

# PROFESSIONAL NURSES' PERCEPTIONS OF THEIR ROLE AS MENTORS FOR NOVICE NURSES IN THE OPERATING ROOM

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in the Faculty of Medicine and Health Sciences  
Stellenbosch University



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**March 2018**

# **DECLARATION**

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Date:                      March 2018

# ABSTRACT

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## BACKGROUND

Mentoring of novice nurses in the operating room (OR) is often neglected due to the specialised nature and inherent complexity of OR nursing, and compounded by a critical nursing shortage in the OR. Numerous studies reiterate the benefits of effective clinical mentoring. However, limited literature within the South African context regarding OR qualified professional nurses' (PNs) perceptions of their role as mentors for novice nurses could be found.

## RESEARCH QUESTION

The two-fold study was guided by the question: "How do OR qualified PNs perceive their role as mentors of novice nurses in the OR?"

## AIM

The aim of this study was to understand and describe OR qualified PNs' perceptions of their role as mentors of novice nurses in the OR.

## OBJECTIVES

The objectives of the study were to understand and describe the perceptions of OR qualified PNs regarding their role as mentor of novice nurses, as well as the factors that could influence OR qualified PNs' perception regarding their role as mentors of novice nurses.

## RESEARCH PROCESS

To reach the objectives of this study, a descriptive qualitative research design was used. Ethical approval was obtained from the Health Research Ethics Committee of Stellenbosch University, two private healthcare institutions in the Free State Province and the Free State Department of Health. After a pilot interview was conducted, data were collected during four focus group discussions with sixteen purposefully selected

participants who met the inclusion criteria. A semi-structured interview guide was used during audio-recorded focus group discussions, while the researcher and facilitator made field notes, especially concerning to group dynamics. The transcribed data were coded and recurring themes were identified. Lincoln and Guba's strategies of credibility, transferability, dependability and confirmability were applied to enhance the trustworthiness of the study.

## **FINDINGS**

A continuous literature review provided the researcher with an understanding of the concepts related to mentoring in the OR. The study found that OR qualified PNs agree that their role as mentors incorporates orientation; support and creating a conducive environment for learning; and teaching novice nurses safe peri-operative practices. However, participants experienced that production pressure, staff shortages and insufficient material resources in the OR influence their mentorship capacity. They mentioned other challenges, including novice nurses' limited competence, inadequate orientation for nurses entering the OR, as well as the attitudes of novice nurses and other OR team members. Markedly, participants in all four focus groups agreed that the mentoring of novice nurses in the OR is currently neither effective, nor conducive to learning. Participants attributed the poor retention of novice nurses, and nursing shortages in the OR to ineffective mentoring.

## **CONCLUSION**

The study highlighted that OR qualified PNs regard adequate mentoring of novice nurses in the OR as fundamental in guiding them to deliver competent, independent and safe peri-operative nursing care. Yet, participants in both private and public hospitals experienced challenges in providing effective mentorship to novice OR nurses.

## **KEY WORDS**

Mentoring, mentor, novice nurse, operating room (OR), OR qualified professional nurse (PN).

# **OPSOMMING**

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## **AGTERGROND**

Mentorskap van die beginnerverpleegster in die operasiesaal (OS) word dikwels agterweë gelaat as gevolg van die gespesialiseerde omvang en kompleksiteit van OS-verpleging en word verder deur die kritieke tekort aan verpleegpersoneel in die OS. Verskeie studies beklemtoon die voordele van effektiewe kliniese mentorskap. Daar kon egter beperkte literatuur in die Suid-Afrikaanse konteks met betrekking tot gekwalifiseerde verpleegsters se persepsie van hulle rol as mentors vir die beginner-verpleegster gevind word.

## **NAVORSINGSVRAAG**

Die studie het voortgespruit uit die vraag: “Hoe beskou gekwalifiseerde Profesionele verpleegkundiges (PV) hulle rol as mentors vir beginnerverpleegsters in die OS”

## **DOEL**

Die tweeledige doel van die studie is om OS gekwalifiseerde PVs se persepsies van hulle rol as mentor vir die beginnerverpleegster in die OS te verstaan en te beskryf.

## **DOELWITTE**

Die doelwitte van die studie was om die persepsies van OS gekwalifiseerde PV's aangaande hulle rol as mentor van die beginnerverpleegster sowel as die faktore wat die OS gekwalifiseerde PV's se persepsie aangaande hulle rol as mentor van die beginnerverpleegster te verstaan en te omskryf.

## **NAVORSINGSPROSES**

Om die doel van die studie te bereik, is 'n beskrywende, kwantitatiewe navorsingsmodel gebruik. Etiese toestemming van die Gesondheidsnavorsingsetiek-komitee aan die Universiteit van Stellenbosch (Health Research Ethics Committee of Stellenbosch University), twee private gesondheidsinstellings in die Vrystaat Provinsie en die Vrystaatse Department van Gesondheid is verkry.

Na 'n loodsonderhoud, is data versamel gedurende vier fokusgroep-besprekings met sestien geselekteerde deelnemers wat aan die kriteria voldoen het. 'n Semi-gestruktureerde onderhoudsmodel is gebruik gedurende oudio-opnames van die fokusgroep besprekings terwyl die navorser en fasiliteerder kant-aantekeninge gemaak het veral oor groep dinamika. Die getranskribeerde data is kodeer en herhalende temas is identifiseer. Lincol en Guba se strategie van geloofwaardigheid, oordraagbaarheid, afhanklikheid en eenvormigheid is toegepas om die betroubaarheid van die studie te bevorder.

## **RESULTATE**

'n Aaneenlopende oorsig van die literatuur het die navorser voorsien van begrip van die konsepte rakende opleiding in die OS. Die studie het bevind dat die OS-gekwalifiseerde PVs saamstem dat hulle rol as mentors oriëntasie en ondersteuning insluit, wat derhalwe 'n ideale omgewing skep om beginnerverpleegsters veilige vooraf operatiewe sorg te leer. Deelnemers het gevind dat produksiedruk, personeeltekorte en onvoldoende navorsingsmateriaal in die OS hulle mentorskap beïnvloed. Hulle het ander uitdagings beskryf wat insluit die beginnerverpleegster se beperkte bevoegdheid, onvoldoende oriëntering van beginnerverpleegsters wat by OS begin sowel as die gesindheid van die beginnerverpleegsters en ander spanleiers in die OS. Dit was opmerkbaar dat al die deelnemers in die groepe saamgestem het dat opleiding van die leerlingverpleegster in die OR of nie effektief is of nie 'n gesonde klimaat vir opleiding skep nie. Deelnemers het die hoë personeelomset en tekorte in die OS toegeskryf aan on-effektiewe mentorskap.

## **GEVOLGTREKKING**

Die studie het uitgewys dat gekwalifiseerde OS-verpleegsters die genoegsame mentorskap vir leerlingverpleegsters as fundamenteel beskou om hulle te help om bevoegde, onafhanklike en veilige vooraf-operasiesorg te verseker. Die deelnemers het nogtans uitdagings beleef om goeie mentorskap aan die beginnerverpleegster te verskaf, beide in privaat en staatshospitale

## **SLEUTELWOORDE**

Mentorskap, mentor, beginnerverpleegster, operasiesaal, Operasiesaal gekwalifiseerde professionele verpleegkundige.

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# **ABBREVIATIONS**

\*1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100 101 102 103 104 105 106 107 108 109 110 111 112 113 114 115 116 117 118 119 120 121 122 123 124 125 126 127 128 129 130 131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146 147 148 149 150 151 152 153 154 155 156 157 158 159 160 161 162 163 164 165 166 167 168 169 170 171 172 173 174 175 176 177 178 179 180 181 182 183 184 185 186 187 188 189 190 191 192 193 194 195 196 197 198 199 200 201 202 203 204 205 206 207 208 209 210 211 212 213 214 215 216 217 218 219 220 221 222 223 224 225 226 227 228 229 230 231 232 233 234 235 236 237 238 239 240 241 242 243 244 245 246 247 248 249 250 251 252 253 254 255 256 257 258 259 260 261 262 263 264 265 266 267 268 269 270 271 272 273 274 275 276 277 278 279 280 281 282 283 284 285 286 287 288 289 290 291 292 293 294 295 296 297 298 299 300 301 302 303 304 305 306 307 308 309 310 311 312 313 314 315 316 317 318 319 320 321 322 323 324 325 326 327 328 329 330 331 332 333 334 335 336 337 338 339 340 341 342 343 344 345 346 347 348 349 350 351 352 353 354 355 356 357 358 359 360 361 362 363 364 365 366 367 368 369 370 371 372 373 374 375 376 377 378 379 380 381 382 383 384 385 386 387 388 389 390 391 392 393 394 395 396 397 398 399 400 401 402 403 404 405 406 407 408 409 410 411 412 413 414 415 416 417 418 419 420 421 422 423 424 425 426 427 428 429 430 431 432 433 434 435 436 437 438 439 440 441 442 443 444 445 446 447 448 449 450 451 452 453 454 455 456 457 458 459 460 461 462 463 464 465 466 467 468 469 470 471 472 473 474 475 476 477 478 479 480 481 482 483 484 485 486 487 488 489 490 491 492 493 494 495 496 497 498 499 500 501 502 503 504 505 506 507 508 509 510 511 512 513 514 515 516 517 518 519 520 521 522 523 524 525 526 527 528 529 530 531 532 533 534 535 536 537 538 539 540 541 542 543 544 545 546 547 548 549 550 551 552 553 554 555 556 557 558 559 560 561 562 563 564 565 566 567 568 569 570 571 572 573 574 575 576 577 578 579 580 581 582 583 584 585 586 587 588 589 590 591 592 593 594 595 596 597 598 599 600 601 602 603 604 605 606 607 608 609 610 611 612 613 614 615 616 617 618 619 620 621 622 623 624 625 626 627 628 629 630 631 632 633 634 635 636 637 638 639 640 641 642 643 644 645 646 647 648 649 650 651 652 653 654 655 656 657 658 659 660 661 662 663 664 665 666 667 668 669 670 671 672 673 674 675 676 677 678 679 680 681 682 683 684 685 686 687 688 689 690 691 692 693 694 695 696 697 698 699 700 701 702 703 704 705 706 707 708 709 710 711 712 713 714 715 716 717 718 719 720 721 722 723 724 725 726 727 728 729 730 731 732 733 734 735 736 737 738 739 740 741 742 743 744 745 746 747 748 749 750 751 752 753 754 755 756 757 758 759 760 761 762 763 764 765 766 767 768 769 770 771 772 773 774 775 776 777 778 779 780 781 782 783 784 785 786 787 788 789 790 791 792 793 794 795 796 797 798 799 800 801 802 803 804 805 806 807 808 809 810 811 812 813 814 815 816 817 818 819 820 821 822 823 824 825 826 827 828 829 830 831 832 833 834 835 836 837 838 839 840 841 842 843 844 845 846 847 848 849 850 851 852 853 854 855 856 857 858 859 860 861 862 863 864 865 866 867 868 869 870 871 872 873 874 875 876 877 878 879 880 881 882 883 884 885 886 887 888 889 890 891 892 893 894 895 896 897 898 899 900 901 902 903 904 905 906 907 908 909 910 911 912 913 914 915 916 917 918 919 920 921 922 923 924 925 926 927 928 929 930 931 932 933 934 935 936 937 938 939 940 941 942 943 944 945 946 947 948 949 950 951 952 953 954 955 956 957 958 959 960 961 962 963 964 965 966 967 968 969 970 971 972 973 974 975 976 977 978 979 980 981 982 983 984 985 986 987 988 989 990 991 992 993 994 995 996 997 998 999 1000

- PN Professional Nurse
- OR Operating room
- SANC South African Nursing Council
- NES Nursing Education Stakeholders

# **CHAPTER 1**

## ***Foundation of the study***

---

### **1.1 INTRODUCTION**

This study sought to explore Professional Nurses' (PN) perceptions of their role as mentors of novice nurses in the operating room (OR). Chapter one describes the background, research aim, objectives and question, and provides a brief description of the research methodology of the study.

The Forum of University Nursing Deans in South Africa (FUNDISA) noted that the professional nurse numbers could not be increased without having an adequate number of professional nurse educators to train new nurses (Mulaudzi & Uys, 2012:3). The model for clinical education and training from the Nursing Education and Training Strategic Plan of South Africa for 2012/2013-2016/2017 states that the recommended teacher-student ratio should preferably be 1:10 to provide for individual support and to achieve competence (Department of Health Republic of South Africa, 2012:85).

With the aim to achieve better teacher-student ratios within the next five years, the strategic plan for nurse education, training and practice indicated that the ratios for undergraduate nursing students should not exceed 1:15-20 and 1:2-5 for post-basic students (Department of Health Republic of South Africa, 2012:86). Even though there are a large number of nurse educators qualifying from the universities in South Africa, it seems that not many nurse educators are in practice, as the nurse educator to student ratio remains 1:16 (Mulaudzi & Uys, 2012:3). From this ratio it can be seen that the nurse educators alone cannot be responsible to teach new nurses. As there are too many students for nurse educators, the need for mentors arise. Thus it is important that the professional nurses in clinical practice take up their roles as mentors of new nurses in the clinical practice environment. As PNs play an essential part in the mentoring of novice nurses (Jackson & Mannix, 2001:275), the South

African Nursing Council guides and stipulates the responsibilities and mentoring roles of the PNs in the Nursing Act No. 33 of 2005 (Republic of South Africa, 2005).

Only a few South African studies have been published about the (OR) as a clinical learning environment (Meyer, 2014:1). Reid (2007:2) described the OR as an “alien environment”, which may seem hostile for novice nurse, which in return results in a non-conducive teaching and learning environment. A study by Meyer (2014:20) showed that student nurses feel unwelcome in the OR and that this hinders their learning. In addition, Motseki (2013:41), stated that clinical placement in the OR brought about anxiety and uncomfortableness in students. Consequently, this unwelcome feeling and fear of the OR may interfere with students’ motivation to pursue OR nursing as a career, which may in turn contribute to nursing resource shortages in the OR.

There are various factors that may have a negative influence on the mentoring of nurses in the OR, such as the nursing duties that are performed in a stressful atmosphere and at a fast pace (Reid, 2007:2). Callaghan (2010:860), described the lack of mentoring due to the high complexity of nursing care practice in the OR environment. In addition to complex, fast paced nursing care, the OR is also characterised by negative attitudes and problematic staff behaviour, which influence effective mentoring in the OR (Mogale, 2011:85; Tshabalala, 2011:40). The negative effect on students’ motivation to learn is intensified by PNs’ unwillingness to teach (Zundel, Wolfa, Christen & Huwendiek, 2015:956). Mentoring in the clinical environment can be very difficult as an unpredictable clinical environment such as the OR does not always support learning opportunities, and is amplified by the risk of unsafe care from novice nurses (Lúanaigh, 2015:451). Some of the challenges and problems regarding mentoring nurses in the OR clinical environment are highlighted by the various studies listed above

## **1.2 CLARIFICATION OF THE PROBLEM**

Mentoring forms an indispensable part of teaching and learning in the OR environment. OR qualified PNs can focus more on providing effective mentoring for the novice nurses if more awareness is created of their mentoring roles. Consequently, this can improve the experience of the novice nurses in the OR, thus having a positive outcome on the clinical learning in the OR.

Limited studies related to the mentoring role of PN's in OR environments in South Africa could be found. The findings of this study may inform OR nurses on the important role of mentoring novice nurses, which in turn may have a positive impact on teaching and learning in the OR clinical environment. Based on scientific evidence of this study, an appropriate training programme may be introduced for mentors to structure the mentoring role to guide novice OR nurses on their path to professional development in the clinical environment.

Through the exploration of the mentoring roles of OR qualified PNs, the findings of the study will raise awareness of the roles of the OR qualified PNs as mentors for the novice nurses and current mentoring programmes updated.

## **1.3 RATIONALE**

The researcher conducted the study on professional nurses' perceptions of their role as mentors in the OR environment. The purpose of this study was to explore and describe participating OR qualified PNs' perceptions as mentors. The researcher, a OR senior PN with seven years' experience, working in clinical practice, became aware of the lack of mentoring in the OR in 2011 after completing the Post graduate Diploma in Operating Room Technique and while doing the Postgraduate Diploma in Nursing Education. During this time, the researcher worked as an OR qualified PN, and experienced that the mentoring that novice nurses needed in the OR was not adequately provided. This inadequate mentoring of novice nurses in the OR environment that the researcher experienced is supported by current literature (Meyer, van Schalkwyk & Prakaschandra, 2016:63). In addition to inadequate mentoring, students experienced the OR as a negative learning environment, where

there is both insufficient orientation and passive learning as they are instructed to: “stand in the corner and watch” (Meyer *et al.*, 2016:63). In the same way, OR mentors face various challenges to provide effective mentoring for novice nurses. These challenges, among others, include staff shortages, excessive workload and a lack of interest in learning from the novice nurses (Mogale, 2011:90, Ramani and Gruppen, 2013:143).

## **1.4 PROBLEM STATEMENT**

As an OR qualified PN, the researcher regularly experienced the reluctance of OR qualified PNs to mentor novice nurses and also observed that novice nurses find the OR environment challenging. OR qualified PNs often face difficulties as mentors in the OR clinical environment which, in turn, may result in learning obstacles for novice nurses. Based on the rationale, the researcher conducted a literature search which revealed several studies regarding mentoring in the OR environment. Although research on OR mentoring was found, it was limited in the South African context, specifically the Free State. Hence, exploring and describing the perceptions of OR qualified PNs regarding their role as mentors of novice nurses in the OR environment in the Free State, South Africa were essential.

## **1.5 RESEARCH QUESTION**

How do OR qualified PNs perceive their role as mentors of novice nurses in the OR?

## **1.6 RESEARCH AIM**

The aim of this study was to describe OR qualified PNs' perceptions of and factors influencing their role as mentors of novice nurses in the OR.

## **1.7 RESEARCH OBJECTIVES**

The objectives of the study were to understand and describe:

- The perceptions of OR qualified PNs regarding their role as mentor of novice nurses
- The factors that could influence OR qualified PNs' perception regarding their role as mentors of novice nurses.

## **1.8 RESEARCH METHODOLOGY**

A brief description of the research methodology is presented in this chapter, followed by a detailed discussion in Chapter Three.

### **1.8.1 Research design**

A qualitative descriptive design was used for the purpose of this study to describe the perceptions of OR qualified PNs about their mentorship role of novice nurses in the OR clinical environment.

### **1.8.2 Study setting**

This study was conducted in the OR of the two largest private hospital groups as well as the two largest provincial hospitals in Bloemfontein in the Free State.

### **1.8.3 Population and sampling**

The target population included all OR qualified PNs working in the ORs of the largest private and provincial hospitals of Bloemfontein, Free State. A purposive sampling method was used to select those participants who had more than two years' experience of working in the OR, as such participants were able to provide rich data about their perceptions of mentoring in the OR environment.

After obtaining ethical and Institutional approval, the researcher made use of four focus groups with three to five participants in each and which represented the four hospitals selected in the Free State. Participants from the same hospitals were purposefully grouped together in focus groups to encourage sharing of thoughts and experiences in a secure, friendly and relaxed environment.

#### **1.8.4 Data collection tool**

The researcher used an interview guide that consisted of open-ended questions, based on the objectives of the study to engage the participants during the focus group discussions (Appendix 4).

Example of open-ended questions used for interviews: *“How do you experience your role as a mentor of novice nurses in the operating room?”*

#### **1.8.5 Pilot interview**

A pilot interview was conducted by the researcher and a skilled facilitator to test the practical aspects of the study and to ensure the opening questions and probing words elicit information that would meet the objectives set for this study. The data collected during the pilot interview was not included in the main study as the pilot interview was conducted with only one participant. However, the research question did not change and the data gathered from the pilot interview correlated with that of the main study.

#### **1.8.6 Trustworthiness**

Trustworthiness in this qualitative research included the following four principles as proposed by Lincoln and Guba: Credibility, transferability, dependability and confirmability (Polit & Beck, 2008:539).

Credibility refers to the truth value of the data, which is obtained through the prolonged engagement of the researcher, by repeatedly listening to the recorded

interviews and reading through the field notes, as well as member checking (Botma, Greeff, Mulaudzi & Wright, 2010:233). In this study, the credibility of the data gathered was ensured by recording the interviews and field notes made during the focus group interviews. The participants read through the interview transcripts and the initial thematic analysis to verify the information and the initial themes through member checking.

Transferability in qualitative studies may be inherently problematic, as the findings may only be relevant to specific settings (De Vos, Strydom, Fouchè & Delpont, 2011:420). In this study transferability was promoted through a comprehensive description of the research setting, the sampling and the research processes.

Dependability can be ensured by means of a dependability audit, using and providing a diversity of traceable resources, and by thoroughly describing the research methodology (Botma *et al.*, 2010:233). In this study, the dependability audit included a detailed description of the data collection process. Furthermore, a variety of traceable resources such as journal articles and textbooks, and a thorough description of the research methodology are given. Data collection was done at four different hospitals, which included private as well as public sector hospitals. The inclusion of hospitals from both private and public sector, ensures that the results of this study is dependable as there is a true reflection of the problem from various sources. Coding was done of the data gathered from the interviews by the researcher, and reviewed by the facilitators and study supervisor, promoting the consistency of this study.

Confirmability in qualitative studies is an indication of how the findings can be confirmed by other researchers (De Vos *et al.*, 2011:421). This is an indication of the objectivity of the research, being free from bias (Botma *et al.*, 2010:233). The findings of this study reflect the participants' perceptions. Bracketing was applied throughout the conceptualisation, data collection and data analysis phases of the research process.

The trustworthiness of this study was promoted through the use of an independent skilled facilitator to eliminate bias during data collection. The skilled facilitator

assisted during the data collection and initial thematic analysis to eliminate bias. The first focus group was conducted by one facilitator, and the other three groups were conducted by another skilled facilitator. Both facilitators created a relaxed and comfortable atmosphere where participants felt comfortable in sharing their thoughts and opinions (Botma *et al.*, 2010:212-2130). In addition, the researcher worked in the field of study for eight years, and as such, she has adequate knowledge and background in the field of OR nursing. During the focus group discussions, the researcher acted as an observer and discussed and compared field notes with the facilitators after each focus group interview.

