behaviors that may increase the risk of illness and injuries. Positive health behavior aims to maintain and improve health, and most important, to prevent the possible occurrence of the disease. Negative health behavior is any behavior that adversely affects the body and can lead to outbreaks of disease. This paper attempts to examine the health behavior of the respondents, determine whether there is a statistically significant difference in health behavior between health and non-health professionals, propose specific activities aiming to prevent risky health behavior and identify high-risk groups of patients prone to certain behaviors with negative health effects. The sample consisted of 50 health professionals and 50 non-health professionals randomly selected by specific categories: age, sex, education, shift work. Research method was a poll made for the purpose of this survey with 41 closed questions with multiple choice answers and instructing participants to circle only one answer. Statistically proven that health professionals in relation to non-health professionals rarely consume alcohol, eat more fruits and vegetables, with their first meal early in the morning. Statistically proven that non-health professionals in relation to health professionals more easily fall asleep, firmer sleep through the night and take their meals at the same time. Although the underlying assumption was that health workers have healthier lifestyle habits and behaviors, research has shown that there is no statistically significant difference in health behavior between health and non-health professionals. The same number of risk and protective health behavior identified in both groups of respondents and for this reason it was not possible to identify the risk group of patients.

Instructions to authors

South Eastern Europe Health Sciences Journal (SEEHSJ) is the official publication (two times per year) of the Faculty of Health Care and Nursing, University of "Vitez" Travnik (Bosnia and Herzegovina) and School of Medicine, University Josip Juraj Strossmayer Osijek (Croatia).

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