SG/NJ 2023;28:42-9
DOI: 10.11608/sgnj.28.1.6

STRUČNI RAD/PROFFESIONAL PAPER

Operating Room Nursing: Integration of Nurses into the Field

Integracija medicinskih sestara u područje operacijskog sestrinstva

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Abstract

The operating room is a specific workplace that requires operating room nurses to possess key competencies in the areas of perioperative healthcare, ethics, legislation, communication, and organizational skills, with continuous professional development through education and research. This knowledge will be acquired through basic and specialized training, which will continue to be integrated into the process in the field of perioperative care in a targeted manner. The need for immediate and effective action by nurses in the operating room in unpredictable situations requires them to respond appropriately, which requires knowledge and practice only possible through structured formal training. These trainings have clear learning outcomes and competencies for knowledge assessment procedures. The current challenge is poorly designed processes for integrating inexperienced staff into perioperative care without explicit requirements to complete perioperative specialist training.

Running head: Operating room nursing integration

Keywords: operating room nursing, integration, perioperative specialist training

Sažetak

Operacijska je dvorana specifično radilište koje od operacijske medicinske sestre / medicinskog tehničara zahtijeva ključne kompetencije iz područja perioperativne zdravstvene njege, etike, zakonodavstva te komunikacijskih i organizacijskih vještina uz kontinuirani profesionalni razvoj koji se stječe obrazovanjem i istraživanjem. Medicinske sestre / medicinski tehničari svoje kompetencije trebaju stjecati temeljnim i specijalističkim obrazovanjem na koje se nastavlja proces dobro osmišljene integracije u područje perioperacijske skrbi. Potreba za hitnim i učinkovitim djelovanjem u nepredvidivim situacijama imperativ je za medicinske sestre / tehničare u operacijskim dvoranama koji moraju reagirati na pravi način, što podrazumijeva znanje i praksu koji su jedino mogući uz strukturiranu formalnu izobrazbu jasno definiranim ishodima učenja, postupcima evaluacije znanja i izlaznim kompetencijama. Trenutni je izazov nedovoljno dobro osmišljen proces integracije novozaposlenih u područje perioperacijske skrbi bez jasnih zahtjeva u kontekstu završetka specijalističke izobrazbe.

Kratak naslov: Integracija medicinske sestre u operacijsko sestrinstvo

Ključne riječi: operacijske medicinske sestre, specijalizacija, integracija

Primljeno / Received February 12th 2023; Prihvaćeno / Accepted March 2nd 2023;

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Introduction

Informal education and training in the field of operating room nursing have a long history. In the early days of surgery, there was a need for specialized support staff whose task was to support the surgeon during the procedure. To this day, operating room nurses usually acquire their specialist competencies by learning while working [1].

The development of medical technology has greatly facilitated the development of surgery and anaesthesia, requiring all members of the surgical team to continuously acquire specific knowledge. The requirement for specialist training also applies to nurses who play a special role in operating room nursing as part of perioperative care. It includes transferring the patient to the operating room, verifying the identity of the patient and the location of the surgical intervention, and the process of performing the surgical intervention [2].

Over the years, the need for the introduction of specialist education in the field of perioperative nursing has been

Uvod

Neformalna izobrazba i usavršavanje medicinskih sestara u poslovima kirurškog instrumentiranja ima dugu povijest. Već u samom začetku razvoja kirurgije pojavila se potreba za pomoćnim stručnim osobljem čija bi uloga bila pomoć kirurgu tijekom operacijskoga zahvata. Od tada do danas, operacijska medicinska sestra svoje specijalističke kompetencije najčešće stječe učenjem uz posao [1].

Današnji razvoj tehnologije u medicini snažno je pomogao razvoju kirurgije i anestezije te posljedično perioperacijske zdravstvene njege čime se povećala potreba stalnog usvajanja specifičnih znanja svih sudionika kirurškoga tima. Zahtjevi specijalističke izobrazbe odnose se i na medicinske sestre / tehničare koji imaju jedinstvenu ulogu u području ukupne perioperacijske skrbi, od prijeoperacijske zdravstvene njege, intraoperacijske skrbi do poslijeoperacijske zdravstvene njege. Navedeni ciklus obuhvaća niz poslova koji se odnose na kompletan kirurški tim: primopredaju bolesnika u operacijski blok, provjere identiteta bolesnika,