### **1.8.7 Data collection**

The data were collected by the researcher and a skilled facilitator who has both a Master's degrees in nursing and is experienced in OR nursing. To avoid the possibility of bias, a facilitator conducted focus group interviews in the hospital where the researcher was employed. Focus group interviews were audio-recorded while the researcher acted as observer and took field notes of group dynamics such as body language and participation during group discussions. Participants were asked to express their own perceptions and experiences. Interviews were conducted at pre-arranged, private venues, and pseudonyms were allocated to groups to retain anonymity. Audio- recorded data of focus groups interviews were transcribed verbatim by a professional transcriptionist who signed a confidentiality agreement.

### **1.8.8 Data analysis**

The researcher used the five steps in an interpretive data analysis approach of familiarisation and immersion, development of themes, coding, elaboration and interpretation and checking, as described by Terre Blanche, Durrheim and Painter (2006: 321-326). During the familiarisation and immersion, the researcher started to form ideas about the phenomenon of the study while gathering the data, as described by Terre Blanche *et al.* (2006: 323). Bracketing was done throughout this study to ensure the researcher present a true reflection of the participants' perceptions. The researcher thus started with the data analysis of each focus group

whilst data gathering was in progress. With the development of the themes, the researcher read through the data, identifying themes (Terre Blanche *et al.*, 2006: 323). The data collected during each focus group interview were coded from which themes were deducted (Terre Blanche *et al.*, 2006: 324-325). Elaboration was done where the researcher examined the data in sections and combined and linked similar meanings (Terre Blanche *et al.*, 2006: 326). The data analysis process of focus groups differ from that of individual interviews as there is the added complexity of group dynamics (De Vos *et al.*, 2011:373). In this study, the analysed data from different focus groups were reviewed in light of the field notes to include the relevant group dynamics of each focus group interview and then combined. Thereafter, interpretation and checking were done, where the researcher interpreted the analysed text and wrote the report, providing a deeper understanding of the findings (Terre Blanche *et al.*, 2006: 326).

## **1.9 ETHICAL CONSIDERATIONS**

Ethical approval was obtained from the Health Research Ethics Committee (HREC) of Stellenbosch University; reference number S16/10/220 (Appendix 1) and permission from Free State Department of Health (Appendix 2), as well as individual institutional permission from institutions where the study was conducted (Appendix 2).

After ethical approval was granted, the data collection commenced. In adherence to the Helsinki declaration (World Medical Association Declaration of Helsinki, 2008:3), the ethical principles of right to self-determination, right to confidentiality and anonymity and right to protection from discomfort and harm were upheld throughout the study. These three principles are described below in the context of this study.

### **1.9.1 Right to self-determination**

The researcher obtained voluntary informed consent from each participant after they were provided with a detailed information letter explaining the aim of the research as well as the benefits of the study. Potential participants were not forced nor

manipulated to participate in this study. There were no foreseen risks for the participants. Participants were also informed that they could withdraw from the study at any stage. In this study, there was one participant who withdrew from the second focus group on the morning of the scheduled interview.

### **1.9.2 Right to confidentiality and anonymity**

Botma *et al.* (2010:277) stated that respect for people is displayed through obtaining ethical and institutional approval where the research will be conducted. In this study, respect was maintained through obtaining voluntary informed consent from participants, as well as approval from the Health Research Ethics Committee of Stellenbosch University (Ethics ref number: S16/10/220). Written approval to conduct the research was thereafter obtained from the respective head offices of the two private hospitals, and from the Free State Department of Health for the two provincial hospitals. Consent was also obtained from the various OR managers.

Botma *et al.* (2010:19) explained that confidentiality is maintained through limited access to data, safe and secure storage of data and the anonymous reporting of data. In this study, confidentiality was ensured during the interviews and throughout the study. The names of the institutions where the research was conducted as well as the names of the participants were kept confidential. This was ensured by giving numbers to the different hospitals and participants. The electronic audio data were downloaded on password-protected electronic storage devices, and will be stored with the verbatim transcriptions for five years, in a locked cupboard. Only the researcher, facilitators and study supervisor had access to the raw data.

All the members of the research team, the transcriber as well as the participants of the study signed a confidentiality pledge. However, anonymity in a focus group discussion cannot be ensured as the participants express their views in the presence of other participants.

### **1.9.3 Right to protection from discomfort and harm**

It was acknowledged that participants might have experienced slight discomfort during focus groups as not everyone is completely open to express their feelings and opinions freely in a group, but no other harm to participants was foreseen. The venues used for focus group discussions were safe and private environments, with controlled access. The researcher and field workers carefully observed the participants for any level of discomfort during the focus group. Participants were invited to a debriefing and support session after the interviews, although no participants indicated the need for this.

Ground rules of confidentiality were agreed upon by the participants during the focus groups. These ground rules included that no information shared during the focus group discussions were to be repeated by or to anyone outside of the group discussion, and no names were to be mentioned. By adhering to the principles of privacy and confidentiality, the researcher ensured that there was no harm to the participants.

## **1.10 OPERATIONAL DEFINITIONS**

### **1.10.1 Mentor**

For the purpose of this study, a mentor is seen as someone who dedicates their time to help and teach individuals to develop, but is not specifically employed as a clinical teacher. This definition summarises the following three points.

Someone who facilitates learning, supervises and assesses (Nursing and Midwifery Council, 2015:17).

A mentor is an experienced and competent professional nurse who works in the clinical field and not for a Higher Education Institution (HEI).

A mentor can be any experienced and competent professional nurse in the clinical field who can provide mentoring and guidance to the novice nurses.

### **1.10.2 Novice nurse**

A novice nurse is inexperienced in the area that he/she must perform in (Benner, 1984:1).

For the purpose of this study, the term novice will include all nursing categories (including student nurses), beginning an operating room placement. Undergraduate and postgraduate student nurses are included.

### **1.10.3 Operating room (OR) qualified professional nurse (PN)**

The OR qualified PN in this study will refer to the professional nurse in the operating room who has a post-basic qualification (diploma) in operating room technique.

The OR qualification for PN's is a one-year course in operating theatre nursing. The OR qualified PN's are registered with the South African Nursing Council for an additional qualification.

### **1.10.5 Role**

The Cambridge English dictionary (2016) defines a role as: *“The position or purpose that someone or something has in a situation or organization”*.

Role refers to the actual role content or work division, as established by negotiation or custom (Maxwell, Baillie, Rickard & McLaren, 2013:623).

For the purpose of this study, the mentoring role of the OR qualified PN will refer to clinical teaching, assessing and evaluating and providing guidance and support to novice nurses (Walsh, 2010:17; Royal College of Nursing, 2009:5).

## 1.11 DURATION OF THE STUDY

Ethical approval was obtained from SU HREC on 08 March 2017. Institutional permission was obtained between April and August 2017. Participants were recruited from April to August 2017, after obtaining consent from each respective institution. Transcription of interviews and the analysis was carried out simultaneously while data were collected between the months of August and September 2017. The final thesis was submitted for examination on 1 December 2017.

## 1.12 CHAPTER OUTLINE

The study is structured as follows:

### ***CHAPTER 1: Foundation of the study***

The foundation of the study provides the background to the study, the research problem, goals, aim and objectives. A brief overview of the research design and methodology used were discussed with a description of the ethical principles that guided the study.

### ***CHAPTER 2: Literature review***

Chapter 2 presents the relevant literature and the literature review process that was followed during the study. This included the OR environment and the process of mentoring and of the professional nurses' responsibilities in clinical learning.

### ***CHAPTER 3: Research methodology***

The research design, methods, data collection and data analysis process used will be described in detail in Chapter 3.

### ***CHAPTER 4: Findings***

In Chapter 4, the results of the study are presented.

### ***CHAPTER 5: Discussion, conclusions and recommendations***

Chapter 5 will present a discussion of the study findings, followed by the study conclusion and recommendations based on the study findings.

### **1.13 SUMMARY**

Chapter one provided a broad introduction and overview of the study, including the research problem, goals, the aim and objectives. A brief overview of the research design and methodology used were also discussed in this chapter.

In chapter two, the researcher will discuss the literature reviewed according to the following themes: the operating room environment, the effects and purpose of positive mentoring, the professional nurses' responsibilities in clinical learning, Benner's theory of clinical competence and the factors influencing professional nurses' perception of their role as mentor. Chapter two will provide the theoretical framework for the study.

### **1.14 CONCLUSION**

Chapter one provided background to the study and methodological congruence to describe OR qualified PNs' perceptions of their role as mentors of the novice nurses in the OR environment.

# **CHAPTER 2**

## ***Literature review***

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### **2.1 INTRODUCTION**

Chapter one provided a brief overview and orientation to the study and included a summary of the research methodology. In Chapter two, the literature review done by the researcher provides background information for the study. According to Keary, Byrne and Lawton (2012:239), the literature review assists the researcher with a theoretical basis for the study. The literature review will provide an overview of mentoring in the operating room, specifically looking at the operating room as a learning environment, the purpose of mentoring, PNs' responsibilities as mentors and the factors that influence mentoring in the OR.

It is controversial to do a preliminary literature review in qualitative studies. While some authors argue that it may inform one's research according to pre-chosen findings, others state that it helps to direct the inquiry (De Vos, et al., 2011:299). In this study, a preliminary literature review assisted the researcher to identify gaps in available literature. A continuous review of the literature during the study allowed the researcher to understand the existing literature about mentoring in the OR.

### **2.2 SELECTING AND REVIEWING THE LITERATURE**

The researcher evaluated the literature and organised it according to its relevance to the study objectives. Electronic databases, textbooks, and internet sources were accessed to compile the literature review. All the electronic literature sources cited were sorted and stored using an electronic reference manager. A total of 59 articles were included in the literature review.

The databases included were PubMed, CINAHL, Medline Ovid and Google Scholar, and the general keywords were:

- *“clinical environment”*
- *“operating room”*
- *“theatre”*
- *“clinical teaching”*
- *“mentor”*
- *“mentoring”*
- *“mentorship”*.

Literature over the last ten years were included to ensure relevance of the literature on the current identified problem statement. However, some literature that extends beyond ten years were also included where the researcher deemed it to be relevant.

Supplementary to the electronic literature sources, textbooks relevant to nursing and teaching and learning in healthcare were also included.

During the literature review, limited literature was found on professional nurses' roles as mentors in the operating room in the South African context. This convinced the researcher to conduct the study on Professional nurses' perceptions of their mentoring role of the novice nurses in the OR in particular. The literature review was structured according to five main concepts, namely the problem of nurse shortages, the OR environment, foundational knowledge and competence of nurse, transfer of learning and mentoring.

## **2.3 SHORTAGES OF PROFESSIONAL NURSES**

According to Nursing Education and Training Strategic Plan 2012/2013-2016/2017, compiled by a ministerial task team of the Department of Health Republic of South Africa, the South African NES Group (2012:30), there is a persistent decline in the number of newly qualified PNs registering at the South African Nursing Council (SANC). Currently, only 16% of new nurses registering with SANC are PNs. In addition, as many as 43.7% of PNs are over 50 years of age, and retiring at a rate of approximately 3000 per year within the next 15 years. These numbers are compelling reasons to train and retain novice nurses as PNs and improve their skills.

Even more so when considering the National Qualification framework (NQF), where the new NQF ranking of a PN is on a NQF level eight (South African Nursing Council, 2011:8). The competencies of a NQF level eight includes the ability to integrate multiple sources of knowledge in a specialised field as well as the ability to use specialised skills and take full responsibility and accountability (The South African Qualifications Authority (SAQA), 2012:11). Thus, to ensure the future of OR nursing practise, the experienced PNs should take up their role as mentors to improve the retention of novice nurses to the OR.

The on-going decrease in the number of PNs are amplified by an even greater decrease in the number of PNs with specialised qualifications (NES group, 2012:30).

In public sector hospitals, surgeons report that they need to limit OR time because of a shortage of trained OR nurses, and the private sector recruit OR specialized nurses internationally (NES group, 2012:31). OR technicians originated in the United Kingdom in the 1970s, because of long waiting lists for surgery due to the shortages of qualified OR PNs (Timmons, 2010:338). Similarly, subsequent to nursing shortages in South Africa, the private sector introduced the training of OR technicians to fill the gaps in the OR (, NES group, 2012:31).

Currently, the challenge in South Africa with the training and employment of OR Technicians is that they are not registered nor licenced for clinical practice (Viszolai, 2016:20). As only registered health care practitioners can be held accountable for misconduct, unregulated OR technicians may present legal concerns regarding task delegation and accountability in the OR (Viszolai, 2016:20). While OR technicians do not have a regulating body governing their acts or omissions, PNs are regulated by the South African Nursing Council (SANC) to work within current legislative and ethical frameworks (Viszolai, 2016:20). The qualification of OR technicians are also on an NQF level six according to the South African Qualifications Framework (Botha, 2015:20). This implies that they have detailed knowledge in certain fields, but are not equipped to handle complex situations and they can function effectively in a team but not as independent practitioners (SAQA, 2012:9). Consequently, OR technicians are not the ideal mentors, as in the case of qualified OR PNs.

Due to the evident nursing staff shortages and resulting excessive workload, the quality of patient care and practical training of novice nurses are jeopardised in South Africa (, NES group, 2012:27). According to the NES group (2012:27), a positive practice environment, which includes sufficient equipment, needs to be developed. A positive practice environment can be defined as a *“cost-effective healthcare settings that support nursing excellence as well as decent work, have the power to attract and retain staff and to improve patient satisfaction, safety and outcomes”* (NES group, 2012:27).

However, many challenges to create positive practice environments have been reported. Congruent with international education requirements, the future training of PNs will only be presented at university level (NES group, 2012:20-21). This is necessary to bring nursing education in line with the National Qualifications Framework (NQF) as published in the NQF Act of 2008 and the Higher Education Act of 2008 (NES group, 2012:21). According to the NQF, a professional degree as well as a postgraduate diploma (specialist nurse) is categorised at NQF level 8 (NES group, 2012:21). Subsequently, a professional nursing qualification (PN) would be achievable at a higher education institution, such as a university or university of technology (NES group, 2012:21). However, the gap that will exist when nursing colleges can no longer train PNs cannot be filled if nursing schools cannot produce sufficient numbers of PNs, as there will not be new qualified PNs who can teach again (NES group, 2012:35). These challenges amplify the necessity to mentor and retain newly qualified PNs for the South African nursing population (NES group, 2012:35).

The health care system in South Africa is a nurse-based system, marked by staff shortages of especially professional nurses and midwives (Amstrong, Bhengu, Kotzè, Nkondo-Mtembu, Ricks, Stellenberg, Van Rooyen, Vasuthevan, 2013:44). In future, there will be an even greater shortage of PNs which will lead to an even bigger staffing problem in specialised nursing fields (Ball, Doyle & Oocumma, 2015:115). This is evident in the decreased registration numbers of clinical nurse specialists at the South African Nursing Council (SANC) (Amstrong *et al.*, 2013:44). Concerns about the added pressure on professional nurses due to limited staff were also raised by the Democratic Nursing Organisation of South Africa (DENOSA) in 2016.

They linked nursing staff shortages to malpractice and patient neglect (Pieterse, 2016:np).

## **2.4 THE OPERATING ROOM ENVIRONMENT**

The OR can be an extremely frightening and stressful environment for novice nurses due to its inherent pressurised, fast pace and high risk milieu (Breedt, 2017:24).

### **2.4.1 Operating room as specialized environment**

The OR is a specialized environment, which involves complex and demanding skills and behaviours. OR nursing requires specialised training to develop and prepare a nurse with a certain set of advanced knowledge and skills (Breedt, 2017:18).

Ball *et al.* (2015:115-116) stated that the OR is a workplace environment which demands more complex interventions and nursing care, and that advanced skills and training is required in the OR due to the evolving technology. In addition, the OR is also classified as a stressful clinical environment due to a high patient turnover, the associated medico-legal risks involved, and the intensity of emergency situations (Meyer, 2014:4). As the OR is also perceived as the most isolated department in the hospital, with limited access for 'outsiders', it is an unfamiliar and intimidating environment for novice nurses (Lyon, 2003:683).

### **2.4.2 Operating room as learning environment**

Research on teaching in the OR environment became of more interest over the last ten years (Zundel *et al.*, 2015:951). Yardley, Teunissen and Dornan (2012:102) explained that workplace learning grants the opportunity for students to obtain solid learning experiences, which allows for the integration of theory and practice. The degree to which a novice nurse can utilise the workplace environment to practice clinical skills learned in theory, determine whether the workplace environment is conducive to learning or not (Donovan & Darcy, 2011:123). A conducive learning environment is important for the professional growth of novice nurses (Frankel, 2008:3-5). Yardley *et al.* (2012:102), described learning as being "situated", which

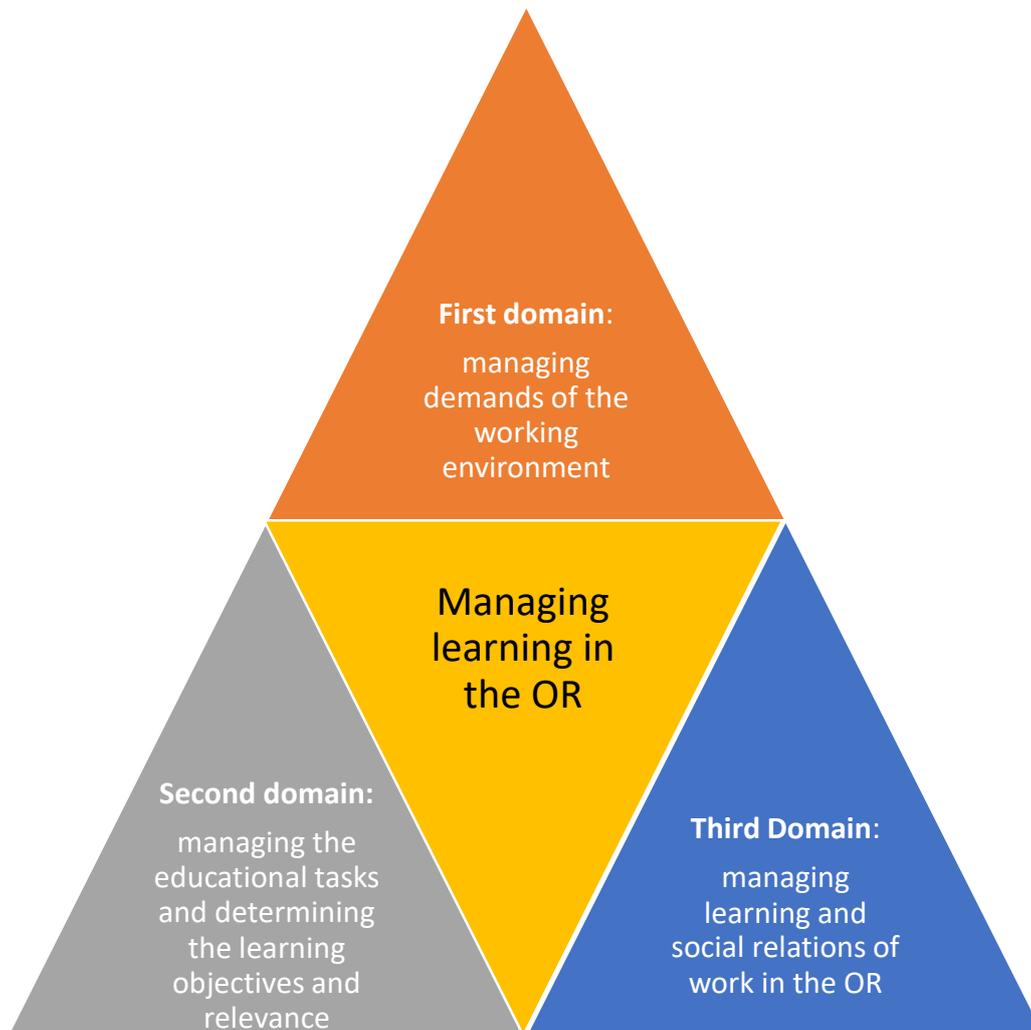
implies that learning occurs from the interaction with various factors in the environment and by being exposed to 'authentic or workplace learning'. Thus clinical learning in the OR forms an integral part of a novice nurses learning as a whole.

Only a few studies on the OR as clinical learning environment in South Africa have been published to date (Meyer *et al.*, 2016:60). However, there are numerous studies on the clinical learning environment that focus on the influence of specific factors on learning in the OR such as a lack of mentoring and negative attitudes of staff (Meyer *et al.*, 2016:61).

Lyon (2003:682) indicated that the OR is a "*new learning environment with new challenges*". Accordingly, Lyon (2003:682) explained that learning in the OR takes place over three domains, as illustrated in Figure 2.1.

Concerning the first domain: "*managing demands of the working environment and emotional impact of surgery as work*", Lyon (2003:682) referred to the OR as a complex learning environment with a high level of work stress related to the medico-legal risks involved, as well as the complicated procedures that arise. Thus, learning in the OR environment might be stressful for novices entering the OR for the first time.

In the second domain, Lyon (2003:684) mentioned "*managing the educational tasks, determining the learning objectives and relevance*". Within this domain the learning objectives should be clear which will result in the learning in the OR to be better supported. If the novice nurse is not interested pursuing OR as a career choice, he or she will not value the learning experiences in the OR environment.



**FIGURE 2.1: Managing learning in the OR adapted from Lyon (2003)**

Lyon's third domain, "*managing learning and social relations of work in the OR*" refers to the often too busy and unfriendly atmosphere in the OR (Lyon, 2003:684). The OR is often perceived as an unwelcome learning environment due to staff working under high pressure. The novice nurses should therefore take an active part in their own learning opportunities in the OR and communicate their objectives and goals with the OR team members to avoid feeling excluded from the team.

Literature emphasise the importance of mentoring in the OR. As the OR is a challenging learning environment, Lyon (2003:682) suggested that active learning strategies, such as mentoring, will enhance learning in the OR. If novice nurses are properly introduced to the OR, they manage to cope better in this strange environment. The first introduction to the OR is of utmost importance for novice nurses (Lyon, 2003:686).

In addition, Callaghan (2010:860) noted that a lack of mentoring, and the high complexity of nursing practice in the OR environment are some of the factors that apprehend learning in the OR. The nursing duties in the OR are performed at a high pace, and often in a stressful atmosphere. This influences the value of the OR as a clinical learning environment, as there is not always sufficient time to teach novice nurses (Reid 2007:2). Meyer (2014:20) reported that learning apprehension from the novice nurses in the OR is caused by the fact that they feel uncomfortable in the OR environment. This statement is supported by Motseki (2013:41), who reported that the OR provoked feelings of tension and distress for novice nurses.

Although not enough studies have been done regarding the OR as clinical learning environment, it is considered to be an important learning environment (Hauxwell, 2010:2).

### **2.4.3 Operating room personnel**

In addition to the inherently challenging OR environment, the literature concurs that mentoring in the OR may also be affected by negative attitudes and staff behaviour. Holton, Bates and Ruona (2000:335) described how the educational transfer climate, referring to attitudes and behaviours of individuals in the workplace environment, influence learning (Holton *et al.*, 2000:335; Piek, 2017:36). This is confirmed by Mogale (2011:85) and Tshabalala (2011:40) who stated that negative attitudes of OR staff could have an undesirable influence on novice nurses and indirectly influence their clinical competence later on. Meyer *et al.* (2016:63) further emphasised how negative interpersonal factors influence and constrain learning in the OR. As quoted from the interviews in the study of Meyer *et al.* (2016:63), *“Theatre staff and doctors are rude, not open-minded and don't have time to teach students”, “The theatre staff made us feel unwelcome and stupid....”*

According to Meyer (2014:17-18) and Breedt (2017:24), the perfectionistic and task-orientated personalities of OR personnel together with the high workload, can convey a message of OR personnel having negative attitudes and being rude

towards novice nurses. Consequently, OR personnel are often regarded as individuals with strong personalities who are perfectionist. The OR personnel typically want to get the work done fast and properly.

## 2.5 FOUNDATIONAL KNOWLEDGE

Although the OR environment and staff influence mentors and mentees, other aspects such as foundational knowledge are equally important to facilitate teaching and learning in the OR. Foundational knowledge forms the background of a novice nurses' understanding of clinical practice (Piek, 2017:46). Foundational knowledge consists of two parts, namely declarative knowledge and procedural knowledge (Botma *et al.*, 2015:502). Declarative knowledge, also known as propositional knowledge or descriptive knowledge, refers to the knowledge that is based on facts - whether it is obtained from books, the internet or classroom notes (Biggs & Tang, 2011:81; Bruce, Klopper & Mellish, 2011:145). Declarative knowledge involves the foundation that is taught to learners (Biggs & Tang, 2011:81). For effective clinical learning, the novice nurse should have a certain degree and a foundation of declarative knowledge, to be able to integrate the theory and practice.

The other part of foundational knowledge, procedural knowledge, requires a certain level of skill and refers to "*how to do something*" (Bruce *et al.*, 2011:145). Thus, procedural knowledge involves the practical skills in the clinical environment, which in return is related to clinical competence. Thus, foundational knowledge, both declarative and procedural, of the novice nurse is important for effective mentoring and to develop clinical competence.

## 2.6 CLINICAL COMPETENCE

Competence is defined by the UK Nursing and Midwifery Council (2010) as: "*the overarching set of knowledge, skills and attitudes required to practise safely and effectively without direct supervision*". The South African Nursing Education Stakeholders group (NES) explained competence in nursing as the ability to understand and integrate theory with practice, either in simulation or a real-life

setting (NES, 2012:50). Clinical competence is related to performance as it involves the application of knowledge and skills, as well as attitude in the clinical practice environment (Piek, 2017:24; Botma, Van Rensburg, Coetzee & Heyns, 2013:32; Botma, Van Rensburg, Coetzee & Heyns. 2015:500).

When considering the clinical competence of a nurse, Benner's theory, "From novice to expert" is relevant, as she refers to progress of students' clinical skills levels. The nursing theory of Patricia Benner: "From novice to expert" was published in 1984, and it was based on the Dreyfus model of skill acquisition (Benner, 1984:402-407). This theory illustrates five levels of nursing skills: novice, advanced beginner, competent, proficient and expert (Benner, 1984:402:407).

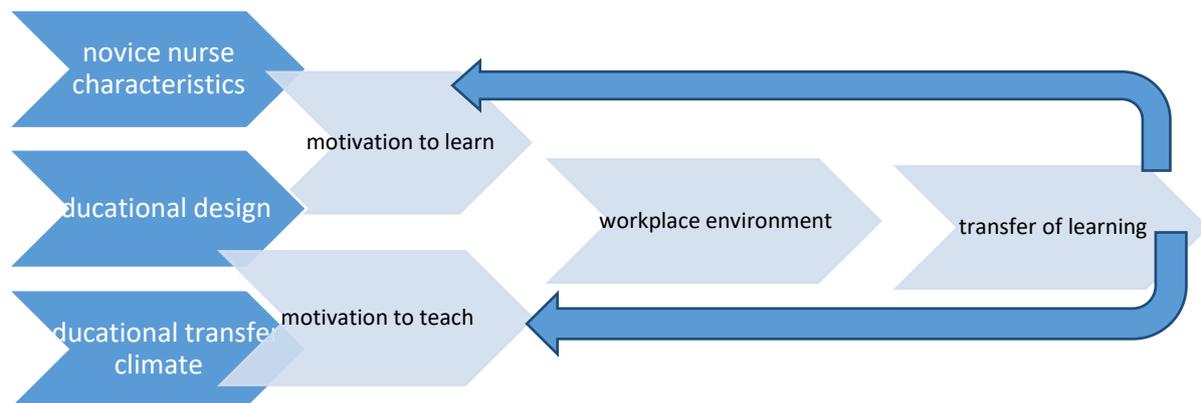
In Benner's theory (1984:402-407), a novice is described as a nurse with no experience and someone who needs constant guidance and support to perform a nursing task. An advanced beginner is seen as a nurse who can perform certain tasks from the little experience he or she gained. A competent nurse is described as someone who has two or more years of involvement in a particular field. The proficient nurse can recognize and interpret situations and deliver a more holistic approach to nursing. The expert nurse has a large amount of experience and they can use instinct in situations. Therefore it can be concluded that the expert nurse is in the ideal situation to be a mentor for novice nurses.

Clinical competence is not only important for the novice nurse, but is also regarded as an important factor for mentors in order to provide the novice nurse with effective and accurate guidance (Robinson, Cornish, Driscoll, Knutton, Corben & Stevenson, 2012:7). Therefore, effective mentoring is influenced by foundational knowledge and clinical competence that result in optimising transfer of learning.

## **2.7 TRANSFER OF LEARNING**

The integration of theory and practice is also known as transfer of learning (Botma *et al.*, 2015:500; Piek, 2017:26). Donovan and Darcy (2011:125) described the transfer of learning process and illustrated the various factors that plays a role in this

process. Transfer of learning is determined by the novices' characteristics, the educational design, the educational transfer climate, the novices' motivation to learn, the motivation to teach and the workplace environment (Piek, 2017:28; Donovan & Darcy, 2011:125). Figure 2.2 below illustrates factors influencing the transfer of learning process.



**FIGURE 2.2: Systematic model of transfer of learning adapted from Piek (2017:28), adapted from Donovan and Darcy (2011:125)**

As illustrated in Figure 2.2, for effective transfer of learning, the novice nurses' characteristics plays a role, which includes competence, personality and motivation (Donovan & Darcy, 2011:123). The attitude of the novice nurses influence both their performance and their clinical competence. Educational design refers to the relationship between what was learned in the nursing programme and the actual requirements of the clinical practice (Donovan & Darcy, 2011:123). Consequently mentoring is regarded as an integral part of the training of novice nurses, especially as novice nurses have limited insight in the actual requirements of clinical workplace. The educational transfer climate is determined by the personnel's attitudes and behaviour in the workplace, which either support transfer of learning or inhibits it (Holton *et al.*, 2000:335; Piek, 2017:36). The attitudes of personnel influence the perception of the novice nurse regarding the workplace environment. In a study done by Meyer *et al.* (2016:62), on the OR as clinical environment, it was noted that some interpersonal factors served as positive enhancers towards learning; these factors included acknowledgement and respect from doctors and staff - which contributed to feelings of inclusiveness as team members. Workplace environment refers to the

clinical work environment (Piek, 2014:37). The OR environment, as stated earlier, is not always conducive to transfer of learning and perceived as a negative learning environment (Meyer, 2014:20; Reid, 2007:2).

Thus, transfer of learning in the OR is a complex process and is determined by various components, as illustrated in Figure 2.2.

## 2.8 MENTORING

Mentoring was formally implemented in healthcare in the 1980s. Gopee (2008:7) described mentoring as the facilitation of professional learning in the clinical practice by an experienced professional who guides and supports a novice. In addition, Waters, Clarke, Ingall and Dean-Jones (2003:518) described mentoring as: *“a relationship between two individuals in a work environment with the specific purpose of one assisting the other to grow and develop to increase role effectiveness”*. Thus, it is important that there should be a trust relationship between the mentor and mentee in order to facilitate professional learning.

A mentor is a dedicated and experienced professional with a passion to further the nursing profession by sharing their knowledge and skills with a novice (Walsh, 2010:18). A mentor gain personal satisfaction form mentoring novice nurses (Booyens, 2014:273). Mentors are not employed by a Higher Education Institution; therefore, all the experienced PNs can be regarded as mentors. The mentors should not be confused with the preceptors. In contrast to a mentor, a preceptor is an experienced, competent and positive professional nurse who acts as a clinical teacher and is employed by a Higher Education Institution (NES group, 2012:51). Subsequently, preceptors often only accompany novice nurses during the orientation phase, whereas a mentor continuously works with novice nurses in the clinical field. Thus, the mentoring relationship is a longer relationship than the preceptor relationship. As novice nurses often have more needs which require a longer relationship that extend beyond the orientation period, they may benefit more from a mentor than from a preceptor (Woodfine, 2011:54).

Various studies found that good mentorship may be a determining factor for a positive learning experience in the demanding clinical work environment for novice nurses (Wilkes, 2006:42). Papastavrou, Lambrinou, Tsangari, Saarikoski and Leino-Kilpi (2010:180) also mentioned that the success of the novice's clinical learning and placement is directly influenced by the quality of mentoring they receive. Thus, there is a great demand for nurse mentors to support novice nurses in practice (Rylance, Barrett, Sixsmith & Ward, 2017:405).

The NES group (2012:41) identified various strategies for the recruitment and retention of nurses, of which a mentoring programme is one. Experienced senior PNs who are interested in teaching and willing to provide support for novice nurses should be identified, trained and allocated to be mentors (NES group, 2012:41).

An effective mentoring relationship is a key element for achieving success and enhances career satisfaction, as it contributes to personal development and career guidance (Ramani & Gruppen, 2013:142). The mentor should show interest in the novice's learning and professional development, providing them support throughout (Ramani & Gruppen, 2013:142). Thus, the mentoring role consists of various components, which includes being a role model, providing guidance and acting as a counsellor (Hulton, Sawin, Metzel, Trimm, Donna, Graham, Amy, Powell & Nen, 2016:1). The PN's role as a mentor involves more than just clinical teaching of skills and knowledge; it requires a form of role-modelling and support (Chandan & Watts, 2012:1).

An effective mentor allows the mentee to develop their own goals, creates an open and trusting relationship, and provides constructive feedback (Ramani & Gruppen, 2013:144). The effective mentor takes pride in their mentee and is willing to invest in the mentee's development, both professionally and personally (Ramani & Gruppen, 2013:144). A good mentor is portrayed as a dependable and true educator and assessor (Andrew & Roberts, 2003:476). A good mentor should demonstrate qualities such as assertiveness, confidence, approachability, experienced, non-judgmental and trustworthiness (Walsh, 2008:18). These specific qualities indicate

that attitude, knowledge and the leadership of the professional nurse will be key determinants of being a good mentor.

Rylance *et al.* (2017:406) noted that this multifaceted role and the complexity of the mentor role can lead to mentoring being neglected. There is a limited number of mentors available and this indicates that there should be some investigation into the mentoring experience and how the mentoring process can be optimised (Rylance *et al.*, 2017:406). For an effective mentoring programme, the participation of the whole nursing team is a necessity (Thomas, 2009:1), as novice nurses are influenced by the attitudes and availability of mentors as well as their peers. Thus, it is important that all the personnel in the OR participate and demonstrate a positive attitude towards mentoring novice nurses. Not all personnel follow the same mentoring methods, as personalities and learning and teaching styles differ from person to person.

### **2.8.1 Mentoring approaches**

There are different types of mentoring approaches as described by Ramani and Gruppen (2013:144-5). These include: Dyadic mentoring, which is the traditional mentoring approach where there is a relationship between a senior professional mentor and junior mentee, and the mentor provides professional guidance to the mentee. Multiple mentoring approach refers to when the mentee usually has one primary mentor and various self-appointed secondary mentors who assist in different areas of learning. A formal mentoring approach is where there are mentors specifically appointed by the institution for each novice and the novice does not have a choice as to who is mentoring them. The formal mentoring relationship is often not so successful in the long term as the mentor and mentee may not have compatible personalities. The formal mentoring process includes the formal coaching of novice nurses (Ali & Panther, 2008:38). An informal mentoring approach, on the other hand, deems to be a more successful long-term relationship as it is formed where the mentor and mentee meet by themselves and discover common interests and goals. This involves a casual process where the expert professional nurse helps and guides her colleagues to be able to create abilities and enhance their practice (Ali &

Panther, 2008:38). Peer mentoring occurs where there is not enough senior mentors to guide the mentees; thus, the mentees count on each other's support and assistance. A distance mentoring approach is when the mentor and mentee works at different institutions and communicates electronically (Ramani & Gruppen, 2013:145). Although there are different mentoring approaches, the relationship between mentor and mentee is equally important for all, no matter the approach followed.

### **2.8.2 Mentoring relationship**

A positive and dynamic mentoring relationship between the PN and the novice nurse can be rewarding for both the mentor and the novice nurse. An effective mentoring relationship contributes to the novice nurse developing as a competent professional, and the mentor benefits from the relationship through personal satisfaction (Booyens & Bezuidenhoudt, 2014:273).

The mentoring relationship comprises four phases: the initiation phase, the cultivation phase, the separation phase and the redefining phase (Ramani & Gruppen, 2013:145-6). The initiation phase consist of the mentor and mentee meeting frequently and establishing goals and common interests. The initiation phase leaves room to discover whether the personalities of the mentor and mentee match. Thereafter, the cultivation phase starts - which includes establishing the specific tasks to be done in order to achieve the set goals. Ongoing feedback and support are provided by the mentor. The separation phase includes planned separation where the goals have been met and further mentoring is not required. The separation phase can also be unplanned, due to lack of interest from either the mentor or mentee or a transfer to another department. Lastly, the redefining phase is where the relationship carries on beyond the training period and usually evolves as a successful peer mentoring relationship and friendship (Ramani & Gruppen, 2013:145-6).

Mentoring is not necessarily a “*lifelong or career-long relationship*”; it can be a short-term relationship while the novice nurse is working in a specific department (Ramani & Gruppen, 2013:142).

### **2.8.3 The effects and purpose of positive mentoring**

Mentoring comprises many aspects, of which an important part is to assist novice nurses with the transition into their new workplace (Persaud, 2008:1173). Novice nurses often rely on their peers for support when they enter a new workplace environment (Persaud, 2008:1174). In research conducted on a workplace mentoring program at the Royal Newcastle Centre Operating Theatre Australia in 2009, mentees commented that they felt supported, and that being part of an effective mentoring program would make them better mentors in the future (Thomas, 2009:3). Furthermore, the mentors in return reported that they felt proud when their mentee performed a procedure on their own (Thomas, 2009:3). This is supported by Rylance *et al.* (2017:406) who stated that the mentoring process is not only beneficial for the mentee, but it was found that the mentoring role is also rewarding to the mentor when sharing their knowledge.

The positive outcomes for both mentees and mentors corroborate that effective mentoring is one of the determinants for leaving nursing or staying in nursing to build a satisfying career (Cangelosi, 2005:1). The mentees benefit greatly from effective mentoring as it enhances their professional growth and aids them in facing difficult situations and gaining confidence (Ramani & Gruppen, 2013:143).

Thus, effective mentoring in the workplace is also a key element for successful clinical practice learning (Thomas, 2009:2). Frankel (2008:3-5) also indicated that effective mentoring from the PNs is a vital key for the professional growth and development of the novice nurses. Mentoring is also important for the professional and personal growth of the OR qualified PN to develop and become a successful leader (Booyens & Bezuidenhout, 2014:273). Therefore, OR qualified PNs have a responsibility towards the novice nurses to lead the way and set the example.

## **2.8.4 The professional nurses' responsibilities in clinical teaching and learning**

Gopee (2008:168) indicated that all healthcare professionals are responsible for training and developing novices to become independent professionals. Mentoring is seen as an imperative part of the PNs' roles (Ali & Panther, 2008:35). A study done on clinical nurses as teachers revealed that the PNs in the clinical practice form a vital part in the students' learning experience in the clinical practice, and the contribution of the PNs are greatly valued by the students (Jackson & Mannix, 2001:275). Thus, the PNs role as effective mentor is crucial for learning in the clinical field. As such, it is a professional requirement that PNs enhance learning through a positive learning environment.

The scope of practice of a registered nurse (R2598) in the Nursing Act 33 of 2005 (Republic of South Africa, 2005), clearly state the responsibilities of PNs as mentors. Thus, the OR qualified PN has a responsibility to teach novice nurses in the stressful OR environment, and guide them to develop as confident and competent OR nurses.

The PN, as a mentor, should motivate novice nurses and empower them with new clinical skills. The mentoring from a PN contributes to the development of a competent novice nurse. (Frankel, 2008:23-24; Ganapathy, 2015:2; Mochaki 2001:1-2). Yet, as mentoring is a complicated role, it is important that mentors receive the necessary training, coupled with an adequate support system (Chandan & Watts, 2012:1).

There is limited research in the South African context with regard to the responsibilities and guidance for the PN as mentor to novice nurses in the OR. Ramani and Gruppen (2013:142) indicated that in some of the institutions where formal mentoring programmes exist, mentors received neither training, nor guidance on the mentoring process, and are, as a result, not prepared for the challenges associated with workplace mentoring.

## 2.8.5 Factors influencing the professional nurses' mentoring role

According to Brammer (2006:964) it is often assumed that novice nurses will “buddy” with the PNs and that all the PNs are prepared to guide and teach them. However, PN's encounter some conflict in their commitments as mentors, as no recognition is given for the work they do (Chandan & Watts, 2012:5). In addition, the job descriptions of PNs do not necessarily include the expectations of the mentoring role they need to fulfil; thus, mentoring may be neglected (Chandan & Watts, 2012:5).

Clearly mentors often experience a negative attitude towards their mentoring role. Moseley and Davies (2007:1630) identified the following three elements that influenced the mentors' attitudes: Organisational issues, which include workload, time available to mentor and the skill mix of both the mentor and novice nurse, interpersonal issues, referring to attitudes of novice nurses and the cognitive issues related to the mentors' knowledge and insight into the novice nurses objectives, and the mentors' ability to provide feedback and assessment.

Adding to the organisational issues identified by Moseley and Davies (2007:1630), a study done by Mogale (2011:89), on student nurses' experience of their clinical accompaniment indicated that staff shortages had a negative influence on their learning experiences. The staff shortages in turn contribute to an increased workload for PNs (Mogale, 2011:90). Confirmed by DENOSA (Pieterse, 2016:np), mentoring in the OR is left behind due to an excessive workload. Murathi, Davhana-Maselesele and Netshandama (2005:18) also found that PNs complained that they need to accommodate clinical teaching and mentoring of novice nurses, despite the enormous workload they have. Thus, excessive workload can be seen as a barrier for effective and successful mentoring, as mentors experience inadequate time to teach novice nurses (O'Driscoll, Allan, & Smith, 2010:216).

Mogale (2011:80) also found that a lack of equipment can influence mentoring. The conceivable absence of equipment expands the anxiety and workload of the PNs, resulting in not having sufficient time and resources available for teaching and mentoring (Mogale, 2011:80).

Another factor influencing the mentoring role of the PNs is the lack of interest in learning from the novice nurse (Rylance *et al.*, 2017:408). The mentors noted that students are often not interested in learning and lack professionalism (Rylance *et al.*, 2017:408). In addition, Ramani and Gruppen (2013:143) described another challenge in mentoring as the fact that the mentor and mentee's goals and expectations of the mentoring relationship may vary and therefore the commitment levels differ - which causes an obstacle in the mentoring process.

Woodfine (2011:55) indicated that the more experienced nurses are often hesitant to mentor, as they perceive the younger nurse who joins the workforce as a potential threat. Ramani and Gruppen (2013:143) added that mentors may not be interested in the mentoring relationship due to the fact that they feel threatened by the hierarchy, generational profile of personality of the mentees.

Thus, there are various factors that influence and inhibit the mentoring role of the PNs. Consequently, mentoring of novice nurses in the workplace environment are not effective. However, effective mentoring of novice nurses may provide a better experience for them in the OR, which in return may improve the retention rate of novice PNs to the OR.

## **2.9 SUMMARY**

The OR is a complex learning environment, therefore there is a great need for OR mentors to facilitate the learning of the novice nurses. However, the literature reviewed indicated that there is currently an international shortage of OR qualified nurses, with a further anticipated decrease over the next five years (Pupkiewicz, Kitson, & Perry, 2015:1; Ball *et al.*, 2015:115); thus, leaving great concerns for the future of OR nursing. Therefore, mentoring of novice nurses in the OR is important to improve the retention of novice nurses to the OR.

This literature review included qualitative and quantitative studies, as well as text books and online sources and the researcher's aim was to become familiar with the mentoring of novice nurses in the OR.

The literature revealed possible insufficient mentoring. Thus, effective mentoring is a key strategy to retain PNs in South Africa, especially in an unfamiliar and often intimidating nursing department such as the OR.

## **2.10 CONCLUSION**

This chapter provided a comprehensive discussion regarding mentoring in the OR environment and the various contributing and inhibiting factors. In Chapter three, the research Methodology, the researcher will discuss the design and the entire research strategy.

# **CHAPTER 3**

## ***Research methodology***

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### **3.1 INTRODUCTION**

Chapter two portrayed the limited South African studies about the perception of OR qualified PNs of their role as mentors in the OR, and informed the methodology of the study. This chapter aims to describe the research design as well as the methods used in this study while exploring PNs' perceptions of their role as mentors of novice nurses in the OR. The research methodology and design guide researchers in preparing and implementing a study in a manner best suited to accomplish the research objectives (Grove, Burns & Gray, 2013:195). The study objectives and research design will be discussed, followed by a detailed description of the research process that was followed.

### **3.2 AIM AND OBJECTIVES**

The two-fold aim of this study was to understand and describe OR qualified PNs' perceptions of their role as mentors of novice nurses in the OR.