shown [1]. That is important since these contents are insufficiently represented during formal general education. Nursing education in the Republic of Croatia is divided into several levels, from basic education through five years of vocational secondary education, to undergraduate and postgraduate studies with the possibility of further studies toward a Ph. D. in biomedicine and public health or related sciences. That brings nurse training in line with EU Directive 2013/55, which requires a minimum of three years of formal training with at least 4600 hours of theoretical and clinical content. However, during vocational education, which represents the basic sufficient level to perform the tasks of surgical nursing in Croatia, operating room nursing is covered as part of the subject Nursing care of surgical patients, in one chapter: Basic surgical instruments and suture material. In the last year of high school, there is a subject Instrumentation, with a total fund of 68 practice hours. However, the subject is optional; it is carried out exclusively through practice which, considering the size of the classes and the availability of operating blocks, is mostly unattainable for schools. Also, the subject has non-specific learning outcomes that are difficult to achieve, such as Prepare sets for certain interventions; Demonstrate the technique of instrumentation for certain procedures.

Teaching in this specific area of nursing work after completing general nursing education mostly relies on mentoring in the operating room under the guidance of an experienced nurse. In the past, in addition to education, it was necessary for the candidate to have previous clinical work experience, preferably in the surgical department and/or intensive care. In recent years, as internships have been eliminated and turnover has increased in Croatia, nursing staff have been inducted directly into surgical nursing immediately after high school. That poses a major challenge, as the sudden onboarding of operating room nursing nurses can lead to surgical team dissatisfaction, increased staff stress, and poor patient care. It is well known that when organizations do not have sound onboarding protocols in place for new employees, organizational culture deteriorates, and employee dissatisfaction increases [3].

Strategies of integrating new employees

To reduce the negative effects of sudden integration and the mismatch between competencies acquired through formal education and the demands of the work environment, it is necessary to implement structured training programs that facilitate the transition of nurses from one nursing specialty to another, specifically, as perioperative care. The challenge is even greater when someone enters the field of perioperative care with no work experience. Ideally, this training and planning for the transition to the perioperative care environment will be provided by a mentor and the nurse manager in the operating area. Many hospitals have implemented such strategies to support new nurses, particularly transition programs designed to facilitate job transitions [4]. According to the literature, the most important strategy to support successful integration is a nursing specialization or transition planning. Edwards et al. have found that half of the quantitative studies examining the

mjesta kirurškog zahvata, proces izvođenja anestezije i kirurškog zahvata te instrumentiranje [2].

Godinama se u Hrvatskoj iskazuje potreba za uvođenjem specijalističke naobrazbe u području operacijskoga sestrinstva [1]. To je iznimno važno jer su tijekom formalnoga općeg obrazovanja ovi sadržaji nedovoljno zastupljeni. U Republici Hrvatskoj obrazovanje medicinskih sestara provodi se na više razina, od temeljne naobrazbe putem petogodišnjega srednjeg strukovnog obrazovanja, do preddiplomskih i diplomskih studija uz daljnju mogućnost upisa doktorskih studija iz područja biomedicine i zdravstva ili srodnih područja znanosti. Time je obrazovanje medicinskih sestara usklađeno s Direktivom 2013/55 EU koja zahtijeva najmanje tri godine formalne izobrazbe koja se sastoji od najmanje 4 600 sati teorijskih i kliničkih sadržaja. Međutim, tijekom srednjoškolskoga strukovnog obrazovanja, koje predstavlja temeljnu razinu dovoljnu za obavljanje poslova operacijskoga sestrinstva, instrumentiranje se obrađuje u sklopu nastavnog predmeta Zdravstvena njega kirurških bolesnika u jednoj nastavnoj temi *Osnovni kirurški instrumenti i šivaći materijal*. U petoj godini učenja postoji predmet Instrumentiranje s ukupnim fondom od 68 sati vježbi. Ipak, predmet je izborni, izvodi se isključivo kroz vježbe, što je s obzirom na veličine razrednih odjela i dostupnost operacijskih blokova školama uglavnom nedostižno. Također, predmet ima nespecifične ishode učenja koji se teško mogu postići poput *Pripremiti setove za pojedine zahvate; Pokazati tehniku instrumentiranja kod pojedinih zahvata*.

Većinom se poučavanje u ovom specifičnom području sestrinskoga rada nakon završenog općeg sestrinskog obrazovanja oslanja na mentoriranje u operacijskoj dvorani pod vodstvom iskusne medicinske sestre / medicinskog tehničara. Nekada je osim obrazovanja bilo nužno da kandidati imaju prethodno kliničko radno iskustvo, po mogućnosti kirurškoga odjela i/ili intenzivne njege. Posljednjih se godina, ukidanjem pripravničkoga staža i zbog velike fluktuacije, novi djelatnici uvode u područje operacijskoga sestrinstva odmah nakon završenoga srednjoškolskog obrazovanja. To predstavlja značajan izazov jer naglo uvođenje u posao operacijske medicinske sestre može dovesti do nezadovoljstva unutar kirurškoga tima, povećane razine radnoga stresa djelatnika te lošije skrbi za pacijenta [3]. Poznato je da ukoliko organizacija nema smisleno razrađene protokole uvođenja u posao novih djelatnika, utoliko je organizacijska kultura lošija i nezadovoljstvo djelatnika postaje sve veće [3].