The objectives of this study were to understand and describe:

The perceptions of OR qualified PNs regarding their role as mentor of novice nurses, and the factors that could influence OR qualified PNs' perception regarding their role as mentor of novice nurses.

### 3.3 STUDY SETTING

The study setting refers to where the study is conducted (Grove *et al.*, 2013:37). In this study, the setting included the two largest private hospital groups as well as the two largest provincial hospitals in Bloemfontein in the Free State Province, as they train and employ all nursing categories in the OR, and perform surgical procedures in various surgical disciplines. The hospitals are widely spread throughout the suburbs of Bloemfontein. Bloemfontein is the capital city of the Free State Province in South Africa; it is centrally situated in the Transgariep area, roughly in the middle of the Free State Province, and the country (South Africa Places, 2016). The four hospitals included in this study are regarded as the two largest private and two largest provincial hospitals, as they each have a large OR complex, consisting of the following number of operating theatres in each OR complex:

- Provincial hospital one: thirteen (13) operating theatres
- Private hospital two: twelve (12) operating theatres
- Provincial hospital three: six (6) operating theatres
- Private hospital four: eight (8) operating theatres

### 3.4 RESEARCH DESIGN

The research design is also referred to as the research strategy (Botma *et al.*, 2010:189). Descriptive research provides a picture of the specific details of a phenomenon (De Vos, Strydom, Fouchè & Delport, 2011:96). Qualitative descriptive designs are used to provide a description of a phenomenon (Botma *et al.*, 2010:194). As the researcher aimed to describe how PNs perceive their role as mentors for novice nurses in the OR, a qualitative descriptive research design was followed in this study.

Qualitative data are gathered through conversations, interviews, dairies or journals (Botma *et al.*, 2010:190). Brink *et al.* (2006:113) described a qualitative research design as suitable to explore and describe human experiences. Descriptive qualitative research does not focus on in-depth interpretation of the data, but rather present a straight description of the phenomenon (Polit & Beck, 2008:237). This

method of choice was motivated by the fact that the researcher wanted to gather a detailed description of the research question of the study.

### **3.5 POPULATION AND SAMPLING**

According to Botma *et al.* (2010:200), the population includes the entire group of people who meets the criteria which the researcher is interested in and is the focus of the study. The target population for the study refers to the entire population that is accessible, and the number of the total population that the researcher may include as participants for the study (Polit & Beck, 2010:307).

The population for this study was all the OR qualified PNs in the two largest private and two largest provincial hospitals in Bloemfontein, in the Free State Province. These large hospitals were selected because of the training that is facilitated for novice nurses and students, and surgical procedures in all surgical disciplines performed. Therefore, OR qualified PNs in each of the four selected hospitals that meet the inclusion criteria, and were able to provide rich data about their experience as mentors of novice nurses in the OR, formed part of the study population.

A sample is the part of the entire population that is selected by the researcher to participate in the research study (Botma *et al.*, 2010:124). Purposive sampling, also referred to as judgmental sampling, is when the researcher deliberately selects the participants who are acquainted and have experienced with the research topic (Botma *et al.*, 2010:201, Burns & Grove, 2009:355). Therefore, in this study, purposive sampling was used, and the researcher deliberately selected participants who had valuable experience of working as mentors in the OR environment.

Expert nurses have two or more years' experience in their clinical field (Benner, 1984:404), and they are believed to be able to provide effective mentoring and guidance for novice nurses. To reach the objectives of this study, PNs with more than two years' experience after they obtained a postgraduate qualification in OR nursing were considered to be OR expert nurses. Hence, these participants were

able to provide rich data regarding their perceptions on mentoring novice nurses in the OR. After institutional permission was received, the researcher contacted the relevant OR managers, and enquired which OR staff met the sampling criteria. The researcher then approached the identified OR nurses from each hospital in person, informed them of the research aim and objectives and invited them to participate in the focus group discussions. Initially, between five and seven participants from each hospital were identified by the OR managers. All the potential participants were approached, to allow for participants who did not show up during the scheduled focus group interviews. However, not all the identified participants were available for the focus group interviews. As a result, the focus groups in this study consisted of less than the prearranged participants.

Focus groups usually consists of six to 10 participants (De Vos *et al.*, 2011:366). However, smaller groups of four to six participants are preferable when the participants have a great deal of experience to share regarding the study topic (De Vos *et al.*, 2011:366). The term “*mini- focus groups*” refers to very small focus groups with five or less participants (Krueger & Casey, 2015:6). Such mini-focus groups not only provide an advantage to the logistics, as it can be easily hosted, but also allow for a better quality of discussion (Krueger & Casey, 2015:6). In this study, the researcher aimed to gather detailed information from each participant during the focus group discussions and therefore smaller, or mini-focus groups, were deemed appropriate. Participants were purposefully grouped together at each hospital to ensure a non-threatening and familiar environment conducive to focus groups. This allowed the participants to share their experiences and perceptions freely. The final sample size for this study included sixteen willing and available participants in four focus groups.

- Focus group one (1): Provincial hospital with five participants
- Focus group two (2): Private hospital with four participants
- Focus group three (3): Provincial hospital with four participants
- Focus group four (4): Private hospital with three participants.

Data saturation suggests that no new or relevant data emerge, and redundancy is obtained (Botma *et al.*, 2010:200, Polit & Beck, 2010:321). In qualitative research,

the quality and depth of information is of more importance than the quantity of the data (Niewenhuis, 2014:51). During the data analysis of the fourth focus group in this study, the emerging themes became repetitive, and the researcher could identify the same trends throughout each group, thus suggesting that no new data would emerge for the purpose of this study.

### **3.5.1 Inclusion criteria**

The participants included in this study were PNs who completed a post-basic diploma in OR nursing, with two or more years' experience post qualification as they have proven clinical competence, and assumed to be in an ideal situation to mentor novice nurses. The researcher specifically wanted to explore the perceptions of OR qualified PNs as mentors, who could provide rich data, as required in qualitative descriptive research.

The participants who were included thus met the selection criteria and were available for the scheduled focus group discussions, and willing to participate.

### 3.6 INTERVIEW GUIDE

A Semi-structured interview guide was used to collect data during the focus group interviews in this study. Semi-structured interviews are used to gather detailed information from the participants and when the researcher has certain questions (Botma *et al.*, 2010:208; Polit & Beck, 2010:341). The interview guide, attached as Appendix 4, contained a biographical section for the participant's biographical details, as well as open-ended questions based on the objectives of the study. The interview guide was developed by the researcher based on the literature as well as expert opinions from qualified OR PNs. The researcher and focus group facilitators had the flexibility to follow certain upcoming topics and themes from the participants' viewpoints during the focus group discussions. The use of facilitators is further discussed in section 3.9 under data collection.

### 3.7 PILOT INTERVIEW

A pilot interview is referred to as a small-scale interview with only a few participants who meet the selection criteria, conducted by the researcher before the main study to test the practical aspects of the study (Botma *et al.*, 2010: 275). The aim of the pilot interview was to investigate the feasibility of the proposed interview, and whether the facilitator has the necessary skills to execute the interviews during the data collection phase of the study (Brink *et al.*, 2006:166; Botma *et al.*, 2010:275). A pilot interview provides a guideline for the researcher on the potential participants' understanding of the phenomenon, and whether the relevant data can be gathered from the participants (Botma *et al.*, 2010; De Vos *et al.*, 2011). According to Botma *et al.*, (2010: 291), the data collected during the pilot interview may be included in the main study, provided that the research question does not change. However, it is challenging to conduct pilot testing for focus group discussions. As it is difficult to separate the questions during the interviews from the environment of each focus group, pilot interviews for focus group discussions may be performed with potential participants or topic experts (De Vos *et al.*, 2011:370). In this study a pilot interview was held in April 2017 after the researcher obtained ethical and institutional approval for the study. The pilot interview was used to evaluate the interview guide and the

interview skills of the researcher and the facilitator, and were not conducted during a focus group, but with one participant who met the inclusion criteria. Therefore, the data gathered during the pilot interview was excluded in the main study, although the themes obtained from the pilot interview correlated with those from the focus groups of the main study.

A briefing session between the researcher and the facilitator were held before and after the pilot interview. During this briefing session, the particular roles of the researcher and the facilitator during the interviews were determined and discussed. The research topic, aim and the objectives of the study were clarified, and a confidentiality pledge was signed by the facilitator. The pilot interview was scheduled at a date, time and venue that was convenient for the participant and lasted one hour. The pilot interview was voice recorded and transcribed verbatim by the researcher. Member checking and transcription validation increase the creditability of findings in qualitative research (Grove, Burns & Gray, 2013:283). For that reason, the transcription and initial thematic analysis were provided to the facilitator and participant for member checking after the transcription and initial thematic analysis.

After conducting and analysing the pilot interview, the interview guideline and methods remained unchanged, as it was deemed feasible to meet the aim and objectives of the study.

### **3.8 TRUSTWORTHINESS**

In qualitative research, rigour refers to the critical appraisal done throughout the study by the researcher (Botma *et al.*, 2010:231). Rigour also refers to the integrity of the study, by ensuring that all interpretations of the data are valid and supported by quotation of the participants' words (Botma *et al.*, 2010:231). Trustworthiness determines whether the qualitative study is of high quality (Grove, Burns & Gray, 2015:392).

Trustworthiness in qualitative research includes five standards: Credibility, transferability, dependability, confirmability (Botma *et al.*, 2010:233-234).

### 3.8.1 Credibility

The researcher accurately reported the the views of the participants in this study to enhance the truth value, or credibility of the study. Credibility in qualitative studies are increased if the accuracy of the transcripts are verified, if two data coders and participants validate the findings (Grove, Burns & Gray, 2013:282). In this study, the researcher applied similar processes to increase the credibility of the findings.

To increase the credibility of the findings, the interviews were audio recorded and the researcher and facilitator making field notes during the focus group interviews, which were discussed after each focus group interview. The field notes were considered during the data analysis process, and guided the researcher while coding the transcriptions to ensure correct interpretation of the data. The field notes included the verbal and non-verbal interactions between participants during the focus group discussions, and it portrayed the group dynamics of each group. The overall group dynamics and interactions demonstrated a positive attitude.

During the focus groups, the facilitator also gave summaries and reflections of the participant's viewpoints to ensure correct interpretation of discussions and statements. After each focus group interview, the facilitators and researcher had a debriefing session to discuss the group dynamics, the field notes, as well as possible coding from the respective interviews. Terre Blanche, Durrheim and Painter (2006:302) referred to transcription reliability as the process where the researcher listens to the recordings and reads through the transcriptions; to ensure the accuracy of the transcriptions. In this study, the researcher, the facilitators and study supervisor read through the transcribed interviews and thematic analysis to ensure the correct information was recorded and the correct themes were formed.

Member checking allows for feedback, and assess whether the researchers' interpretations of the data is accurate (Polit & Beck, 2010:499). Member checking was done with two participants after the initial thematic analysis. In addition, where participants' quotes were translated from Afrikaans to English, it was emailed to the

specific participants to verify that the translation was a true representation of what they have said. The participants responded via email and confirmed the translations. The credibility of this study was furthermore ensured through the ethical approval by the Health and Research Ethics committee of Stellenbosch University, and ethical principles were adhered to.

### **3.8.2 Transferability**

Transferability refers to whether the findings of the study can be applied to a different sample or setting; in other words, the findings can be generalised to larger populations (Botma *et al.*, 2010:233). The generalisation of qualitative research is limited and often seen as a problematic area, as findings may be limited to similar settings or phenomena (De Vos *et al.*, 2011:420). The transferability of this study was enriched through the detailed description of the participants, the research methods and the data analysis, which is described in chapter 3.10. Thus, other researchers would be able to conduct similar research.

### **3.8.3 Dependability**

Dependability of a study refers to whether the study findings will be homogenous when repeated in a similar context (Botma *et al.*, 2010:233).

The dependability of the study was achieved through a dependability audit to avoid mistakes during data collection, interpretation and data analysis. The dependability audit was ensured through member checking where the participants read through the transcribed interviews and confirmed whether this was a true reflection of what they said, as well as check the coding and themes with the supervisor. Furthermore, dependability was ensured by providing a variety of traceable resources, and a thorough description of the research methodology. Dependability in this study was also ensured by the research question and conduction of all four focus groups in the same manner. The focus groups' interviews were voice recorded on a dictaphone as well as a cell phone for transcription. After each focus group interview, data was downloaded onto a laptop and transcribed verbatim for further analysis.

### **3.8.4 Confirmability**

The confirmability of the study refers to the objectivity of the data by means of congruence between two or more independent people for data accuracy and interpretation (Polit & Beck, 2010:492). This was achieved by the facilitators, participants and the study supervisor reading through the transcriptions and the identified themes. Confirmability was further increased through the use of bracketing throughout the research process, which is further described in chapter 3.9.

The use of an audit trail further improve the conformability of this study (De Vos *et al.*, 2011:421). By recording an audit trail, the study allows for an independent auditor to evaluate the research findings. Therefore in this study, conformability was enhanced through a detailed description of the participants, data collection and documentation, as well as accurate description of the data analysis processes.

## **3.9 DATA COLLECTION**

In this study, the researcher worked with consistent adherence to the protocol that was approved by the Health Research Ethics Committee (HREC) of Stellenbosch University. Data collection took place from April 2017 until August 2017. The data collection period took longer than originally anticipated due to a delay in consent from one hospital and a cancellation of an appointment at another hospital.

The researcher conducted the data collection process together with experienced facilitators. The role of the facilitator is to direct the conversation and to probe participants to engage in the conversation (Botma *et al.*, 2010:212). It is important that the facilitator is experienced and familiar with the topic under discussion, as well as the interview guide (Botma *et al.*, 2010:212. De Vos *et al.*, 2011:367). In addition to this, Krueger and Casey (2015:104-106), mentioned that the experienced facilitator should be a good listener, respect the participants, communicate effectively and clearly and do not judge the participants viewpoints and keep their personal views aside.

In this study, there were two experienced facilitators who assisted the researcher during the data collection phases. The facilitators were both OR qualified PNs, each holding a Master's degree in nursing. In addition, they are both employed in academic posts by the University of the Free State, one as an OR nursing lecturer and the other as an OR clinical preceptor. Thus, the focus group facilitators have knowledge and experience of both research and the topic under study. The focus group facilitators kept the discussions focused on the topic at hand. The researcher was an observer during all the focus group discussions, and took detailed field notes of the verbal and non-verbal communication, like body language between participants and facial expressions.

The use of experienced facilitators during the interviews also assisted in excluding researcher bias during the interviews. As the facilitators conducted the focus group interview at the institution where the researcher is employed, bias from the researcher was avoided, and the researcher's colleagues could express their true perceptions during this focus group discussions.

A disadvantage of the focus group interviews is that it could be an expensive process that needs skilled researchers (De Vos et al., 2011: 374). The researcher addressed this by using experienced facilitator to assist during the focus group interviews and provision for this was made in the research budget

Institutional consent was obtained from each hospital to conduct the study, where after consent was obtained from the various OR managers. A date and time convenient for each group were scheduled. The venues for the focus groups differed, as the researcher went to each hospital where it was most convenient and accessible for the participants. The focus group interviews were recorded on a dictaphone as well as a cell phone for transcriptions.

The focus group interviews were conducted using an interview guide with open-ended questions that are based on the objectives of the study. According to Brink *et al.*, (2006:152) and De Vos *et al.* (2011:373), focus group interviews provide an

advantage for data collection as it allows the participants to share their thoughts with each other and also bring forward new ideas.

Creswell (2013:251), stated that the credibility of a study can be enhanced by using a variety of different sources and viewpoints. A wide variety of participants from different organisations may therefore promote the credibility of the study, as it reduces local factors, peculiar to one organisation or facility. In this study, data was collected from participants working in four different clinical institutions in both public and private hospitals.

Focus group discussions should provide for a secure setting for the participants to share their thoughts without the fear of someone criticising them (De Vos *et al.*, 2011: 373). Thus, participants from the same hospital were in each specific group, and they were encouraged to express their perceptions and experiences during data collection. Although, a disadvantage of focus groups may be that some of the participants do not feel comfortable to share their thoughts in a group (Brink *et al.*, 2006:152). The facilitator constantly guided the group by continuous communication between the facilitator and the participants. The researcher acted as observer during all four the focus group interviews and made field notes, which included important interactions between the participants, as well as non-verbal communications like body language. The group interactions noted in the field notes were taken into consideration during the data analysis. The observer and facilitator were also open and willing to listen without judgement, and the facilitator empowered the participants to engage in the conversation, especially those who seemed quiet.

The group dynamics during focus group interviews may cause bias due to the fact that some participants are more outspoken than others, thus making it difficult to hear the opinions of the less assertive participants (Niewenhuis, 2014:91). Especially in small focus groups, the opinion may not be adequately representative of all the OR qualified PNs. However, Hyde, Howlett, Brady and Drennan (2005:2589) implied that the group dynamics during the focus groups may promote the depth of the discussion with a deeper meaning more than what individual interviews may provide. In this study, where the focus groups were small, participants actively engaged in the discussions and mostly confirmed each other's viewpoints.

The interviews were conducted in English and Afrikaans, depending on the participant's preference, and language was mixed at times, depending on how the participants wanted to express themselves. The facilitator led the discussions to avoid any bias or prompting from the researcher to the participants. This ensured that the participants gave their own true perceptions and opinions on the questions asked. Probing was used at times to obtain more comprehensive data from the participants (Polit & Beck, 2010:494).

The purpose of the study and the role of the researcher in the study were clearly described in the information letter to the participants and also repeated at the beginning of each focus group session. All the focus groups were conducted with participants seated around a table in a circle. The researcher provided refreshments for the participants. After obtaining written consent from all participants and anonymity assured, the focus group interviews commenced with the researcher introducing the function and role of herself and the facilitator to the group. After each participant briefly introduced him- or herself and a more comfortable and non-threatening rapport was established and anonymity assured, the facilitator started the formal interview by explaining certain definitions related to the study and set the first introductory question to the participants. Ethical principles were maintained throughout the data collection process, as discussed in Chapter one (1).

The interview guide was followed throughout each focus group interview and the same questions were asked in each participating group. The facilitator and the researcher made field notes and the certain ideas and concepts were also re-established by providing a summary of what was said to the participants in concluding each interview. All the interviews were completed in less than 60 minutes, although there was no specific time limit given. After concluding the interviews, the researcher again expressed appreciation for each participants' time and willingness to part take in the study. The interviews were downloaded on an external Universal Serial Bus (USB) drive and given to an independent transcriber, who signed a confidentiality agreement, for initial transcriptions. The researcher read the transcribed notes while listening to the recordings to ensure each transcription is correct and the researcher also removed all names of participants, surgeons

mentioned by the participants or institutions used during the interviews to ensure and protect the participants and institutions' privacy.

Bracketing is when a researcher sets aside any preconceived opinions about the phenomenon which enables the researcher to consider every available perspective (Brink *et al.*, 2006:113). According to Brink *et al.* (2006:113), the researcher should build up a consciousness of the lived experience. Chan, Fung and Chien (2013:3), stated that bracketing is not restricted to the data collection and analysis phases, but is also done before the researcher starts with the literature review. Thus, with this qualitative descriptive study, the researcher bracketed her preconceived ideas throughout the research process as she had a thorough background in the OR environment. Intuiting refers to the researcher being open to the meaning given of the phenomenon by the participants (Botma *et al.*, 2010:190). The researcher aimed to become immersed in the phenomenon through the participants' descriptions of their experiences and perceptions through intuiting.

### **3.10 DATA ANALYSIS**

Data analysis in qualitative studies begins together with data collection (De Vos *et al.*, 2011: 405). In this study, an interpretive data analysis approach as described by Terre Blanche *et al.* (2006:321-326) was used. The researcher used the following five steps for interpretive analysis: Familiarisation and immersion, development of themes, coding, elaboration and interpretation and checking (Terre Blanche *et al.*, 2006:321-326). Group interaction is an important factor during focus group interviews (Niewenhuis, 2014:90). As the researcher took comprehensive field notes as an observer during data collection, group interaction and non-verbal communication were also included in data analysis.

#### **3.10.1 Familiarisation and immersion**

In order to begin to understand the collected data, researchers read through the transcripts, listen to the recordings, and review the field notes (De Vos *et al.*, 2011:405). The familiarisation and immersion steps in this study commenced at the

start of data collection. During each interview, the researcher made field notes and listened carefully to the participants and began to form certain ideas and themes. The familiarisation and immersion with the data continued when the researcher read through the field notes and transcribed interviews while listening to each interview recording and making notes again. This ensured that the researcher was familiar with and trusted the data.

### 3.10.2 Development of themes

The researcher started to identify themes when reading through the transcriptions and making notes in each paragraph, using the language of the participants that occurred in each focus group. Congruent with the study objectives, the data was placed into the context of participants' perceptions regarding their role as mentors of novice nurses in the OR. The themes developed were linked to the coding done and checked by the study supervisor as well as the respective facilitators.

Table 3.1 Extraction from theme development table:

THEMES, SUBTHEMES AND CATEGORIES:	TRANSCRIPTION FROM INTERVIEW:	FOCUS GROUP:	PARAGRAPH:	PERSON SPEAKING:
<b>1. OR environment</b>				
1.1 Strange and Intimidating environment	<ul style="list-style-type: none"> <li>- "you know what, if the person is coming from the outside, meaning not from the hospital, then they tend to be in a state of shock if they enter this theatre environment, because its a strange place"</li> <li>- So we must remember that it is bad for them to enter this strange environment that is not known to them, we know the fear of the unknown"</li> <li>- "I think for a first year student, it is a very strange world to enter into theatre"</li> <li>- sometimes they are afraid , afraid of the contents, especially in the theatre"</li> </ul>	PI  FG1  FG2  FG3	A3  29  16  25	PI  P5  P7  P13

	- "because it's a different place"	FG4	20	P16
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### 3.10.3 Coding

Coding is a way of labelling data to both reduce the data and attach meaning to the different elements in the data (Grove, Burns & Gray, 2013:280). The transcribed interviews in this study were coded by the researcher, by linking a code to each theme. The coding of each interview was checked by the focus group facilitator as well as the supervisor to ensure that the researcher established the correct themes, see table 3.2 below.