Strategije integracije novih djelatnika

Da bi se smanjilo negativne učinke nagle integracije te nesrazmjer između kompetencija stečenih formalnim obrazovanjem i zahtjeva u radnom okruženju, potrebno je implementirati strukturirani plan osposobljavanja radi olakšanog prijelaza djelatnika iz jedne specijalističke grane sestrinstva u drugu visoko specifičnu kao što je to perioperacijsko sestrinstvo. Izazov je time veći ako osoba ulazi u specifično stručno područje bez prethodnoga radnog iskustva. U idealnim bi uvjetima plan osposobljavanja i prijelaza u okolinu perioperacijskoga sestrinstva provodili mentori i voditelji operacijskog bloka.

Mnoge su bolnice implementirale takve strategije za pružanje podrške medicinskim sestrama početnicama, ponajviše

effectiveness of transition strategies and interventions were based on nursing specialty programs [5]. Outcomes of the program were categorized as being important to employers, such as retention and turnover, or personal care outcomes, including self-confidence, competence, knowledge, stress, anxiety, and job satisfaction [6].

The integration process can be seen as a person's introduction to the organization and their orientation in the work environment or as a process by which new nurses learn about the existing work environment to enable rapid adaptation [7]. One of the challenges hospitals faces is hiring efficient and motivated staff. In determining competency for different qualifications, employers should have a key role in shaping requirements according to the education system [8]. Therefore, nurses who decide to work in the operating room should meet certain requirements for that position. Some requirements for nursing in the operating room are emotional stability, patience, willingness to learn, perseverance, dexterity, teamwork, and resourcefulness. Recruiting, selecting, and retaining employees is a significant challenge given the specifics of the position, working hours, stressful conditions, responsibilities, and emotional investment.

Today, the integration process refers to nurses leaving school and entering the workforce. It also refers to nurses who transfer to departments or institutions. The process of integrating new hires into the operating room is long and complicated, not only because they barely include it in their training, but because it includes several steps that are demanding on both staff and mentors. The duration of training depends on the competency of the recruit and often depends on the requirements of the specific surgical specialty.

The transition from the role of nursing student or student to professional nurse is widely recognized as a period of stress, role adjustment, and shock. Studies show that up to 20% of new nurses quit their first job within one year [8, 9].

Case studies of nursing integration in operating room settings

In the United States and Canada, nurses that work in operating rooms have completed specializations. Within the field of surgery, there are three distinct specialties: Surgical Nurse in Surgical Nursing, Anaesthesia Nursing, and First Surgical Assistant. Surgical Nursing training courses are held in the School of Nursing and last 24 and 36 months. The profession is regulated and formally recognized by the US and Canadian Ministries of Health and Education, as well as professional organizations [10, 11].

The situation in the European Union and its member states is different. For example, Bulgaria, Greece, and Spain do not have a specialty for operating room nurses, whereas some countries regulate residency training according to the guidelines of the European Association of Operating Room Nurses (Table 1). There is no specialization in the Republic of Croatia, but a training program for operating room nurses has been designed according to the guidelines of the European Association of Operating Room Nurses (EORN).

prijelazne programe u nastojanju da olakšaju promjenu radnoga mjesta te osiguraju zadržavanje medicinskih sestara u profesiji [4]. Prema podacima iz literature kao najvažnije strategije podrške uspješnije integracije spominju se specijalizacija medicinskih sestara / tehničara ili prijelazni programi. Edwards i sur. sustavnim su pregledom literature ustanovili da se polovica kvantitativnih studija osmišljenih za ispitivanje učinkovitosti prijelaznih strategija i intervencija oslanja na programe specijalizacije medicinskih sestara [5]. Ishodi programa kategorizirani su kao oni važni za poslodavce, poput stope zadržavanja i fluktuacije, ili pojedinačnih ishoda medicinskih sestara, uključujući povjerenje, kompetenciju, znanje, stres, tjeskobu i zadovoljstvo poslom [6].