Table 3.2 Extraction from coding done by researcher

Person speaking:	Paragraph number: [P]	Group 1 transcription:	Coding/notes:
Participant 3 [P3]	4	<p>"Number 3"</p> <p>"There are toe types. Those who are really not interested. they sit there with their cell phones the whole day from beginning to end." Then they want you to sign their things because they now saw how swab counting is done. And then you get those who really want to learn, they are interested. they stand there and they want to start opening packs en they ask questions"</p>	<ul style="list-style-type: none"> <li>- <b>Student attitudes</b></li> <li>- Passive : not interested in learning</li> <li>- Active, want to learn</li> </ul>

### 3.10.4 Elaboration and interpretation

During the elaboration and interpretation phase the researcher took each theme and started to link all the similar themes from the various focus group interviews and identified sub-themes and categories for the identified themes. With the interpretation and development of the themes and sub-themes during the fourth focus group, the researcher found that the data did not present any new ideas or

concepts for the development of new themes, other what was already labelled in the first three focus group discussions. All four the focus group transcriptions with coding and theme development was checked by the study supervisor and the facilitators.

### **3.10.5 Checking**

The checking was the last step where the researcher interpreted the analysed text and wrote the final report in which a deeper understanding of the findings is given. The researcher also shared the interpreted text with the supervisor as well as the two facilitators to ensure that it provided a true reflection of the collected data.

## **3.11 CONCLUSION**

Chapter three provided an explanation of the research methodology and the methods used during this study. The trustworthiness and ethical considerations of the study were also discussed.

In Chapter four, the results and findings of the focus group interview will be discussed.

# **CHAPTER 4**

## ***Presentation of Findings***

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### **4.1 INTRODUCTION**

In this chapter, the results of the focus group interviews that were conducted with the OR qualified PN's will be presented and discussed.

The findings of the study indicated that the participants know what is required from them to be mentors for novice nurses. The findings also indicated various factors that influence PNs to provide effective mentoring for novice nurses.

The biographic data of the participants as well as the themes and sub-themes that emerged from the focus group interviews will be discussed.

### **4.2 BIOGRAPHICAL DATA OF PARTICIPANTS**

In this study, 16 participants took part in four focus group discussions. The biographical data will be presented in this section, followed by the themes that emerged from the collected data.

In this study, the inclusion criteria discussed in Chapter 3 stipulated that participants must have two or more years' experience after they obtained a postgraduate qualification in OR nursing.

#### **4.2.1 Age and years of experience as OR qualified PN**

The age, and years of experience after they obtained a postgraduate qualification in OR nursing were recorded, and are presented in Table 4.1.

**TABLE 4.1: Focus group participants age and years of OR experience**

FOCUS GROUP (FG)	PARTICIPANTS	AGE	YEARS OF EXPERIENCE AS OR QUALIFIED PN
Focus group 1	Participant 1	28	Two and half(2.5)
	Participant 2	47	21
	Participant 3	44	21
	Participant 4	44	17
	Participant 5	49	19
Focus group 2	Participant 6	34	Seven (7)
	Participant 7	34	Four (4)
	Participant 8	48	23
	Participant 9	43	16
Focus group 3	Participant 10	53	18
	Participant 11	56	24
	Participant 12	56	24
	Participant 13	56	23
Focus group 4	Participant 14	51	25
	Participant 15	56	18
	Participant 16	56	20

It can be seen that focus group three and four had more experienced OR qualified PNs and no participants had less than 10 years' experience. Although focus group one and two had OR qualified PNs with less years of experience, it can be seen that they still had extensive OR experience.

#### 4.2.2 Group Dynamics/interaction

Focus groups are used to understand how participants perceive a certain area of interest, and the interaction between participants can also expose reality (De Vos *et al*, 2011:361). In this study, focus group discussions were conducted in groups where the participants knew each other. Participants who know each other, or who are fundamentally similar, are able to discuss the issues at hand, rather than explaining themselves to group members (De Vos *et al*, 2011:366).

In this study, the focus groups were small, as can be seen in Table 1. Krueger (1994:17), endorsed the use of very small focus groups, or so-called “*mini-focus groups*”. Small focus groups, with three or four participants can be used when participants have specialised knowledge (Krueger & Casey, 2015:82). Thus, even

though the focus groups in this study were small, the participants had extensive experience as OR qualified PNs and could make meaningful contributions during the focus group interviews to reach the study objectives.

Focus group data analysis differ from individual interview analysis, as the complexity of group interaction is added (De Vos *et al.*, 2011:373). The researcher and facilitator engaged in extensive listening, by focusing on the detail and overall understanding of what was said, to be able to make comprehensive field notes. The facilitator and researcher discussed their field notes about the verbal and non-verbal communication of participants after each focus group discussion. These field notes supplemented the audio-recorded data.

In the first focus group, the participants actively engaged in the conversation and all the participants had a positive attitude during the group discussion. They agreed on one another's viewpoints and each participant added valuable remarks. In this group, two of the participants were dominant speakers; however, the facilitator ensured that all participants had equal time to speak, even though it was an open floor, by asking specific participants each a question and drawing in those who seemed quieter

In the second group, all the participants showed interest in the topic under discussion. A positive group interaction was also noticeable in this focus group discussion, and participants were enthusiastic to share their experience in the group.

Conversely, the third focus group had a slow start and the participants did not seem very eager to engage in the conversation at first. After the first participant started speaking, two other participants seemed to relax, and then they engaged in the discussion. Yet, one participant in this group remained distant and seemingly indifferent during the first part of the discussion. During a meeting between the facilitator and the researcher after the focus group discussion, the facilitator remarked that the indifferent participant seemed to be very tired, especially at the beginning of the group discussion, but as the group discussion progressed, she become more conversant.

In the fourth focus group, there was one dominant participant who seemed very positive about mentoring during the interview. One participant displayed a closed body language, although she took part in the conversation, and shared her perceptions regarding mentorship in the OR freely. The third participant in this group seemed more reserved and the facilitator successfully prompted her to involve her in the conversation.

The above group interactions that were noted and recorded in the field notes were taken into consideration during the data analysis. Also, the repetition and comprehensiveness of comments were carefully considered during data analysis, as the aim of focus group data analysis is to search for trends in each focus group, and then among different focus groups (De Vos *et al.*, 2011:373).

### **4.3 THEMES AND SUB-THEMES EMERGING FROM THE FOCUS GROUP INTERVIEWS**

The data from the focus groups are presented according to the identified themes and sub-themes, as it occurred within each focus group, and among the four focus groups. The aim of the study was kept in mind throughout data analysis, as indicated by Krueger and Casey (2015:138). The field notes of the observer were also taken into account while identifying themes and subthemes. Each focus group data set was analysed separately and then compared to one another. Similar themes and subthemes were identified in all the groups. The themes are supported through quotations from the participants, using the following format: [FG1, P1]. This refers to focus group one, participant one's words.

The data collected from the focus group discussions included participants' descriptions of their perceptions of their role as mentors to novice nurses as a supportive role and setting an example for novice nurses. The participants also stated that being a mentor requires some degree of intrinsic motivation and self-confidence in your own knowledge and skills.

The participants emphasized that the attitudes of novice nurses' also have a direct influence on the mentors' approach. They agreed that there are various factors in the OR environment that either inhibit or contribute to their mentoring roles and to the extent that they are able to effectively mentor novice nurses. The participants of one of the focus groups in a public hospital added that that they work with inexperienced medical practitioners, and considered it a factor that influence their mentoring role. They regarded this as added stress, resulting in less time to mentor novice nurses.

The perceptions of the OR qualified PNs regarding their role as mentors of novice nurses in the OR appeared to have been formed by different factors. The themes and subthemes are presented in Table 4.2 below, followed by an in-depth discussion thereof.

**TABLE 4.2: Themes and sub-themes**

<b>THEMES:</b>	<b>SUBTHEMES:</b>
Supportive roles	Role modelling
	Standard setting in OR practice
	Creating teaching and learning in OR environment
Realities of OR in context	Production and workload pressure of the OR
	Staff shortages
	Resource constraints (material)
Challenges for mentoring role	Competence level of novice nurses
	Lack of orientation of novice nurses
	OR team members' attitudes for mentoring
	Mentoring practice and processes

### 4.3.1 Theme 1: Supportive roles

During the focus group interviews, participants referred to various aspects of mentorship. The supportive role of mentors was described by participants, specifically as they experience it in the unique OR environment: "*...it is always the supportive side*" [FG3, P13]. Participants included many references about the expectation that they must lead the way for novice nurses and ensure that they maintain a high standard of mentoring. In addition, participants emphasised that the OR is unfamiliar and threatening to novice nurses, which influence the way they mentor novice nurses.

One participant mentioned that OR qualified PNs have the responsibility to be good mentors to novice nurses and to lead the way for them. However, teaching and mentoring in the OR environment is not always conducive to learning or supported by the OR environment. Being a mentor does not only involve teaching and conveying your expertise. There needs to be a certain degree of passion for your work and a passion for sharing your knowledge: *“So mentorship should not evolve around the fact that you are just here to work, you should have a passion and love for it as well”* [FG1,P5].

#### **4.3.1.1 Subtheme 1.1: Role modelling**

All the participants agreed that being a mentor involves setting a good example in their everyday work and being a role model for novice nurses *“...it’s not what you say that makes you a mentor, it is what you do without you knowing that people are watching you”* [FG1, P5]. When a mentor sets a good example and is consistent in role modelling the right procedures every day, it can change novice nurses’ attitude to also work correctly every time: *“...when we are consistent about doing the right thing...they are bound to copy”* [FG3, P13].

While being a mentor and role model includes providing support for novice nurses and coaching them, one participant added that mentors have a responsibility to check on novice nurses continuously: *“So yes, I think one should stand with them the whole time and keep an eye on them, keep your thumb on them”* [FG1,P5]. A mentor who is serious about his/her role will also never just leave novice nurses to carry on by themselves: *“Our conscience doesn’t allow us to do that to our students. You’ll go after them, you, you will fight, but you will do it”* [FG3,P13].

When considering who needs to be mentors, it was noted that it is not only certain OR qualified PNs should be mentors, but that all OR qualified PNs have that responsibility. Yet, the teaching responsibility of PNs are often portrayed onto the clinical facilitators and the PNs tend to forget whom they were taught by as novice nurses.: *“I think we, some people, and I this is my viewpoint, we forget that we were*

*also students, we think umm, there are clinical facilitators who do the teaching, so they should do it, I've got my own work, so I don't need to teach" [FG2,P9].*

In addition, mentors should remember where they started as a novice nurse and look at mentoring as an opportunity to teach a novice nurse according to their standards: *"...what we should keep in mind here is the fact that it is an opportunity to teach someone according to your hand, umm yes... to, to bend the tree while it is still young, I think we should just bring that back into place" [FG2,P9].*

Participants perceived the motivation to teach as an important aspect, as wanting to be a mentor versus not wanting to be a mentor can influence the learning experience of novice nurses in the OR.

#### **4.3.1.2 Subtheme 1.2: Standard setting in OR practice**

Participants felt that mentors should be PNs who set an example and always follow a certain standard: *"...if you have a certain standard as a mentor, don't downgrade your standards. Don't fall to someone who doesn't want to learn standards" [FG2,P6], "...we do you follow this standards you don't compromise you do ever according to the laws of the institution or the department" [FG3, P11].*

Participants in focus group one, two and four described the standard of mentoring as an integral part of the mentoring process that will influence the future standards of nursing. They expressed their concern regarding certain mentors' standards: *"you allow a person to pass, and no one can believe that this person has passed. What do you leave to enter the world? That person won't be an advocate for her patient" [FG1,P5].* A participant added that not only will poor standards in mentorship influence patient care, but also affect the name of the training institution that awarded the nursing qualification: *"you throw away the University's name, because that person will say abroad that she studied here at ....University and she is so pathetic" [FG1,P3].*

Participants in focus group two and four elaborated on mentoring standards. They added that mentoring standards were decreased by novice nurses who want to be placated, and are unwilling to learn: *“to let them learn effectively, it sometimes feels to me that our standards fall, because you have to get onto their level to get the best out of them, you have to please them the whole time, and that I struggle with”* [FG2,P9]. When novice nurses give the impression of not wanting to learn, mentors tend to withdraw as well, as they feel it is not worth teaching someone who does not want to learn: *“what is the use of you teaching them, if they say they are not interested in working here”* [FG4,P16].

In all four focus groups, participants agreed that there should be certain standards for mentors to ensure an acceptable quality of mentoring. Participants understood that the supportive role of mentors in the OR include a responsibility to uphold certain standards of mentoring. In addition, they agreed that novice nurses also influence the standard of mentoring through their own behaviour and willingness to learn in the OR.

#### **4.3.1.3 Subtheme 1.3: Creating an environment for teaching and learning in OR**

The supportive role that OR mentors play is not restricted to leading the way and maintaining standards. Mentoring in the OR environment maybe further influenced by the complexity this specialized nursing department.

Participants in all four focus groups emphasized the complex and strange OR environment. They agreed that the OR is intimidating for novice nurses: *“...it is a different world to go into in the OR”* [FG2,P7]. They shared similar experiences that novice nurses are often afraid to work in the unknown, isolated OR department: *“So we need to remember that it is bad for them to come in to the environment that are not known to them. We know most, fear for the unknown?”* [FG1,P5].

During the focus group discussions, the supportive role of mentors was emphasised through participants' acknowledging the strange and often intimidating environment they work in. They also understood that the OR environment is intimidating and scary for novice nurses, which in turn affects their learning. The participants agreed that mentors should therefore aim to create a more conducive learning environment for their mentees: "*we must make it more appealing for them, so that they know they are welcome here*" [FG1,P5]. "*...I first try to make them feel comfortable and at ease, you understand?*" [FG2,P8].

Yet, the OR as learning environment is not only influenced by a welcoming atmosphere. It is also greatly influenced by the specific surgical procedures, which allow for learning opportunities or by its nature, does not: "*It depends, because like today we do mastectomies. It is a placid atmosphere..., but it almost feel to me like it is an operation where I don't have to think, I can relax a bit...*" [FG1,P3]. The participants agreed that more specialised procedures had an influence on mentoring in the OR. Major surgical procedures or emergencies do not allow time for effective mentoring: "*...then you get an aorta or something more serious. Then there is no time to teach*" [FG1,P3], "*in emergency situations, it is also very difficult to, to teach someone, because then it feels, they should now really stand in the corner, because they are actually now in the way*" [FG2,P8].

In addition to complex surgical procedures, participants added that the unpredictability of staff allocation in the OR contributes to the unfamiliar environment. PNs often work in different surgical specialities daily, consequently, novice nurses tend to work with a different mentor every day: "*...the people are moving, today they are gynaecology, emergency, orthopaedic ...today she's working with this person, tomorrow she is working with this one..., so it's an problem*" [FG3,P11].

Participants emphasised that they have a supporting role in mentoring novice nurses in the OR. They feel responsible for maintaining high standards in mentoring, but they described how the specialised nature of OR nursing might influence mentoring negatively.

### 4.3.2 Theme 2: Realities of OR in context

The participants remarked on the realities in the OR environment and that their role as mentors added additional pressure to their daily routine that was already very demanding, as it is a specialised field. The additional pressure to mentor novice nurses is influenced by the realities of the OR in context. Factors like a high workload, staff shortages and the lack of resources. These factors, inherent in the OR, increases the stress and pressure on the PNs and their role as mentors are affected by this: *“And we are also tired - so many factors in place, we are irritable because of these very factors”* [FG3,P10]. It was clear that work pressure contributes to the mentors’ attitudes. Participants experienced that they are not fully focussed on teaching novice nurses when they are overworked and tired: *“I must also say it depends on how tired you are. If you have worked alone for a week and you are not feeling up to people and talking, and you still need to teach someone, \*sigh\* then it is a bit challenging”* [FG1,P1].

Even if participants experienced mentoring as an additional pressure, they also stated that mentoring requires a motivation to teach. Specifically with consideration of the added pressure they associate with mentoring, mentors must have an intrinsic motivation to teach for an effective mentoring relationship: *“you want to be a mentor or you don’t want to be an mentor, so it really depends on your experience, your knowledge your positiveness”* [FG3,P10].

#### 4.3.2.1 Subtheme 2.1: Production and workload pressure

Personnel in the OR work under huge pressure relating to time and workload, as there is only a certain amount of time, with the maximum amount of patients. The work pressure and time available sometimes prevent PNs from mentoring novice nurses in the OR: *“you don’t always have the time to explain to them”* [FG1,P2], *“Work pressure and the fact that now maybe sometimes you won't be able to be an role model as because you have to do everything in a hurry”* [FG3,P11]. Participants emphasised the pressure they feel to achieve more in less time, and that it influenced their capacity to be effective mentors.

Production pressure was experienced even more by participants in the private sector. As patients pay per minute of theatre time, *“time is money”*: *“look, we are busy, the private sector is busy, and everything evolves around time and money”* [FG4,P15]. Not only did participants emphasise that surgical procedures translate into financial gain for private institutions, they also demonstrated concern about the cost implications of lengthy surgical procedures on patients: *“Okay, it is quite important for us, time, because everyone works against time and the patient pays per minute and the damn anaesthetic time is expensive hey. So you know you shouldn’t waste the persons money”* [FG4,P16], *“look, we are busy, the private sector is busy, and everything evolves around time and money”* [FG4,P15], *“...but if I can refer to what ██████ said, then we think about time and money in the private sector.”* [FG2,P9]. Thus, mentors in the private sector hospitals find it difficult to invest adequate time in mentoring novice nurses, as they also considered that added theatre time result in higher costs to private patients.

#### **4.3.2.2 Subtheme 2.2: Staff shortages**

In this study, participants described how staff shortages in the OR also translate into additional pressure on mentors. Both in public and private sector hospitals, they emphasised that shortages of staff in the OR have an effect on the degree to which mentoring is provided for novice nurses: *“you have a short of staff”* [FG3,P11]). The PNs remarked that it is easier to be an effective mentor when there are more than one PN allocated to a certain theatre list, thus allowing more time to engage with novice nurses: *“if you are more than one on a list, then you can invest in teaching, understand?”* [FG4,P16]. Participants argued that it was hard to be the sole PN on a theatre list, and give their full attention during surgical procedures, whilst also mentoring at the same time: *“It also depends whether you have help on your list as well”* [FG3,P6].

While participants concurred that staff shortages result in a decreased mentoring capacity, they also perceived that staff shortages contribute to absenteeism in the OR: *“And lack of human resources make increase absenteeism rate, because if we become over work and we are tired”* [FG3,P12]. Consequently, the shortage of staff directly influence the absenteeism rate.

While the OR was described as a specialised nursing department that requires effective mentoring, participants accentuated that production pressure and staff shortages affect their mentoring capacity negatively.

#### **4.3.2.3 Subtheme 2.3: Resource constraints (Material)**

Not only is the shortage of human resources problematic in the OR, but the lack of material resources also hinder mentoring in the OR. One participants described that they find it very hard to teach a novice nurse the correct clinical skill, such as draping, when they do not have drape packs to demonstrate it correctly: *“At a certain time period we didn’t even have towels. Now you teach the students to drape a certain way... now you have to anticipate because you don’t have it available... So they have to learn it, but they don’t see it...”* [FG1,P2],

Especially participants in the public sector experienced that a lack of resources prevents or limits mentors from teaching novice nurses the correct way: *“public sector, we’ve got budget constraints, imagine, it’s a problem for us, it’s a lot of problem for us”* [FG3,P11], *“...the patients is booked and the operations is going to be done in the mean time you don’t have the surgicell, you don’t have the material resources* [FG3,P14], *“The fact that you often do not have stock or equipment is broken or whatever...”* [FG1,P2].

These statements reiterated the challenges that mentors experience in effectively mentoring novice OR nurses. They described the benefits of clinical demonstrations, but they highlighted how resources constraints limited efficient mentoring: *“The fact that you don’t have stock a lot of the time... you are supposed to use this, but now*

*we use something else. So you actually confuse the people because you can't teach them in the correct way" [FG1,P2].*

Thus, instead of providing effective learning opportunities through correct demonstration of skills, they often resort to verbally stating the correct techniques, but not implementing it due to constrained resources. Consequently, participants considered that this might hinder novice nurses from learning the correct OR principles and techniques.

Therefore, both human and material resources are considered important aspects to provide adequate mentoring for novice nurses in the high-risk OR environment. However, the pressure to do more in less time, together with a shortage of staff and resource constraints, was seen by participants as factors that hinder effective mentoring.

### **4.3.3 Theme 3: Challenges for mentoring role**

During the focus group discussions, participants described their mentorship role as challenging. They distinguished these challenges from the added pressure that they experience by relating it to the competence, orientation, behaviour and attitudes of OR staff.

Participants in all four focus groups discussed how the theoretical and clinical competence of novice nurses and the limited OR orientation that novice nurses receive, influence effective mentoring. They also described how the attitudes of the OR team members, including that of novice nurses, pose challenges to them. In addition, they elaborated on how the mentoring process itself can be a challenge, especially if the PNs are not motivated or inclined to mentor novice nurses.

#### 4.3.3.1 **Subtheme 3.1: Competence level of novice nurses**

Participants regarded foundational knowledge as an important factor in nursing when entering any clinical field. Specifically, they expected novice nurses in the OR to have a basic level of foundational knowledge, such as the principles of sterility, to be able to understand the unique OR environment.

However, the participants in the study experienced that not only do novice nurses often lack an understanding of basic OR principles, but they also have very little understanding of basic nursing, unrelated to the OR: *“Yes, for sure, and it has nothing to do with theatre technique. It is basic nursing”* [FG1,P2]. PN participants expected the foundational knowledge of novice nurses to be in place to enable mentors to guide and teach them effectively. PNs stated that it is frustrating for them to mentor a novice nurse who has limited basic nursing knowledge upon entering the OR: *“They don’t have any other knowledge...”* [FG1,P8], *“It’s like you said, a complete lower level, and then she is supposed to keep up with the other students. It irritated me a lot...”* [FG1,P1].

During the focus group discussions, participants distinguished between their mentorship approaches for novice nurses in different nursing categories. The professional category of the novice nurse affect their mentoring approach, as the different categories of novice nurses have different objectives and mentoring needs: *“I feel if it is a new sister, then you should have had some theatre exposure in your four years training, then I think you’re not going to be so brand new as a student nurse for example. Yes, I think then you are going to handle it differently”* [FG2,P9]. Thus, mentors expect that undergraduate nursing students will need more mentoring than novice OR PNs.

It was also mentioned that all novice nurses should have adequate basic nursing knowledge. In addition, they expect that novice OR PNs, whether from the same institution or another, should first obtain some OR experience before they are entered into a postgraduate OR qualification course: *“Her institution sent her, I understand that, but the foundation should be laid down”* [FG1,P5]. They expected

novice PNs to have an OR background and sufficient foundational OR knowledge: *“The stuff is not known to them at all. So, we for instance could scrub if we did the course, and be involved, because we knew more or less what was going for what, but they do not have a clue. So I think if they apply to do the course, they should have some kind of background of theatre...”* [FG1,P2],

Participants reiterated the importance of clinical OR experience during the focus group discussions. They suggested that theoretical knowledge can easily be obtained by studying and memorising of facts, but clinical competence in the OR only comes with practice, and some novice nurses lack these practical skills: *“They probably learn those things like rhymes of by heart, because they get 80%, but if they walk into theatre, then they don’t even know how to wash their hands”* [FG1,P3]. Although participants acknowledged that some novice nurses do have adequate theoretical knowledge, they questioned novice nurses’ ability to translate theoretical knowledge into practice: *“This theoretical knowledge story doesn’t always work for me, because the book is according to what should happen, but if the patient’s condition change, then you can’t remember a book, then you have to do what needs to be done...”* [FG1,P5].

Mentors described how the level of clinical competence of novice nurses determines the method and extent of mentoring by OR qualified PNs: *“I look at what they can do, and if I see this sister is very slow, she scrubs slow, you can go through the steps faster, and you drape so slow, then I tell them... you must work a bit faster now...”* [FG4,P16]. Thus, participants deemed it important for mentors to evaluate the clinical skills of novice nurse to identify their learning needs.

While participants appreciate the clinical skills level of novice nurses, they also discussed how the learning abilities of novice nurses determine the mentoring approach which they will follow: *“Let me start with a sister, I feel that it is important for myself to find out where this sister is with her training, and what must I add for her from my side”* [FG2,P8]. However, they perceive that some novice nurses take more time to learn and be competent in certain skills, and that those novice nurses require more mentoring: *“I first try and determine what the intellectual level of the person is and go from there, and if you can see some are faster learners, then you go faster,*

*and those who are slower learners, you teach them a bit slower”* [FG4,P16]. Participants indicated that they often spend a great deal of time on mentoring novice nurses who are slower learners: *“it took me five months to teach her the basic things, she is a very slow learner...”* [FG4,P16]. Yet, one of the participants mentioned how novice nurses who learn slower sometimes cause frustration, as the mentor need to repeatedly explain and demonstrate the same procedure (*“I’ve put in a lot of effort with her and it was very frustrating, because you feel today, yesterday I told her everything, and today I have to repeat it again...”*) [FG2,P16].

Participants in this study perceived their role as mentors as challenging. They described some frustration due to insufficient theoretical knowledge and limited clinical skills of novice nurses. Yet, they also understood the importance for mentors to know the abilities and professional category of novice nurses in the OR.

#### **4.3.3.2 Subtheme 3.2: Lack of orientation of novice nurses**

The limited knowledge and clinical competence of novice nurses emphasised the importance of a structured orientation programme in the OR. However, throughout all the focus groups, participants highlighted that they perceived the orientation of novice nurses entering the OR for the first time as deficient: *“I tend to agree 100% with the fact that they are not orientated”* [FG1,P5]. Even if they found the orientation of novice nurses to be lacking, participants explained that they do orientate novice nurses in the specific surgical discipline where they are allocated to: *“I give her an orientation of how my theatre setup works and how my theatre runs”* [FG2,P8].

However, orientation in a surgical speciality was not deemed sufficient. *“...let them get comfortable first especially for the first day...”* [FG2,P6]. As the OR is such an unfamiliar environment, participants agreed that a specific orientation and induction program is essential in the OR: *“There should be a program according to which you teach them, a set out program, you start here, so you first introduce them and explain what is where and what goes for what”* [FG4,P15]. One participant also noted that orientation and induction through simulation would be of value for novice nurses entering the OR for the first time. Such a programme should include aspects such as

principles of sterility and the general routine in the OR, *“so I think you must make a point of it the moment they are introduced to theatre, that they should be taught, even if it is in simulation, about opening sterile packs and unsterile packs”* [FG2,P9].

The participants from one of the public sector hospitals, who are involved in training of the postgraduate OR students, mentioned that it is important for potential postgraduate OR students to first do an induction program in the OR: *“I feel...theatre technique students must be evaluated to do the course... we were required to first work a year and rotate in the theatres, before we could do the course. So we had a relative background of what happens in each speciality”* [FG1,P3]. Participants highlighted their perception that OR experience in each surgical discipline should be structured through an induction programme, prior to approving candidates for a postgraduate OR qualification course.

A structured orientation programme will not only provide novice nurses with essential clinical skills. Participants agreed that proper orientation of novice nurses will also contribute to creating a more welcoming environment for the novices. Consequently, they will be more comfortable in the unfamiliar OR: *“to make the stay of the novice nurse more comfortable... must have the feeling of being more welcomed in the department, yes it's very important so we must orientate him or her...”* [FG3,P13], *“...let them get comfortable first especially for the first day...”* [FG2,P6].

An absent or insufficient orientation programme for novice nurses escalate the challenges that mentors experience in the OR. Due to the fact that the OR is a complex and unfamiliar environment to novice nurses, all the participants strongly agreed on the value that an adequate orientation and induction program can provide for novice nurses. In turn, participants agreed that a structured orientation programme will assist them in providing more effective mentoring.

#### **4.3.3.3 Subtheme 3.3: Attitudes of both novice nurses and OR team members in mentoring**

Effective mentoring requires a partnership, or relationship, between the mentor and the novice nurse. Part of the mentorship relationship can be defined as the mentors' approach, which includes the attitudes, roles and motivation of the mentor. As mentoring is always a two-way relationship, the mentor's attitude is important. In this study, participants in all the focus groups agreed that *"the student should give, but the mentor should give as well"* [FG1,P1].

The attitudes of the OR team members are important for effective mentoring to take place. These include the attitudes of the mentors themselves, the novice nurses, the other OR personnel, as well as the medical practitioners. *"So the mentor's attitude also plays a role"* [FG2,P8]. Therefore, the manner in which a mentor reacts or the way a message is conveyed, can make or break a mentoring relationship. Participants also described *"if you want to earn respect then you should act in a way that people will respect you"* [FG1,P5]. They agreed that mentorship *"is not always what you say, but how you say it..."* [FG1,P5], and that it could affect the mutual respect between the mentor and mentee.

Even if participants value mutual respect, they indicated that the mentor's attitude is often influenced by the novice nurses' attitude. They experienced that they tend to invest more in the mentoring relationship if the novice shows willingness to learn: *"Remember, it influences your attitude towards the student. If you see she is interested, then you want to teach her, but if you see she's not really interested and she just want to finish this case, then you also don't really feel like teaching her anything"* [FG1,P4]. Participants seemed to evaluate novice nurses' willingness to learn by their participation or eagerness to perform clinical tasks: *"I look at what her reaction is, is she really interested..., you get those students who immediately starts working: 'sister, please tell me what I should do, I don't want to just stand around', then I go full steam ahead and teach them...but the others... that still stand with their arms folded, I don't give a lot of attention to them, and I'm honest about that"* [FG2,P8]. If novice nurses show an interest in the surgical procedure, or clinical

tasks, mentors will “...give it all and I show them and teach them everything” [FG2,P8]).

It is important to keep in mind that the PNs also sometime have a bad day, and do not feel up to mentoring or teaching on those days. This should not demotivate the novice nurse or the mentor, as it is normal in any relationship: “... I also have my off-days, then you should know it is an off-day. I have my days when I’m not feeling ok, and then I tell her I don’t feel good today, so please bear with me” [FG1,P5]. Although mentors mention that they do not always feel up to mentoring, when the novice nurse displays a positive attitude it also provokes a positive attitude from the mentor. This allows room for faster and more in-depth learning and mentoring.

While the participants noted that a positive and active learning attitude from the novice nurse is important, they also expressed a mutual feeling that a passive learning attitude from novice nurses cause some frustration when mentoring. “There are two kinds (of novices). There are those who are not interested, they just there with their cell phones, and they sit the whole day with their cell phones from start to finish” [FG1,P3]. Participants described how many novice nurses enter the OR with neither motivation nor eagerness to learn. Focus group two reiterated how “it’s something that we sit with every day... the student nurses sit on chairs against the wall playing with their cell phones” [FG2,P6]).

One participant mentioned how the body language of novice nurses can tell you whether they are interested in the OR procedures indicates “do you want to learn or not?” [FG4,P15]. This participant described that a novice nurse that is not attracted to the OR environment and has no interest in the procedure in front of them, might demonstrate a closed demeanour with arms folded.

Although other focus groups did not discuss body language as an indication of novices’ willingness to learn, participants of one of the focus groups specifically mentioned that novice nurses do not help with theatre preparation for emergency cases. They experienced how novice nurses would sit in the tearoom and complain about tiredness, rather than utilising these learning opportunities: “the others would say: No, they are really tired now, they are going to sit a while” [FG1,P3]. They also

described how novice nurses were unwilling to assist and *“they won’t even take sets in to theatre”* [FG1,P1]. Evidently, participants perceived that novice nurses sometimes *“do nothing, they just sit in the tearoom”* [FG1,P3]. In turn, this affected participants’ willingness to teach.

As previously mentioned, the intrinsic motivation to teach from the mentors’ side is important for an effective mentoring relationship. Equally important is the novice nurses’ motivation to learn. Throughout the focus group interviews, participants reiterated that the mentoring relationship would not be of value and difficult to establish if novice nurses do not display any motivation to learn. Participants also perceived that some novice nurses want to work in the OR to get better salaries, or OR allowances, *“lot of them does it...to get OSD (occupation specific dispensation) and those things. They tell us that. They are not really interested”* [FG1,P3]. Even if novice nurses may appreciate the dedication and skill of OR qualified nurses, they may also acknowledge that they are only in the OR for financial gain: *“you know sister you are fast, how many years do you have’, and I’m telling him, he said oh, oh sister wow, but you sisters, you’ve got the dedication, we are just here for the salary and that’s it”* [FG3,P13].

The participants in this study furthermore experienced how some novice nurses display a laid-back attitude towards their work and learning objectives and display a *“don’t care attitude”* [FG3,P13]. They also commented that the novice nurses have the perception that the mentors are old-schooled. Consequently, they do not follow the example of the mentors: *“and they don’t copy what we are doing now, because we are the old school they feel what we are doing is dumb”* [FG3,P11].

As medical practitioners form an integral part of the OR team, the medical practitioners’ attitudes also influence mentorship. *“So sometimes you get the difficult doctors...”* [FG3,P13]. With *“difficult doctors”*, participants experienced how pressure from a surgeon sometimes result in inadequate time and opportunity to provide effective guidance to novice nurses: *“so you working with a very difficult surgeon, you know you’re very stressed as a sister because you are going to scrub and there is an new student that you have to teach here, you don’t even give them the eye you just give them to the floor nurse and saying help them out”* [FG2,P6]. The PNs

experience tremendous work pressure from the side of the surgeons, as surgeons tend to get irritated and demanding when unforeseen circumstances arise: *“the minute they get stressed about something or a cannot get something right, like it’s an artery bleeding or whatever, and then they are thinking and shouting”* [FG3,P13]. Participants tend to then rely on the circulating nurse, who may be an EN or ENA, to lead novice nurses. However, as certain medical practitioners do not want staff talking in theatres, the mentors cannot give direct guidance and on the spot training to novice nurses as desired: *“Some of the surgeons doesn’t want a lot of talking around them so there isn’t time to talk, umm and even in theatre 7 you are not allowed to, to whisper even, so it makes it difficult”* [FG2,P9].

Adding to the pressure the PNs experience from the medical practitioner’s side, working with an inexperienced surgeon might cause a more stressful atmosphere in the OR due to the fact that there is a higher possibility of medico-legal risks occurring. Thus, mentoring tend to be difficult in these situations, as the PNs cannot divide her attention between the surgeon and the novice nurse. This was evident especially in the public sector hospitals: *“Another challenge can be working with an inexperienced doctor”* [FG3,P11].

In the case of the novice nurse being a new PN, learning to scrub, it was mentioned by participants in all the focus groups that the medical practitioners’ attitude towards them can prevent proper learning, as the surgeons do not easily accept novice personnel: *“a lot of the time...the sister is doing good, but the doctor just don’t like her, for some or what reason things are difficult and you see he is agitated, he doesn’t say anything, but he is agitated”* FG4,P16].

Hence, the attitudes of the medical practitioners can affect mentoring in the OR and also influence the creation of a conducive learning environment: *“...but it depends on which surgeons is working. If there is a certain surgeon, then we know this surgeon loses it when he sees a student”* [FG1,P1]

The analysed data in this study repeatedly revealed how *“...the doctors that you have work with”* [FG2,P6], as with the attitudes of all OR team members influenced effective mentorship.

#### **4.3.3.4 Subtheme 3.4: Mentoring practice and process**

During the focus group discussions, participants described how novice nurses “*don’t get the opportunity to work with a mentor for a whole month, so you can’t walk a path with someone, they are thrown around a lot, today they work in gynaecology, tomorrow in urology, Wednesday in surgery...*” [FG2,P8]. As it relates to the mentoring process, the participants suggested that the novice nurses should be allocated to a specific PN in the OR, rather than to a different theatre and mentor each day. In this way the opportunity will be provided for the mentor relationship to be established and to teach the novice nurse effectively: “*then allocate you a week to a person, then, yes a week is short, but uhm, I think, then they at least have an idea of what they like, gynaecology, orthopaedics, surgery, then they can form an idea, a picture in their heads*” [FG2,P9]. They agreed that the allocation of novice nurses “*to a person*” [FG2,P9], would enable consistent mentoring, while also giving novices more experience in different surgical specialities.

Participants agreed that novice nurses should receive active input from mentors to prepare them for surgical procedures: “*I think what I now try to do when they are with me on my afternoon list, is to talk to you specifically, and say: ‘listen here, I am going to expect this and that of you’ and to talk a bit softer with the person, that is just what I try to do, just trying not to scare her off, and I explain to her that this doctor is a bit rude so don’t be bothered by him, and if you talk loud and fast it is not necessarily being angry*” [FG2,P9]. During the mentoring process, the mentor should aim at creating a comfortable and relaxed environment for the novice nurse to enhance the learning experience: “*if you put them at ease, then they relax*” [FG4,P16]. One way of creating a conducive learning environment can be to explain the procedures and routine of the specific theatre to the novice nurse beforehand. In this way the novice nurse will be more relaxed and know what to expect in the OR, optimising all learning opportunities: “*...so just a highlight even before the operation what is going to take place, what is the actual operation, the patient is going to get anaesthetised and the surgeon will cut, then you using, your preparation, the blades, all the different sizes, the cautery point or what is done with the cautery point, such things. So that at least when the operation is on, she’s having, okay an idea*” [FG3,P13].

However, participants perceived that the learning opportunities of student nurses are limited as they are regarded as part of the workforce. They experienced that there is no time for novice nurses to observe first and get acquainted with the OR routine before they are expected to function as an independent team member: *“then my student nurses I feel, they should not be taken as part of the team, they are not really workforce...”* [FG2,P8].

An active mentoring approach tends to provide more learning opportunities, especially in a complex clinical environment like the OR: *“you let them scrub with you once, and then you scrub with them the next time, but you just sit there on the chair, because if you stand there next to them, then they make use of your brain”* [FG1,P3]. Therefore, participants agreed that learning can be enhanced or inhibited by the mentoring approach followed by the mentor. When the PNs do not have time to provide direct mentoring and teaching to the novices’ themselves, they often allocate the novice nurse to another staff member that they trust to teach the novice nurse (*“what I often do when I have someone that is new, then I look at who my floor nurse is, and then I make sure I trust that floor nurse with my heart. Then I tell her: ‘don’t you want to work with [REDACTED] today, I’m alone and I can’t give a lot of attention to you’, then she knows she can communicate with [REDACTED] the whole time”* [FG2,P9]). Participants regarded this as an effective way of still providing active mentoring when the designated mentor does not have adequate time to mentor the novice nurse.

Another advantage of an active learning approach is that the novice nurse gets the opportunity to learn through practical experience, which tends to speed up the learning process: *“I don’t let them wait that long, no, get it together, they can tell you the instruments names, they can do the draping and so on, but I let them get involved quickly...”* [FG4,P16]. Most of the participants in this study agreed that a passive mentoring approach can have a negative outcome on the novice nurses’ learning, as they do not get the opportunity to actively engage in clinical learning experiences. Conversely, some participants advocated for a passive mentoring approach. An example of a passive mentoring approach was explained by two participants in focus group four. They prefer a new novice nurse to first stand in theatre and only observe, not taking part with the OR routine work: *“if there is a new*

*sister with me that needs to learn how to scrub, then you first stand there and watch me for a few months, and if you don't look and pay attention, then you won't learn. I don't let them scrub at first, they should first learn the sets and know the basics, then only will I let them scrub*" [FG4, P15]. A definite passive mentoring approach was evident in focus group four with referral to undergraduate students coming into the OR during their rotation. They experienced that these students are not allowed to do anything in theatre and they should only learn passively through observation: *"and they are not allowed to do anything, we were told they are only allowed to stand in theatre and observe"* [FG4,P16].

In the event of the novice being a PN, the participants mentioned that the novice PN is dependent on the knowledge and experience of the mentor. An example of such behaviour is when the mentor scrubs with the new PN, dictating every step of the procedure, thus, not allowing the novice to think for themselves: *"you ride on people's back because they think for you. So it is true what they say: leave them that they carry on by themselves"* [FG1,P4]. Therefore, allowing the mentee's to start working on their own and just assisting when needed, allows more opportunity for them to grow and become independent OR nursing practitioners.

Even though the OR are a specialized and complex environment, the OR qualified PNs should aim at providing adequate support for novice nurses, by means of creating a conducive learning environment for novice nurses to learn hands-on and by following an active mentoring approach.

#### **4.4 SUMMARY**

The participants' viewpoints during the focus group discussions provided the researcher with insight on their perceptions of the mentoring role as well as the factors which influence this mentoring role.

The four focus groups in both Private and Provincial health care institutions presented almost identical results. All the groups indicated that mentoring of novice nurses in the OR is important, but not without challenges. Clear differences between

the groups was that the private sector often has time constraints which limits effective mentoring, due to the fact that time is money in the private sector. The public sector, on the other hand, mentioned the excessive stress on the OR qualified PNs when working with inexperienced medical practitioners, limiting the time available for mentoring.

## **4.5 CONCLUSION**

In this chapter, the results of the focus group interviews were discussed by means of a thematic presentation of the data obtained. The corresponding responses of the participants were given in support of the identified themes and subthemes

In Chapter 5, the above mentioned themes and findings will be discussed in accordance with the existing literature.

# CHAPTER 5

## *Discussion, limitations, conclusions and recommendations*

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### 5.1 INTRODUCTION

The researcher conducted a descriptive study to establish the perceptions of OR qualified PNs regarding their role as mentors of the novice nurses in the OR. In this chapter, the findings of the focus group interviews, as they were discussed in Chapter four, will be discussed and interpreted in relation to the objectives of the study as well as with the existing literature. Chapter five concludes with recommendations, limitations and dissemination of the research.

### 5.2 DISCUSSION AND INTEGRATION OF LITERATURE

The aim of this study was to understand and describe OR qualified PNs' perceptions of their role as mentors in the OR. As described in Benner's theory (Benner, 1984:404), OR qualified PNs, can be regarded as potential mentors as they have sufficient experience in a specialised nursing field. In addition to experience, mentors are also required to have the required clinical competence (Robinson *et al.*, 2012:7). Participants of this study concurred: *"the (mentorship) role is very important for an experienced theatre trained nurse"* [FG3, P13]. Thus, being a mentor in the OR is perceived as being a crucial role for OR qualified PNs. The specific role of mentors as perceived to be supportive, although it places additional pressure on OR qualified PNs, and is often challenging. The way that participants in this study described their mentorship role correlates with the definition of the mentoring role as: *"the clinical teaching, assessing and evaluating, providing guidance and support to novice nurses"* (Walsh, 2008:17; Royal College of Nursing, 2009:5).

Various aspects influence OR qualified PNs' perception of mentoring novice nurses, and were reiterated throughout the focus group interviews. Participants focussed mainly on aspects such as supportive roles of mentors, and realities of the OR which included staff shortages, production and workload pressure and resource constraints that result in additional pressure on the mentors. Other challenges in their role as mentors include the competence and orientation of novice nurses, compatibility of mentors and mentees and the attitudes of novice nurses, surgeons as well as the mentors themselves.

Participants in all four focus groups emphasised the mentorship needs that novice nurses in the OR have. This corresponds with Persaud (2008:1179), who emphasised that OR qualified PNs should understand the need to mentor novice nurses and therefore be willing to invest time and effort into their mentoring roles.

### **5.2.1 Objective 1: The perceptions of OR qualified PNs regarding their role as mentor**

Mentoring in the OR is a highly effective method to prepare novice nurses, and it is a helpful way to support them in developing as independent practitioners (Ajorpaz, Tafreshi, Mohtashami, Zayeri, & Rahemi, 2016:1324). Emanuel and Pryce-Miller (2013:20), added that providing support and encouragement form an imperative part of the PNs' mentoring role, as this in return can improve the nursing care standards. In this study, participants from all four focus groups agreed that they are required to assist novice nurses through encouragement and support.

#### **5.2.1.1 Supportive role**

Participants described that mentors in the OR should work towards creating a conducive learning environment for novice nurses and provide ongoing support for them: *"so it's always the supportive side"* [FG3, P13]. Persaud (2008:1174) and Thomas (2009:3) reiterates how novice nurses values support from others. Literature concurs that the high-pressured OR environment is often an extremely frightening and stressful environment for novice nurses (Breedt, 2017:24). In this study,

participants recognised their role in making the OR less threatening to novice nurses, and *“to make the stay of the novice nurse more comfortable...more welcome in the department...”* [FG3,P13]. Participants also experienced that novice nurses find the OR a challenging department to work in, and emphasised the importance of *“a passion and love”* [FG1,P5] for mentoring, for it to be effective.

### **5.2.1.2 Role modelling**

According to Ali and Panther (2008:36), mentors have some important roles, which include being an advisor, role model, teacher and supporter, to name but a few. A mentor should provide support for novice nurses and foster a relationship where continuous feedback, assistance and guidance are provided (Persaud, 2008:1174). The PN mentors in this study described the role of the mentor to be supportive and to always be consistent: *“But I think the other thing when we are consistent about doing the right thing”* [FG3,P13]. They also emphasised the importance of being a role model, and recognised the value of setting an example for novice nurses.