Proces integracije može se promatrati kao uvođenje pojedinca u organizaciju i njegovo snalaženje u radnoj sredini, odnosno kao proces kroz koji se medicinske sestre početnice informiraju o postojećem radnom okruženju sa svrhom da se omogući brza prilagodba [7]. Jedan je od izazova za bolnice zaposliti učinkovitu i motiviranu radnu snagu. Poslodavci bi trebali imati ključnu ulogu u formiranju zahtjeva prema obrazovnome sustavu u pogledu određivanja kompetencija različitih kvalifikacija [8]. Stoga bi medicinska sestra / medicinski tehničar koji se odluči za rad u operacijskoj dvorani trebao imati određene preduvjete za ovo radno mjesto. Preduvjeti za operacijsko sestrinstvo svakako su: emocionalna stabilnost, strpljivost, spremnost za učenje, izdržljivost, spretnost, funkcioniranje u timu i snalažljivost. Zapošljavanje, odabir i zadržavanje osoblja velik je izazov s obzirom na specifičnost ovog radnog mjesta, radno vrijeme, stresne uvjete, odgovornost i emocionalnu uključenost.

Danas se proces integracije odnosi na one djelatnike u sestrinstvu koji prvi put ulaze u svijet rada te one koji mijenjaju odjele ili ustanove. Proces integracije novozaposlenih djelatnika u operacijsku dvoranu dugotrajan je i složen proces jer se sastoji od nekoliko iznimno zahtjevnih koraka za zaposlenika, ali i mentora. Trajanje obuke ovisi o vještinama novozaposlene medicinske sestre / medicinskog tehničara, a vrlo često i zahtjevnosti specifične grane kirurgije.

Prijelaz iz uloge učenika ili studenta sestrinstva u profesionalnu medicinsku sestru široko je prepoznat kao razdoblje stresa, prilagodbe uloge i šoka od stvarnosti. Studije navode da čak do 20 % novih medicinskih sestara napusti svoj prvi posao u roku od jedne godine [8, 9].

Primjeri integracije medicinskih sestara u područje operacijskoga sestrinstva

U Sjedinjenim Američkim Državama i Kanadi medicinske sestre koje rade u operacijskoj dvorani imaju završenu specijalizaciju. Unutar kirurškog područja postoje tri različite specijalnosti: operacijska sestra u operacijskoj njezi, anesteziološkoj njezi i prvi kirurški asistent. Programi osposobljavanja operacijske sestrinske skrbi izvode se na fakultetima sestrinstva u trajanju od 24 mjeseca i 36 mjeseci. Specijalizacija je regulirana i službeno priznata od strane Ministarstva zdravstva, Ministarstva obrazovanja SAD-a i Kanade te stručnih društava [10, 11].

U Europskoj je uniji situacija drugačija s obzirom na zemlje članice. Primjerice, Bugarska, Grčka i Španjolska nemaju specijalizaciju za operacijske medicinske sestre / tehničare dok

The program lasts 1 year and it includes 600 hours, and the requirement for participants is to complete an undergraduate degree in nursing [12].

According to European directives, only registered nursing staff with postgraduate or specialist qualifications can work in EU member states where the profession is regulated. Since 1997, some members of the European Association of Operating Nurses (EORN) have developed a general curriculum for the specialization of perioperative care [13]. Table 1 shows the current situation in individual countries in Europe [14].

pojedine zemlje imaju regulirano specijalističko obrazovanje u skladu sa smjernicama Europskog udruženja operacijskih sestara (Tablica 1.). U Republici Hrvatskoj još uvijek se ne provodi specijalizacija, nego je osmišljen program usavršavanja za operacijske sestre instrumentarke koji je usklađen sa smjernicama Europskog udruženja operacijskih sestara (EORN). Program traje 1 godinu te ima 600 sati, a uvjet za polaznike završen je preddiplomski studij sestrinstva [12].

Prema Europskoj direktivi, samo registrirane medicinske sestre s poslijediplomskim ili specijalističkim studijem mogu raditi u operacijskim salama na poslovima operacijske sestre instrumentarke u državama članicama EU-a u kojima je specijalizacija regulirana. Neke članice Europske udruge operacijskih sestara (EORN) od 1997. godine razvijaju zajednički kurikulum za perioperativnu specijalizaciju sestrinstva [13].Trenutno stanje u pojedinim zemljama u Europi [14] prikazuje Tablica 1.