It was also evident, as emphasised by focus group one, that the PNs as mentors must remember that they were also once a novice nurse who was taught by their seniors and peers.: *“I just want to add something about a mentor, and that is that we should always remember where we came from, Yes, know your roots”* [FG1,P1]. Persaud (2008:1178), also reported that mentors use their past experiences as novice nurses when mentoring, and that it can be reassuring for novice nurses when mentors tell them about their own experiences as novices and their accomplishments.

While novice nurses have no experience and need guidance to perform nursing tasks (Benner, 1984: 404), participants in this study emphasised the constant supervision that novice nurses require. In order to set an example and lead the way, *“one should stand with them the whole time and keep an eye on them”* [FG1,P5].

### **5.2.1.3 Standard setting in OR practice**

Mentors should be those PNs who set an example, those who are role models for novice nurses. High standards and consistency combined represents an inevitable part of mentoring in nursing, as it influences the future of nursing (Harvey, 2012:232).

This requirement from mentors to be consistent and work according to standards was definitely acknowledged during this study: “...to have a standard as a mentor, and not to lower your standards...” [FG2,P8]. Participants highlighted that “you follow this standards you don't compromise, you do everything according to the laws of the institution or the department” [FG3,P10].

Straus and Sackett (2012:368), stated that mentors should aim at achieving an approachable, supportive, yet professional relationship with novice nurses. Yet, participants sometimes find it difficult to maintain high standards and to foster a friendly mentoring relationship: “so it's very difficult to draw the line and say now I'm going to be strict and professional and be friendly” [FG2,P6].

Mentors should be knowledgeable and approachable (Loots, 2016:53). Similarly, participants in this study agreed “it really depends on your experience, your knowledge your positiveness” [FG3,P10]. However, they pointed out that their ability to maintain high standards in mentoring is influenced by the unpredictable and specialised nature of OR nursing.

### **5.2.1.4 Creating teaching and learning OR environment**

Existing literature refer to the OR as a complex learning environment and a demanding workplace (Lyon, 2003:687; Reid, 2007:2; Meyer, 2014:24). Novice nurses experience the OR as a stressful and intimidating place to work due to the high pace and excessive workload (Breedt, 2017:24). This was reiterated throughout the focus groups where participants referred to the complexity of the OR and stated that it is a strange and completely different environment for the novice nurses

*“because it’s a different place”* [FG4,P14].

The OR brings about feelings of anxiety and a fear of the unknown for novice nurses: *“...we know, most fear of the unknown”* [FG1,P5]. There are several reasons which bring about this fear and this leads to the fact that the OR is perceived as an environment which is not conducive to learning (van der Merwe, 2005:67,68). These feelings of anxiety and fear of the unknown was recognised by the participants *“sometimes they are afraid, afraid of the contents, especially in the theatre”* [FG3,P12].

In addition to a fear of the unknown, an unpredictable and unstructured environment can leave novice nurses to be fearful and anxious, which inhibits their learning (Emanuel & Pryce-Miller, 2013:19). The OR can become an unpredictable and seemingly unstructured department in the event of emergency surgical procedures. Participants in this study felt that emergency procedures are not feasible for training, and that they cannot provide effective mentoring during emergency situations: *“like you said, they are in the way, and they don’t always realize how serious it can get”* [FG1,P3].

The difficulty of teaching in the OR during emergency procedures was confirmed by Nagraj, Wall and Jones (2006:642), and reiterated by another participant in focus group one: *“we had a huge emergency case on Tuesday, where it was blood all over. In that case, I think it is better if there isn’t a student present, because you may be rude, but things need to happen fast and right. There is no time for learning then”* [FG1,P3].

Thus, participants and literature concur that the OR is often an intimidating environment due to the complexity and specialised nature of OR nursing. As such, it is not always conducive to learning. Specifically, the unpredictable and urgent nature of emergency procedures is perceived as unconducive to learning and teaching.

### 5.2.1.5 ***Mentoring practice and processes***

In order for effective mentoring to take place, participants noted that they need to create a comfortable environment and provide explanations for the novices, *“If you put them at ease, then they relax”* [FG4,P16]. The mentoring process in the OR should include creating a comfortable environment for novice nurses as well as providing them with clear explanations of what is going to happen, orientating the student to the clinical environment and introducing them to the team members (Ali & Panther, 2008:38). Participants agreed that *“... just a highlight even before the operation what is going to take place”* [FG3,P13], is beneficial to novice nurses.

A study done by Ajorpaz *et al.* (2016:1324) on the clinical competence of OR students in Iran, indicated that effective mentoring definitely contributed to a better clinical competence outcome for novice nurses. The clinical competence of novice nurses are improved by an active mentoring approach (Harvey, 2012:236).

As the OR is complex learning environment, participants in this study agreed that active mentoring can definitely have a positive outcome on the retention of novice nurses to the OR. Focus group one and two discussed how they do make use of an active mentoring approach by allowing the novice nurses to develop critical thinking skills: *“If a student asks me a question, I always ask them to think about it, what do they think is the answer”* [FG1,P1], also by letting the novice nurses actively take part in the OR routine *“...they have to participate, I just want to see how they participate first...”* [FG2,P6].

Even though an active mentoring approach is more feasible for novice nurses' learning, some participants seemed to follow and advocate for a passive mentoring approach. In focus group four, they boldly stated that novice nurses only get to learn through passive observation in the OR: *“...then you first stand there and watch me for a few months...”* [FG4,P16]. Although literature acknowledge that the fast pace in the OR may sometimes only allow time for passive learning by observation and no specific goal-orientated teaching (Nagraj *et al.*, 2006:462), passive mentoring is followed too often. Passive observation as a learning method in theatre causes

novice nurses to feel excluded, and deprives them of the opportunity to work with a mentor who can guide and teach them (Harvey, 2012:233).

Even if participants in this study disagreed on active mentoring, they agreed that novice nurses should be directly allocated to a specific mentor, to enhance the learning process: *“yes, to a person”* [FG2,P9]. According to literature, a mentor-mentee relationship is based on mutual trust and respect that develops over time (Ali & Panther, 2008:37). Participants in this study explained the disadvantage for novice nurses that do not have a specific mentor: *“they don’t get the opportunity to work with a mentor for a whole month, so you can’t walk a path with someone, they are thrown around a lot ...”* [FG2,P8]. Thus, allocating a novice nurse to a specific mentor can be beneficial for their learning as it allows time to invest in a trusting mentor-mentee relationship.

The compatibility of the mentor and the novice nurse can also have an influence on the learning process as novices’ learning often involve a demanding social environment that consists of various personalities (Persaud, 2008:1174). Therefore, the mentor should aim to build a relationship with the novice nurse, which will assist the novice with the transition into the OR environment. Whilst participants agreed with this in principle, they perceived it as difficult to allocate a student to a specific mentor, as not all the specialities in the OR have mentors to teach novices: *“Every speciality does not have someone who teach, like the clinical facilitator, other than the scrub sister”* [FG1,P1]. In addition, Persaud (2008:1178) also mentioned that there is merit to allow mentees to select their own mentor instead of being allocated to a mentor, to enhance the mentoring relationship. This, however, was not discussed by any participants in this study, although participants considered that the current way of teaching and mentoring in the OR is not effective.

Participants perceived that ineffective mentoring has an influence on the retention of novice nurses to the OR: *“I just want to say one thing, umm, it is a good subject we are addressing now, because if we keep on treating students like we currently do, there will be no more OR nurses, because no one will want to come to theatre”* [FG2,P7]. This confirmed that there should be a drastic change in the OR learning and the way that students are managed in the OR (Harvey, 2012:233).

In conclusion, the objective to explore and describe the perceptions of OR qualified PNs regarding their role as mentor was reached. Congruent with existing literature, the findings of this study thoroughly describe participants' perceptions and experience, as it relates to their role as mentors.

## **5.2.2 Objective 2: The factors that influence OR qualified PNs' perception regarding their role as mentors**

Over the past ten years, the focus on OR teaching has become of more interest, resulting in a better understanding of the challenges in OR teaching (Zundel *et al.*, 2015:951-952). While exploring how mentoring added pressure to their already demanding field, the participants named staff shortages and staff allocation as additional concerns. Interpersonal factors like the attitudes of the novice nurse and medical practitioners were also brought forward. Participants further included concerns about novice nurses' limited foundational knowledge and lack of clinical competence, compounded by their willingness and ability to learn OR skills.

### **5.2.2.1 Realities of OR in context**

Throughout this study, participants consistently described how their role as mentors are influenced by the already high work pressure that they experience: *"And we are also tired...we are irritable because of these very factors"* [FG3,P10]. Also in other studies, professional nurses complained of the enormous workload they have to combine with clinical teaching and mentoring (Murathi *et al.*, 2005:18). Due to an excessive workload, mentoring of novice nurses decrease (Pieterse, 2016:np).

### **5.2.2.2 Production and workload pressure**

Production pressure is a barrier that prevent mentors from providing effective guidance and support. In this study, it was evident that production pressure definitely inhibited the mentors from providing effective support and engaging in learning opportunities: *"Work pressure and the fact that now maybe sometimes you won't be*

*able to be a role model as because you have to do everything in a hurry*" [FG3,P11]. This is congruent with O'Driscoll *et al.* (2010:216), who found that increased workload prevents mentors from providing the required support to student nurses.

Time constraints were specifically emphasised during focus groups in the private sector: *"look, we are busy, the private sector is busy, and everything evolves around time and money"* [FG4,P15], *"... because everyone works against time and the patient pays per minute ... So you know you shouldn't waste the persons money"* [FG4,P16]. Although the researcher could not verify this information through literature, participants emphasised the *"time is money"* nature of private healthcare in the South African context.

### **5.2.2.3 Staff shortages**

Participants in this study experienced how staff shortages, together with the pressure to do more in less time, affect their ability to be effective mentors. *"You have a shortage of staff"* [FG3,P11], which in turn, results in inadequate time to support novice nurses. Staff shortages and the negative influence on the training needs of students was reported by Mogale (2011:89). Similarly, the participants in this study reported that the availability of more than one PN per theatre list makes the mentoring of novice nurses easier and more effective: *"if you are more than one on a list, then you can invest in teaching, understand?"* [FG4,P16].

The participants mentioned that staff shortages and increased workload are inter-related. In addition, they perceived that tired and overworked staff leads to increased absenteeism: *"a lack of human resources make increase absenteeism rate...because we become over worked and we are tired"* [FG3,P12]. Mogale (2011:90) also reported on higher absenteeism when staff are tired. Therefore, staff shortages can contribute and relate to production pressure, which in turn, decreases effective mentoring.

#### **5.2.2.4 Resource constraints (material)**

The quality of practical training of novice nurses is jeopardised in South Africa due to shortages of nursing staff, excessive workload and lack of equipment (NES group, 2012:27). While all participants agreed that mentoring is affected by staff shortages, the lack of material resources stood out during focus group discussions in the public sector. The lack of resources was described as a hindering factor in mentoring, because the mentors feel they cannot provide effective training for novice nurses if they do not have the necessary equipment. *“The fact that you don’t have stock a lot of the time... you are supposed to use this, but now we use something else. So you actually confuse the people because you can’t teach them in the correct way”* [FG1,P2]. The implication of compensating for the lack of resources is that novice nurses are sometimes taught alternative methods, which are not necessarily correct. The influence of a lack of material resources on effective mentoring was also described by Mogale (2011:77,80), who stated that students in the OR cannot engage in adequate clinical learning opportunities due to the lack of equipment, which leaves novice nurses with a shortfall in their clinical competence.

Thus, consistent with literature, participants agreed that adequate human and material resources are required to mentor novice nurses, which in turn may enable them to practice the necessary clinical skills to develop into proficient nurses. However, participants highlighted that they experience a lack of these resources, which influences their ability to mentor novice nurses in the OR.

#### **5.2.2.5 Challenging mentoring role**

Participants in this study regarded their role as mentors as challenging. Throughout the focus group interviews, they explained how factors such as the competence level, lack of orientation and attitudes of novice nurses and OR staff influence their role as mentors.

### 5.2.2.6 Competence level of novice nurse

In the OR, foundational knowledge is important for novice nurses to be able to learn the necessary clinical skills. The NES group (2012:50) stated that a novice nurse requires theoretical knowledge as well as clinical skills in each situation to solve a problem. As novice nurses have limited insight in the actual requirements of the clinical workplace, mentoring is crucial to relate what was learned in the nursing programme with clinical practice (Donovan & Darcy, 2011:123). While participants in this study agreed that novice nurses should apply theoretical and clinical skills, they perceived that novice nurses lack the required skills: *“They don’t have any other knowledge...”* [FG1,P8]. Foundational knowledge forms the background of novice nurses’ understanding of clinical practice (Piek, 2017:46). Participants in this study described their frustration and demotivation when they experience that novice nurses lack foundational knowledge: *“It’s like you said, a complete lower level...it irritated me a lot...”* [FG1,P1].

Procedural knowledge requires a certain level of skill and refers to *“how to do something”* (Bruce *et al.*, 2011:145). The participants in this study expressed the necessity to evaluate novice nurses’ level of clinical competence to determine the mentoring approach they will utilise and also to identify the areas they should focus on while mentoring: *“I look at what they can do, and if I see this sister is very slow, she scrubs slow, you can go through the steps faster, and you drape so slow, then I tell them... you must work a bit faster now...”* [FG4,P16]. Therefore, it is not only foundational knowledge that is important, but the clinical competence level of a novice nurse can also affect the mentoring process. This was confirmed by Piek (2017:26), and Botma *et al.* (2015:500) who highlighted the importance of the integration of theory and practice in nursing.

There are different professional categories of novice nurses entering the OR that need to be mentored and trained, each with a different learning ability as well as objectives and outcomes to be reached. Accordingly, there is a different mentoring approach for each professional category: *“I feel if it is a new sister, then you should have had some theatre exposure in your four years training, then I think you’re not*

*going to be so brand new as a student nurse for example. Yes, I think then you are going to handle it differently*” [FG2,P9], *“Let me start with a sister, I feel that it is important for myself to find out where this sister is with her training, and what must I add for her from my side”* [FG2,P8]). Participants expected novice PNs, who enter theatre with the goal of becoming an OR qualified PN, to first work in the OR to get a good foundational knowledge before they enter the OR qualification course: *“So I think if they apply to do the course, they should have some kind of background of theatre...”* [FG1,P2]). The admission requirements of the University of the Free State for the advanced diploma in Operating Theatre Nursing stipulate that the applicants should provide proof of 900 hours per annum of practical experience within the past two years (University of Free State, 2017:105). Thus, practical foundational knowledge is considered a pre-requisite for novice PNs in the OR in the Free State Province.

Not only does the professional category influence the mentoring approach the mentor will follow, but the learning ability of the novice nurse also affects the mentoring process, as every individual has distinctive learning capacities. The varying learning abilities of the novice nurses provoke some annoyance for some mentors when they have to repeat themselves: *“I’ve put in a lot of effort with her and it was very frustrating, because you feel today, yesterday I told her everything, and today I have to repeat it again...”* [FG2,P16].

### **5.2.2.7 Lack Orientation of novice nurses**

One of the biggest concerns PNs have is the lack of proper orientation in the OR for the novice nurses: *“I tend to agree 100% with the fact that they are not orientated...”* [FG1,P5]. This is in accordance with the findings of Breedts (2017:67) who mentioned that both the OR personnel and the students currently feel that the preparation and orientation of students are not adequate. It was suggested that by improving the current orientation programme for novice nurses in the OR, their training and learning experience can be enhanced, which in turn will improve their ability to take part in the OR nursing routine (Breedts, 2017:85).

### **5.2.2.8 Attitudes of both novice nurses and OR team members in mentoring**

Another factor influencing the mentoring role of the PNs is the lack of interest in learning on the side of the novice nurse (Rylance *et al.*, 2017:408). Participants in focus group one divided the attitudes of novice nurses into two groups. In the first group are those who engage in a positive and active learning attitude, while those who have a negative and passive learning attitude, were placed in the second group. A negative learning attitude from novice nurses discouraged the participants in this study to teach and support them: *“what is the use of you teaching them, if they say they are not interested in working here”* [FG4,P16]. Such negative attitudes from the novice nurses can have a negative outcome on both the mentoring relationship and the possible learning experience. Lyon (2003:684), reported that novice nurses who are uninterested in the OR as a career choice, will not value OR learning opportunities. In contrary to mentoring novice nurses with a negative learning attitude, participants found it pleasant to work with a novice nurse who wants to learn and who displays a positive attitude: *“and then you get those who really wants to. They are interested, they stand there and they want to start opening packs and they ask questions and so on”* [FG1,P3], *“Some of them really want to know, they follow a procedure carefully and the know what to give next”* [FG1,P4]. The novice nurses’ attitude towards learning can often be observed through the body language which they display: *“body language, do you want to learn or not?”* [FG4,P15], and if they do not show interest in learning the mentor will not invest time to teach them. These findings harmonise with other studies that described that mentors note when students are not interested in learning and lack professionalism (Rylance *et al.*, 2017:408).

Another arising factor that contributes to the challenges of the mentoring role is the attitudes of the medical practitioners in the OR. Literature confirmed that the medical practitioners are part of the team in the OR, but they often do not support the learning experiences of the novice nurses (Mogale, 2011:85). This was clearly stated during the interviews, as the mentors explained that *“the difficult doctors...”* [FG3,P13] can be a barrier for them when it comes to effective mentoring of novice

nurses: *“If there is a certain surgeon, then we know this surgeon loses it when he sees a student”* [FG1,P1]. The surgeons’ attitudes not only affect the novice nurse, but also the mentors. As one participant explained the pressure of working with a certain surgeons: *“so you’re working with a very difficult surgeon, you know you’re very stressed as a sister because you are going to scrub and there is an new student that you have to teach here, you don’t even give them the eye you just give them to the floor nurse and saying help them out”* [FG2,P6]. The PNs working in the public sector mentioned that they often experience difficulty focusing on their role as mentor, when they are working with inexperienced surgeon: *“Another challenge can be working with an inexperienced doctor”* [FG3,P11]. Consequently, mentoring of the novice nurses are left behind as the PNs then have to turn all their focus and undivided attention to the surgeon. These findings agree with Meyer *et al.* (2016:63), who also emphasised how negative interpersonal factors influence and constrain learning in the OR.

In conclusion, the objective to explore and describe the factors that influence OR qualified PNs’ perception regarding their role as mentors, was reached. The realities of the OR context are often not conducive to learning, and is an influential factor towards effective mentoring. Compounded by constrained resources, even in institutions where formal mentoring programmes exist, mentors seldom receive training and guidance on the mentoring process. Mentors and are not well prepared for the challenges that occurs with workplace mentoring (Ramani & Gruppen, 2013:142). Congruent with literature, participants in this study were ill equipped and under resourced to establish and maintain effective mentor-mentee relationships and to promote the mentoring role of OR qualified PNs

Mentoring in the OR face various challenges which often lead to mentoring being left behind. There for, empowering the PNs to provide effective mentoring for novice nurses are very important to ensure that they can overcome the challenges they are faced with in the OR with regards to mentoring.

### 5.3 LIMITATIONS OF THE STUDY

The researcher recognised the following limitations in this study:

Even though the number of participants in the focus groups were adequate for the data analysis of this study, the sampling limitations on the focus groups included the fact that not all four focus groups had the same number of participants due to internal circumstances within the specific health care institutions.

The findings of this study may only be related to a specific demographical area due to the fact that the study was conducted only in Bloemfontein, not including any other provinces in South Africa. However, both the private healthcare sector as well as the public healthcare sector was included in the study.

### 5.4 CONCLUSIONS

The two-fold aim of this study was to understand and describe OR qualified PNs' perceptions of their role as mentors of novice nurses in the OR, as there was no research evidence found on the OR qualified PNs perceptions of their mentoring role in the South African context.

The study was directed by the research question: *“How do OR qualified PNs perceive their role as mentors of novice nurses in the OR?”*, and this study question was answered through the description of the OR qualified PNs' perceptions regarding their role as mentor of novice nurses, as well as the factors that influence their role as mentors.

It was found that the OR qualified PNs experience their role as mentors to the novice nurses as supportive and to teach novice nurses according to standards. The participants in this study also highlighted the challenges they experience with regards to mentoring the novice nurses in the OR environment.

## **5.5 RECOMMENDATIONS**

Based on the scientific evidence gathered during this study, the following recommendations are made:

### **5.5.1 Recommendation 1: The implementation of a formal training programme for mentors**

A comprehensive training programme specifically for OR qualified PNs can be implemented to assist them with effective mentoring skills. The mentoring role of the PN is complicated and therefore the mentors require training, and an effective support system for mentors (Chandan & Watts, 2012:1). Due to the complexity and specialised nature of OR nursing, it was evident that the OR environment has numerous challenges, that differ from the other health care departments, which inhibit effective mentoring.

It is recommended that a mentoring programme specifically addressing OR challenges and solutions, are implemented to assist OR qualified PNs in developing as more efficient mentors. Such a mentorship programme can be linked to the Continuing Professional Development (CPD) point system that SANC is aiming to implement for nurses. This will allow opportunity for OR specific mentor training as well as earning CPD points.

### **5.5.2 Recommendation 2: Implementation of a OR orientation programme for novice nurses**

The importance of implementing an orientation programme for novice OR nurses to enhance their learning experience was emphasised in this study.

It is recommended that such an orientation programme is structured by means of a portfolio of evidence. Specific outcomes will direct the learning and exposure of novice OR nurses through different surgical specialities. An outcome based portfolio

may be driven by novice nurse themselves, especially in view of the unpredictable daily scheduling, inherent to the OR environment. An useful guide with the names of mentors in each OR speciality can be included.

This study, congruent with literature, supports the allocation of a novice to a specific mentor. However, with cognisance of the current challenges associated with mentoring in the OR, a structured orientation guide, coupled by a portfolio of evidence may guide novice nurses toward learning opportunities and clinical competence.

A comprehensive, structured orientation programme and dedicated nurses can lead to a more valuable and comfortable learning experience for novice nurses, which in turn may improve the retention of novice nurses to the OR.

### **5.5.3 Recommendation 3: Setting of objectives and outcomes for novice nurses to take responsibility for their own learning**

It is important for novice nurses to actively participate in their own learning programme by means of setting their own objectives and outcomes to reach. This is supported by Meyer *et al.* (2016:65) who stated that novice nurses and students are to a certain extend responsible for their own, which in return tends to lead them to better achievement. When a novice nurse takes responsibility for their own learning, they work towards a certain goal, which ultimately bring about a certain degree of pride in their work.