Table/Tablica 1. Characteristics of professional training in European countries / Osobitosti specijalističkog obrazovanja u zemljama Europe [14]

	The specialization of perioperative nursing is regulated by the ministries responsible for education and health	Program takes place in hospitals	Program takes place at universities	Previous experience required	Duration of the school in years (hours)
GERMANY	YES	YES	NO	NO	2
BELGIUM	YES	YES	YES	NO	1
CIPRUS	YES	YES	NO	YES	1 (1500)
SLOVAKIA	YES	YES	NO	NO	1
FINLAND	NO	NO	YES	NO	1
SWEDEN	YES	YES	YES	YES	1
ESTONIA	YES	YES	YES	NO	1
FRANCE	YES	NO	YES	YES	1 (2300)
HUNGARY	YES	YES	YES	YES	1 (1440)
CZECH	YES	YES	NO	NO	1 (560)
IRELAND	YES	YES	YES	NO	1
POLAND	YES	YES	YES	YES	1 (836)
NETHERLANDS	YES	YES	NO	YES	1,5
ITALY	YES	YES	YES	NO	1(1000)
NORWEGIA*	YES	YES	YES	NO	2
SWITZERLAND*	YES	YES	YES	YES	2
CROATIA	NO	YES	YES	NO	1

* it does not belong to the EU, it has free mobility of experts between member states

Factors for successful adaptation of operating room nurses in the transition process

The goal of the Common European Curriculum for all nursing disciplines is the free movement of specialists between all member states. Undoubtedly, specialization makes an additional contribution to achieving quality surgical care [13]. Thus, in the operating room, through experience, the necessary skills can be developed to help reduce the real-world transitional shock of new nurses.

Čimbenici uspješne prilagodbe operacijskih medicinskih sestara u tranzicijskome procesu

Konačni je cilj zajedničkoga europskog kurikuluma za sve specijalizacije u sestrinstvu slobodna mobilnost stručnjaka u svim državama članicama. Neosporno je da bi specijalističko obrazovanje dalo dodatan doprinos u postizanju kvalitete operacijske njege [13]. Tako se u operacijskoj dvorani potrebne vještine razvijaju stjecanjem iskustva tijekom vremena što pomaže u smanjenju tranzicijskoga šoka od stvarnosti.

Transitional shock also has an underlying basis in Kramer's theory [15], which describes the phenomenon of long periods of learning to practice a particular role followed by the realization that professional reality differs from expectations. There are four phases of actual shock – the honeymoon phase, which is followed by excitement, idealism, and optimism; the shock phase, where negative emotions and vulnerabilities can be sought; the recovery phase, where reality is faced; and the resolution phase where confidence emerges and the perceived dominance of an open perspective. The first and most compelling phase of this adaptive role theory occurs during the first four months of professional practice [16].

During integration, the nurse is considered a novice in a continuous learning and skill development process defined by Patricia Benner, who must be guided until independence to be able to perform her tasks individually and safely [17]. Therefore, competency acquisition and development can be categorized into five levels: Beginner, Intermediate, Competent, Experienced, and Expert [18] and tailored to the field of perioperative care [19].

The authors of this paper propose a one-year consolidation in the central operating block. Each newly hired Surgical Nurse is assigned a Mentor (Bachelor Surgical Nurse - Team Leader in the Clinical Department) and receives specific instruction on working in the Central Surgical Area. The first three months of training are designed to teach the principles of surgical hand disinfection, disinfection, and aseptic procedures, check material sterility indicators, prepare patients for surgery, and assist in positioning patients in proper positions, knowledge, and mastery of content of nursing documents and surgical consumable documents. The Central Sterilization Training Program lasts 2 weeks. The second trimester of training is designed to prepare the patient independently and assist the patient in positioning and preparing instruments and supplies for the procedure. Instrument insertion planned for minor surgery under the guidance of an instructor. The third trimester of training is aimed at autonomous patient preparation and assistance with patient positioning, instrument and consumable preparation, and minor surgery under the supervision of an instructor. After 8 months, visits to other surgical branches are planned for a total of three months. The fourth trimester of training is aimed at self-preparing and assisting with patient positioning, preparing instruments and consumables, and performing more complex surgical procedures under the guidance of an instructor.

During training, the progress of the OR nurse is continuously monitored, and unnecessary and unintended interventions are corrected. Willingness to work independently was assessed by the head nurse of the central surgical area in consultation with the mentor (team leader of the clinical unit) and the newly trained surgical nurse.

The priority is to acclimate novices to the workplace, as failure to do so can lead to failure, and personal frustration, which will affect the quality of care provided. Therefore, a clearly defined and structured integration procedure is required. According to the recommendations of the American Association of Perioperative Registered Nurses (AORN),

Tranzicijski šok isto ima temeljnu podlogu u Kramerovoj teoriji [15] koja opisuje fenomen dugogodišnjega učenja kako bi se prakticirala određena uloga, a zatim se otkrije da je profesionalna stvarnost drugačija od očekivane. Stvarni šok ima četiri faze – fazu medenog mjeseca koju prati uzbuđenje, idealizam i optimizam; fazu šoka u kojoj je moguće tražiti negativne osjećaje i ranjivost; fazu oporavka pri čemu se događa suočavanje s realnošću i fazu razrješenja gdje dominira samouvjerenost i sagledavanje otvorenih perspektiva. Početna i najdramatičnija faza u ovoj teoriji prilagodbe uloga događa se tijekom prva četiri mjeseca profesionalne prakse [16].

Medicinska sestra u postupku integracije smatra se početnikom u kontinuumu stjecanja i razvoja vještina koje je definirala Patrícia Benner i mora biti pod nadzorom mentora sve dok ne bude samostalna kako bi mogla individualno i sigurno obavljati svoje zadatke [17]. Prema tome, stjecanje i razvoj vještina može se raščlaniti u pet faza: početnik, napredni početnik, kompetentan, iskusan te stručnjak [18], što je moguće prilagoditi operacijskom sestrinstvu [19].

Autori ovoga članka predlažu da se integracija provodi u Središnjem operacijskom bloku u trajanju od jedne godine. Svaka novoprimljena operacijska sestra / operacijski tehničar dodijeljen je mentoru (operacijska sestra prvostupnica – voditelj tima kliničke jedinice) i upućuje se o specifičnostima rada u Središnjem operacijskom bloku. Cilj prvoga tromjesečja edukacije jest savladavanje kirurške dezinfekcije ruku, principa antiseptičkoga i aseptičnog rada, kontrole indikatora sterilnosti materijala, pripreme bolesnika za operaciju i asistenciju pri namještanju bolesnika u odgovarajući položaj, poznavanje sadržaja sestrinske dokumentacije te dokumentiranje potrošnoga materijala tijekom operacije. Planira se edukacija u jedinici Centralne sterilizacije u trajanju od 2 tjedna. Cilj drugoga tromjesečja edukacije jest samostalna priprema bolesnika i asistencija pri namještanju bolesnika za operaciju te priprema instrumenata i potrošnoga materijala. Planirano uvođenje u instrumentiranje kod manjih operacijskih zahvata odvija se uz nadzor mentora. Cilj je trećega tromjesečja edukacije samostalna priprema bolesnika i asistencija pri namještanju bolesnika, priprema instrumentarija i potrošnoga materijala te instrumentiranje manjih operacijskih zahvata uz nadzor mentora. Nakon 8 mjeseci planira se obilazak i drugih grana kirurgije u trajanju od ukupno tri mjeseca. Cilj četvrtoga tromjesečja edukacije jest samostalna priprema bolesnika i asistencija pri namještanju bolesnika, priprema instrumentarija i potrošnoga materijala te instrumentiranje složenijih operacijskih zahvata uz nadzor mentora.

Tijekom edukacije kontinuirano se prati napredak operacijske sestre / operacijskog tehničara te vrši korekcija neželjenih i neočekivanih postupaka. Procjenu spremnosti za preuzimanje samostalnoga rada vrši glavna sestra Središnjega operacijskog bloka u dogovoru s mentorom (voditelj tima kliničke jedinice) i novo educiranom operacijskom sestrom / operacijskim tehničarom.

Prioritet jest prilagoditi početnika radnom mjestu jer ako se to ne dogodi, rezultat je neuspjeh i osobna frustracija koja se odražava na kvalitetu pružene skrbi. Za to je potrebno imati dobro definiran i strukturiran program integraci-

Table/Tablica 2. Presentation of the acquisition and development of skills operating room nurse adapted according to the P. Benner model / Prikaz stjecanja i razvoja vještina operacijskih medicinskih sestara prilagođen prema modelu P. Benner

	Model P. Benner	Operating room nurse
Beginner	- the person has no experience - students / pupils - nurses from higher categories can be classified at beginner level if they are placed in an unknown area	- has no experience in the operating room and must focus on each task from the beginning to the end
Advanced beginner	- rules based and task completion - difficulty understanding patient's ongoing needs - through practical experience in specific situations that neither the teacher nor the student can define, advanced beginners begin to visually identify the elements of the situation that arise - feel a great responsibility, but rely on help from more experienced people - mainly nursing trainees	- can work at an acceptable level and have experience to fall back on when things don't go as planned
Competent	- intermediate learners reach proficiency levels by learning by doing and following the methods of others - this level is defined as unplanned and identifies which aspects of the current and future situation are important and which should be ignored - more efficient, but attention is more focused on time for service delivery and care organization tasks rather than time tailored to patient needs	- in the operating room for two or three years, and is able to adapt to the changing environment
Proficient	- the performer perceives the situation as a whole, and the performance itself is fully realized - recognizes most aspects and has an intuitive insight into situations - demonstrates a new ability to see changes relevant to a particular situation including recognizing and implementing responses to the situation as it develops - they no longer rely on previous goals for the organization and show greater self-confidence in their knowledge and ability	- can track things empirically and identify issues quickly
Expert	- level 5 of the model is reached when the "expert" no longer relies on analytical principles to understand the situation and act appropriately - Benner describes a specialist as a nurse with intuitive insight into a situation - there is a qualitative change, because the specialist "knows the patient" and knows the typical response patterns - professional nurses are characterized by research-based practice and instil "know something know how" - see the big picture, see the unexpected	- has a lot of experience, solves problems intuitively and doesn't waste time thinking about alternatives

the integration phase must last at least one year [18]. Table 3 shows the duration of the phases.

je. Prema preporuci Američkoga udruženja perioperativnih registriranih medicinskih sestara (AORN), razdoblje integracije mora biti najmanje godinu dana dok ukupnu integraciju do specijalističke razine [18] prikazuje Tablica 3.

Table/Tablica 3. Adaptation phases according to AORN / Faze prilagodbe prema preporuci AORN-a

First phase	Introduction to perioperative nursing	0-3 months
Second phase	Advanced beginner	3-6 months
Third phase	Intermediate practice	12-24 months
Fourth phase	Advanced practice	2 or more years
Fifth phase	Specialization	5 or more years

At the beginning of the integration phase, there is uncertainty and stress, combining new skills that need to be developed, understanding a whole new way of working, ignorance of the field, and working with unfamiliar people. Research has shown that low self-confidence, overwork, disorientation, and anxiety can influence a nurse's decision to stay in a new job [20]. Interventions need to be developed to ensure respect and acceptance of new employees and to make them feel welcome as a group. The lack of professional self-confidence among job seekers was investigated. Researchers have demonstrated that trust among new caregivers increases with experience [20, 21]. Furthermore, self-confidence is an indicator of successful integration and is associated with less burnout. Respondents have realistic expectations for practice and plan extra time to study and prepare outside of work to boost confidence. Self-direction to acquire practical skills is important when transitioning from new nurses [22]. It is also important to build a mutual relationship between new hires and mentors based on trust and mutual understanding.

Conclusion

When integrating a new employee, the focus is on the gradual, conscious adaptation of the new employee to perioperative care skills. To be able to perform surgical nursing care independently requires years of experience based on step-by-step planned professional training and learning from experience. The existing system needs to be improved by implementing special education programs and nurse integration strategies to increase the motivation to stay in the profession and provide high-quality healthcare.

Authors declare no conflict of interest

Na početku integracijskoga razdoblja javljaju se osjećaji nesigurnosti i stresa vezani za nove aktivnosti koje treba razvijati, shvaćanje potpuno novoga načina rada, nepoznavanje prostora, rad s nepoznatim ljudima. Studije su pokazale da su nedostatak samopouzdanja, preopterećenost, problemi s orijentacijom i strah često utjecali na odluku medicinskih sestara hoće li ostati na novom radilištu [20]. Postoji potreba razrade intervencija koje novozaposlenima osiguravaju poštovanje i prihvaćanje te osjećaj da su dobrodošli u novo radno okruženje. Sve se više istražuje manjak profesionalnoga samopouzdanja primjetan kod medicinskih sestara koje tek ulaze u praksu. Istraživači su potvrdili da povjerenje među novim medicinskim sestrama raste s iskustvom [20, 21]. Nadalje, samopouzdanje je pokazatelj uspješne integracije i povezano je s manjim izgaranjem. Ispitanici imaju realna očekivanja od prakse te odvajaju dodatno vrijeme za učenje i pripremu izvan posla kako bi stekli samopouzdanje. Samousmjeravanje u stjecanju znanja potrebnoga za praksu pokazalo se važnim pri tranziciji novih medicinskih sestara [22, 23]. Važno je da se između novozaposlenoga i mentora stvori recipročan odnos temeljen na povjerenju i međusobnom razumijevanju.

Zaključak

Postupna i dobro osmišljena prilagodba početnika na obavljanje poslova perioperacijskoga sestrinstva prioritet je koji treba ostvariti u postupku integracije novozaposlenih. Za potpunu samostalnost u obavljanju poslova instrumentiranja potrebno je višegodišnje iskustvo koje se oslanja na prethodno specijalističko obrazovanje i postupno planirano iskustveno učenje. Nužno je unaprijediti postojeći zdravstveni i obrazovni sustav implementacijom specijalističkih obrazovnih programa te strategija integracije medicinskih sestara / tehničara u poslove perioperacijskoga sestrinstva da bi se poboljšala motiviranost ostajanja u struci i kvaliteta pružene zdravstvene njege.

Nema sukoba interesa

References

[1] Kozina B, Dragija D. Povijest i evolucija sestrinstva u operacijskoj dvorani. Sestrinski glasnik. 2018; 23: 27–30.

[2] Kurtović B. Zdravstvena njega neurokirurških bolesnika. Zagreb: HKMS; 2013.

[3] Schneider B, Brief AP, Guzzo RA. Creating a climate and culture for sustainable organizational change. Organizational dynamics. 1996; 24 (4): 7–19.

[4] Hallaran AJ, Edge DS, Almost J, Tregunno D. New Nurses' Perceptions on Transition to Practice: A Thematic Analysis. Canadian Journal of Nursing Research. 2022; 0 (0). doi:10.1177/08445621221074872

[5] Edwards D, Hawker C, Carrier J, Rees C. A systematic review of the effectiveness of strategies and interventions to improve the transition from student to newly qualified nurse. International Journal of Nursing Studies. 2015; 52 (7): 1254–1268. https://doi.org/10.1016/j.ijnurstu.2015.03.007

[6] Hallaran AJ, Edge DS, Almost J, Tregunno D. New Nurses' Perceptions on Transition to Practice: A Thematic Analysis. Canadian Journal of Nursing Research. 2022; 0 (0). doi:10.1177/08445621221074872

[7] Kamau S et al. Integration strategies and models to support transition and adaptation of culturally and linguistically diverse nursing staff into healthcare environments: An umbrella review. International Journal of Nursing Studies. 2022; 136. https://doi.org/10.1016/j.ijnurstu.2022.104377

[8] Casey K, Oja KJ, Makic MBF. The lived experiences of graduate nurses transitioning to professional practice during a pandemic. Nurs Outlook. 2021.

[9] Kovner CT, Brewer CS, Fatehi F, Jun J. What Does Nurse Turnover Rate Mean and What Is the Rate? Policy, Politics, & Nursing Practice. 2014; 15 (3–4): 64–71. doi:10.1177/1527154414547953

[10] Dumchin, M. Redefining the future of perioperative nursing education: A conceptual framework. AORN journal. 2010; 92 (1): 87–100.

[11] Holmes T, Vifladt A, Ballangrud R. A qualitative study of how interprofessional teamwork influences perioperative nursing. Nursing Open. 2020; 7 (2): 571–580.

[12] Program usavršavanja za operacijske medicinske sestre – instrumentarke [Internet]. Zdravstveno veleučilište. Dostupno na: https://www.zvu.hr/program-usavrsavanja-za-operacijske-medicinske-sestre-instrumentarke/ Datum pristupa informaciji: 10. 2. 2023.

[13] Benze C, Spruce L, Groah L. Perioperative nursing: Scope and standards of practice. 2021.

[14] Pérez Ortiz M. Influencia de la formación de la enfermería del quirófano en la seguridad del paciente quirúrgico. Percepción de los enfermos y revisión de un Sistema de Comunicación de Incidentes [thesis]. Madrid: Universidad complutense de Madrid, Facultad de enfermería, fisioterapia y podología; 2019.

[15] Kramer M. Reality shock: Why nurses leave nursing. American Journal of Nursing. 75 (5): 891.

[16] Wakefield E. Is your graduate nurse suffering from transition shock?," Journal of Perioperative Nursing: 2018; 31 (1).

[17] Benner, P. From novice to expert. American Journal of Nursing. 1982; 82: (3)

[18] Alligood MR, Tomey AM. Nursing Theorist and Their Work 7th ed. Mosby Elsevier; 2010.

[19] Jasinski, M. Evidenced-based staff education program for novice perioperative nurses. [thesis]. Walden University: 2019.

[20] Transition to Perioperative Practice Program – Participant Resource Manual. Dostupno na: https://www.health.nsw.gov.au/nursing/practice/Publications/participant-resource-manual.pdf. Datum pristupa informaciji: 10. 2. 2023.

[21] Hallaran AJ, Edge DS, Almost J, Tregunno D. New Nurses' Perceptions on Transition to Practice: A Thematic Analysis. Canadian Journal of Nursing Research. 2022; 0 (0). doi:10.1177/08445621221074872

[22] Ortiz J. New graduate nurses' experiences about lack of professional confidence. Nurse Education in Practice. 2016; 19: 19–24. https://doi.org/10.1016/j.nepr.2016.04.001

[23] Craig C, Moscato S, Moyce S. New BSN nurses' perspectives on the transition to practice in changing economic times. JONA: The Journal of Nursing Administration. 2012; 42 (4): 202–207. https://doi.org/10.1097/NNA.0b013e31824ccd95