To assist the novice nurses with setting their own objectives and working towards achieving these objectives in the OR, the OR mentors can guide the novice nurses to OR unit specific objectives. These objectives should be written out and given to the mentors together with an action plan on how the novice nurse is planning to achieve these objectives.

Thus, the novice nurses will actively take part all the learning opportunities in the OR environment and the mentors will also be provided with a more structured guiding

tool on what and where to assist the novice nurse they are mentoring with.

#### **5.5.4 Recommendation 4: Allocation of adequate resources in the OR**

There is a great demand for nurse mentors to support novice nurses in practice (Rylance, Barrett, Sixsmith & Ward, 2017:405). Yet, due to shortages of nursing staff, excessive workload and resource constraints, the quality of practical training of novice nurses and patient care are jeopardised in South Africa (NES group, 2012:27). This study highlighted that the mentoring of novice nurses in the OR is negatively affected by inadequate human and material resources. PN's encounter some conflict in their commitments as mentors, as no recognition is given for the work they do (Chandan & Watts, 2012:5). According to the NES group (2012:27), a positive practice environment that supports nursing excellence needs to be developed.

It is recommended that the allocation of human and material resources in the OR receives urgent attention to address challenges and improve current mentoring practices. This can be done by means of delegating a "mentor of the day" on the allocation lists which will inform novice nurses whom they can refer to for guidance and help each day, especially if they get allocated with a PN who is not providing effective mentoring for them.

To contribute to the mentors' motivation to teach, an incentive structure can be implemented for the mentors. For example, if the novice nurses successfully complete their learning objectives in the OR, the mentor can be rewarded, by means of institutional recognition or financial incentives coupled with performance appraisal processes.

#### **5.5.4 Future research**

A follow-up study regarding PNs perceptions of their role as mentors to the novice nurses in the OR can be conducted with a larger sample of OR qualified PNs and in

another context to determine if the results are comparable.

A descriptive study on the learning experience of novice nurses and students in the OR can be done to provide insight on what their mentoring needs are.

Quantitative study to determine novice nurses' or student nurses' satisfaction with the OR as a learning environment will be able to determine if the current OR learning is sufficient and could identify possible gaps in OR learning.

Research regarding the result of effective mentoring in the OR on the retention of novice nurses to the OR can provide insight on the current mentoring situation in the OR.

Observational research regarding the formal training of OR qualified PNs as mentors and whether a mentor training programme has better outcomes on clinical teaching for novice nurses in the OR could also be conducted

## **5.6 DISSEMINATION**

The study will be published in accordance with the fulfilment of the requirements of a Master of Nursing Science in the Faculty of Medicine and Health Sciences of Stellenbosch University.

The research findings will be disseminated to all the Health Care Institutions that were involved in this study.

This research will also be disseminated through publication in journals, and presentation at academic platforms, including workshops and conferences.

## **5.7 CONCLUSION**

Even though there is limited specific South African literature that stipulates that mentoring is part of the PNs responsibilities, the Scope of Practice of Registered

Nurses (R2598) in the Nursing Act 33 of 2005 (Republic of South Africa, 2005) clearly states that PNs should enhance learning by creating a conducive clinical learning environment for novice nurses. Thus, the role of being a mentor for novice nurses can be directly drawn in to each PNs Scope of Practice and Responsibilities.

The OR qualified PNs described their role as mentors for the novice nurses to be supportive, to create a conducive and welcome learning environment and to teach novice nurses safe peri-operative practices to ensure patient safety in the OR. However, the mentoring role does not go without challenges and additional pressure in the complex OR environment, and therefore it is often left behind.

Thus, to ensure a better learning experience, improved competence and retention of novice nurses to pursue the OR as a career path, effective mentoring in the OR is crucial.

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**APPENDIX 1**

***Ethical approval from Stellenbosch  
University***



UNIVERSITEIT STELLENBOSCH-UNIVERSITY  
Jou kennisverdiel - your knowledge matters

## Approval Notice Response to Modifications- (New Application)

08-Mar-2017  
Liebenberg, Maruanda M

Ethics Reference #: S16/10/220

Title: **PROFESSIONAL NURSES' PERCEPTIONS OF THEIR ROLE AS MENTORS OF NOVICE NURSES IN THE OPERATING ROOM.**

Dear Mrs Maruanda Liebenberg,

The **Response to Modifications - (New Application)** received on 27-Jan-2017, was reviewed by members of **Health Research Ethics Committee 1** via Expedited review procedures on 02-Mar-2017 and was approved.

Please note the following information about your approved research protocol:

Protocol Approval Period: **08-Mar-2017 -07-Mar-2018**

Please remember to use your **protocol number** (S16/10/220) on any documents or correspondence with the HREC concerning your research protocol.

Please note that the HREC has the prerogative and authority to ask further questions, seek additional information, require further modifications, or monitor the conduct of your research and the consent process.

### After Ethical Review:

Please note a template of the progress report is obtainable on [www.sun.ac.za/rds](http://www.sun.ac.za/rds) and should be submitted to the Committee before the year has expired. The Committee will then consider the continuation of the project for a further year (if necessary). Annually a number of projects may be selected randomly for an external audit.

Translation of the consent document to the language applicable to the study participants should be submitted.

Federal Wide Assurance Number: 00001372

Institutional Review Board (IRB) Number: IRB0005239

The Health Research Ethics Committee complies with the SA National Health Act No.61 2003 as it pertains to health research and the United States Code of Federal Regulations Title 45 Part 46. This committee abides by the ethical norms and principles for research, established by the Declaration of Helsinki, the South African Medical Research Council Guidelines as well as the Guidelines for Ethical Research: Principles Structures and Processes 2004 (Department of Health).

### **Provincial and City of Cape Town Approval**

Please note that for research at a primary or secondary healthcare facility permission must still be obtained from the relevant authorities (Western Cape Department of Health and/or City Health) to conduct the research as stated in the protocol. Contact persons are Ms Claudette Abrahams at Western Cape Department of Health ([healthres@pgwc.gov.za](mailto:healthres@pgwc.gov.za) Tel: +27 21 483 9907) and Dr Helene Visser at City Health ([Helene.Visser@capetown.gov.za](mailto:Helene.Visser@capetown.gov.za) Tel:

+27 21 400 3981). Research that will be conducted at any tertiary academic institution requires approval from the relevant hospital manager. Ethics approval is required BEFORE approval can be obtained from these health authorities.

We wish you the best as you conduct your research.

For standard HREC forms and documents please visit: [www.sun.ac.za/rds](http://www.sun.ac.za/rds)

If you have any questions or need further assistance, please contact the HREC office at .

**Included Documents:**

2016 ABRIDGED CV L FURST.pdf  
abbreviated CV Marunda Liebenberg.docx  
investigator declaration Maruanda-1.pdf  
If CO supervisor signed declaration 26.10.pdf  
20170127 MOD HREC Modification letter  
M Liebenberg General Checklist(Eng)\_V2.1 April 2016.docx  
20170127 MOD HREC Application form  
InformedConsent participants M Liebenberg.docx  
20170123 MOD Cover letter  
Proposal for ethics submission M Liebenberg .docx  
20170127 MOD Informed Consent participants  
Abbreviated CV Loraine Viszalai.docx  
20150224 Investigator Declaration V4.2 (Eng).pdf  
20170127 MOD Protocol  
HREC APPLICATION M LIEBENBERG.pdf  
M Liebenberg participant information letter.docx  
Synopsis Liebenberg.pdf  
20170127 MOD HREC Checklist

Sincerely,

Franklin Weber  
HREC Coordinator  
Health Research Ethics Committee I

## Investigator Responsibilities

### Protection of Human Research Participants

Some of the responsibilities investigators have when conducting research involving human participants are listed below:

- 1. Conducting the Research.** You are responsible for making sure that the research is conducted according to the HREC approved research protocol. You are also responsible for the actions of all your co-investigators and research staff involved with this research.
- 2. Participant Enrolment.** You may not recruit or enrol participants prior to the HREC approval date or after the expiration date of HREC approval. All recruitment materials for any form of media must be approved by the HREC prior to their use. If you need to recruit more participants than was noted in your HREC approval letter, you must submit an amendment requesting an increase in the number of participants.
- 3. Informed Consent.** You are responsible for obtaining and documenting effective informed consent using only the HREC-approved consent documents, and for ensuring that no human participants are involved in research prior to obtaining their informed consent. Please give all participants copies of the signed informed consent documents. Keep the originals in your secured research files for at least fifteen (15) years.
- 4. Continuing Review.** The HREC must review and approve all HREC-approved research protocols at intervals appropriate to the degree of risk but not less than once per year. There is no grace period. Prior to the date on which the HREC approval of the research expires, it is your responsibility to submit the continuing review report in a timely fashion to ensure a lapse in HREC approval does not occur. If HREC approval of your research lapses, you must stop new participant enrolment, and contact the HREC office immediately.
- 5. Amendments and Changes.** If you wish to amend or change any aspect of your research (such as research design, interventions or procedures, number of participants, participant population, informed consent document, instruments, surveys or recruiting material), you must submit the amendment to the HREC for review using the current Amendment Form. You may not initiate any amendments or changes to your research without first obtaining written HREC review and approval. The only exception is when it is necessary to eliminate apparent immediate hazards to participants and the HREC should be immediately informed of this necessity.
- 6. Adverse or Unanticipated Events.** Any serious adverse events, participant complaints, and all unanticipated problems that involve risks to participants or others, as well as any research-related injuries, occurring at this institution or at other performance sites must be reported to the HREC within five (5) days of discovery of the incident. You must also report any instances of serious or continuing problems, or non-compliance with the HREC's requirements for protecting human research participants. The only exception to this policy is that the death of a research participant must be reported in accordance with the Stellenbosch University Health Research Ethics Committee Standard Operating Procedures [www.sun025.sun.ac.za/portal/page/portal/Health\\_Sciences/English/Centres%20and%20Institutions/Research\\_Development\\_Support/Ethics/Application\\_package](http://www.sun025.sun.ac.za/portal/page/portal/Health_Sciences/English/Centres%20and%20Institutions/Research_Development_Support/Ethics/Application_package) All reportable events should be submitted to the HREC using the Serious Adverse Event Report Form.
- 7. Research Record Keeping.** You must keep the following research-related records, at a minimum, in a secure location for a minimum of fifteen years: the HREC approved research protocol and all amendments; all informed consent documents; recruiting materials; continuing review reports; adverse or unanticipated events; and all correspondence from the HREC.
- 8. Reports to the MCC and Sponsor.** When you submit the required annual report to the MCC or you submit required reports to your sponsor, you must provide a copy of that report to the HREC. You may submit the report at the time of continuing HREC review.
- 9. Provision of Emergency Medical Care.** When a physician provides emergency medical care to a participant without prior HREC review and approval, to the extent permitted by law, such activities will not be recognised as research nor will the data obtained by any such activities should it be used in support of research.
- 10. Final reports.** When you have completed (no further participant enrolment, interactions, interventions or data analysis) or stopped work on your research, you must submit a Final Report to the HREC.
- 11. On-Site Evaluations, MCC Inspections, or Audits.** If you are notified that your research will be reviewed or audited by the MCC, the sponsor, any other external agency or any internal group, you must inform the HREC immediately of the impending audit/evaluation.

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## **APPENDIX 2**

***Permission obtained from  
institutions/Department of Health***



# health

Department of  
Health  
FREE STATE PROVINCE

26 April 2017

Mrs. M Liebenberg  
26A Pikie De Villiers Str.  
Universitas  
BFS, 9301

Dear Mrs. M Liebenberg

**Subject: Professional nurses' perceptions of their role as mentors of novice nurses in the operating room.**

- Please ensure that you read the whole document. Permission is hereby granted for the above - mentioned research on the following conditions:
- Participation in the study must be voluntary
- A written consent by each participants must be obtained
- Serious adverse events to be reported and/or termination of the study.
- Ascertain that your data collection exercise neither interferes with the day to day running of [redacted] hospital nor the performance of duties by the respondents or health care workers.
- Confidentiality of information will be ensured and please do not obtain information regarding the identity of the participants.
- Research results and a complete report should be made available to the Free State Department of Health on completion of the study (a hard copy plus a soft copy).
- Progress report must be presented not later than one year after approval of the project to the Ethics Committee of the University of Stellenbosch and to Free State Department of Health.
- Any amendments, extension or other modifications to the protocol or investigators must be submitted to the Ethics Committee of the University of Stellenbosch and to Free State Department of Health.
- Conditions stated in your Ethical Approval letter should be adhered to and a final copy of the Ethics Clearance Certificate should be submitted to [schedule@fsh.health.gov.za](mailto:schedule@fsh.health.gov.za) before you commence with the study
- No financial liability will be placed on the Free State Department of Health
- Please discuss your study with the institution managers/CEOs on commencement for logistical arrangements
- Department of Health to be fully indemnified from any harm that participants and staff experiences in the study
- Researchers will be required to enter in to a formal agreement with the Free State department of health regulating and formalizing the research relationship (document will follow)
- You are encouraged to present your study findings/results at the Free State Provincial health research day
- Future research will only be granted permission if correct procedures are followed see <http://hmi.hsa.org.za>

I trust you find the above in order.

Kind Regards

Dr D Motau

HEAD: HEALTH

Date: 8/05/17

## LETTER REQUESTING PERMISSION TO CONDUCT RESEARCH

Request for permission to conduct research at [REDACTED] Theatre

July 2017

Title: PROFESSIONAL NURSES' PERCEPTIONS OF THEIR ROLE AS CLINICAL TEACHER OF THE NOVICE NURSE IN THE OPERATING ROOM.

Maruanda Liebenberg

MNurs Student Stellenbosch University

Student Nr: 14358115

HREC Nr: S16/10/220

[maruandascherman3@hotmail.com](mailto:maruandascherman3@hotmail.com)

082 673 4198

To whom it may concern

I, Maruanda Liebenberg am doing research for my Masters' Degree in Nursing at Stellenbosch University. My supervisor is, Mrs. L Viszalai, lecturer at Stellenbosch University Department of Nursing, together with co-supervisor, Mrs L Fürst.

I am hereby seeking your consent to conduct research at your institution for my study entitled: Professional nurses' perceptions of their role as mentors of the novice nurse in the operating room.

The aim of the study is to understand and describe OR qualified PNs' the professional nurses' perceptions of their role and function as mentors in the operating room.

Your institution has been selected because it is one of the two largest private and provincial hospitals in the Free State region and have students of all nursing categories in the operating room.

The study will explore and describe the perceptions of operating room qualified professional nurses of their functions as mentors.

The benefits of this study are:

- Understanding the professional nurses' perceptions recommendations can be made to improve the mentoring of novice nurses.

- Effective mentoring can in return influence the retention of nurse in the operating room.

No potential risks or harm is foreseen.

To assist you in reaching a decision, I have attached to this letter:

- (a) A copy of an ethical clearance certificate issued by the University
- (b) A copy of Freestate Department of Health consent granted to conduct research at [REDACTED]

Should you require any further information, please do not hesitate to contact me

Upon completion of the study, I undertake to provide you with a bound copy of the dissertation.

Your permission to conduct this study will be greatly appreciated.

Yours sincerely



Maruanda Liebenberg  
MNurs Student Stellenbosh University  
[maruandascherman3@hotmail.com](mailto:maruandascherman3@hotmail.com)  
082 673 4198

CONSENT GRANTED:



[REDACTED] Theatre  
Manager

Date: 07/07/2017





INTERNAL MEMO

DATE:	11 JULY 2017	ENQUIRIES	
TO:	Mrs M. Liebenberg 26A Pikkie De Villiers Street Universitas BLOEMFONTEIN 9301	FROM:	Dr G.P. Matshediso Director Clinical Services [REDACTED] Tel: 051 405 1660/6355 Bloemfontein Email: [REDACTED]

RESEARCH: PROFESSIONAL NURSES' PERCEPTIONS OF THEIR ROLE AS MENTORS OF NOVICE NURSES IN THE OPERATING ROOM.

[REDACTED] Hospital grants you permission to conduct researches/studies and the following criteria must be met.

- That you obtain ethical clearance from the human research ethics committee of the relevant university.
- That the Hospital incurs no cost in the course of your research.
- That access to the staff and patients at the [REDACTED] will not interrupt the daily provision of services.
- That prior to conducting the research you will liaise with the supervisors of the relevant sections and introduce yourself with permission letter and to make arrangements with them in a manner that is convenient to the sections.

Yours Sincerely

*[Handwritten signature]* 11/07/2017

Dr. Matshediso G.P.  
Director: Clinical Services

DR G.P. MATSHEDISO  
11-07-2017  
CLINICAL MANAGER



## RESEARCH APPLICATION – M LIEBENBERG

Date: 18 April 2017

FOR APPROVAL



---

Chief Human Resources Officer

G VAN WYK

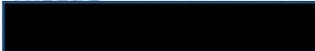
### NOTES

- |                       |                                                                                                                |
|-----------------------|----------------------------------------------------------------------------------------------------------------|
| Locality              | •                            |
| Value of Study        | • Confirmed                                                                                                    |
| Employee              | • Yes                                                                                                          |
| Topic/Title           | • PROFESSIONAL NURSES' PERCEPTIONS OF THEIR ROLE AS CLINICAL TEACHER OF THE NOVICE NURSE IN THE OPERATING ROOM |
| Impact                | • 5- 20 Registered Nurses in theatre                                                                           |
| Supported by hospital | • Supported by: L Zeelie – Nursing Manager                                                                     |



17 March 2017

Maruanda Liebenberg (17064)  
Theatre



**Proof of approval of Research for Master's degree in Nursing;  
Professional Nurses' Perceptions of their Role as Mentors of Novice  
Nurses in the Operating Room through the University Stellenbosch**

Consent is granted to Maruanda Liebenberg to do the Practical research data collection regarding Professional Nurses' Perceptions of their Role as Mentors of Novice Nurses in the Operating Room through the University of Stellenbosch from March 2017 on a part time basis through distant learning process.

We wish Maruanda all the best and will assist her from hospital side as far as we possibly can.

Kind Regards

Mrs L Zeelie  
Nursing Manager



[REDACTED]

[REDACTED]

National Health Research Ethics Committee registration: REC 251015-048

28<sup>th</sup> April 2017

Mrs Maruanda Liebenberg  
Student  
Stellenbosch University  
[Maruandascherman3@hotmail.com](mailto:Maruandascherman3@hotmail.com)

Dear Mrs Liebenberg

RE: APPLICATION TO CONDUCT RESEARCH: [REDACTED] HOSPITAL

Title of study: Professional nurses' perceptions of their role as mentors of novice nurses in the operating room

The Research & Scientific Committee: Nursing and Quality, of [REDACTED] hereby grants permission with no conditions for your study to be conducted at [REDACTED] hospital, in Bloemfontein.

Present this letter to the hospital manager of the above mentioned hospital to gain permission to enter the facilities.

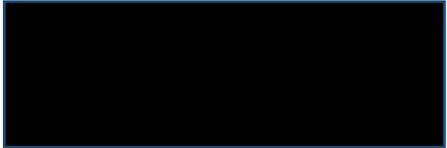
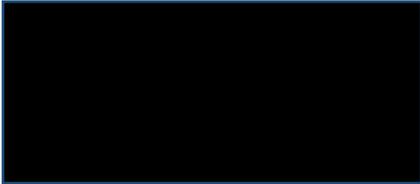
Yours sincerely,



Chairperson  
Research & Scientific Committee: Nursing and Quality

Permission is granted based on the following standard terms and conditions:

1. Should patient or institutional confidentiality be compromised, [REDACTED] has the right to withdraw this permission and take legal action.
  2. An electronic copy of your final research report is submitted to the [REDACTED] Research Ethics Committee.
  3. No direct reference is made to [REDACTED] or its various institutions in your research report or any publications thereafter. The Company and its facilities are not in any way identifiable in the study.
  4. The research is conducted within two years of permission being given by the Company.
  5. Placement of the electronic research report and any publications on the Company's research register after approval by the associated Higher Education Institution.
  6. [REDACTED] will not be liable for any costs incurred during or related to this study.
- [REDACTED]



12 April 2017

M Liebenberg  
Student Nr. 14358115

ADDRESS: Division of Nursing  
Faculty of Medicine and Health Sciences  
University of Stellenbosch  
Cape Town  
Francie van Zijl Drive  
Tygerberg  
7505

CONTACT NUMBER: 051 522 1677/ 082 673 4198

Permission to conduct research at [REDACTED] Hospital

Consent granted to Maruanda Liebenberg to do research data collection at [REDACTED] hospital and we wish you success with your research.

Study entitled: **Professional nurses perceptions of their role as mentors of novice nurses in the operating room.**

Ethics reference: S16/10/220

Yours sincerely

  
.....  
T.A. Louw  
Theatre Manager



---

## **APPENDIX 3**

***Participant information leaflet and  
declaration of consent by participant  
and investigator***

***TITLE OF THE RESEARCH PROJECT:  
PROFESSIONAL NURSES' PERCEPTIONS OF THEIR  
ROLE AS MENTORS OF NOVICE NURSES IN THE  
OPERATING ROOM***

**REFERENCE NUMBER: S16/10/220**

**PRINCIPAL INVESTIGATOR: M Liebenberg**

**ADDRESS: Division of Nursing  
Faculty of Medicine and Health Sciences  
University of Stellenbosch  
Cape Town  
Francie van Zijl Drive  
Tygerberg  
7505**

**CONTACT NUMBER: 051 451 9292 / 082 673 4198**

Dear Colleague

My name is Maruanda Liebenberg, and I am a Masters in nursing student at Stellenbosch University. I would like to invite you to participate in a research project that aims to investigate the perceptions of operating room qualified professional nurses regarding their role as mentors of novice nurses in the operating room.

Please take some time to read the information presented here, which will explain the details of this project and contact me if you require further explanation or clarification of any aspect of the study. Also, your participation is **entirely voluntary** and you are free to decline to participate. If you say no, this will not affect you negatively in any way whatsoever. You are also free to withdraw from the study at any point, even if you did agree to take part.

This study has been approved by the **Health Research Ethics Committee (HREC) at Stellenbosch University** and will be conducted according to accepted and applicable National and International ethical guidelines and principles, including those of the international Declaration of Helsinki October 2008.

The aim of this study is to understand and describe operating room qualified professional nurses' perceptions of their role and responsibility as mentor in the operating room.

**The objectives of the proposed study is:**

To explore and describe the perceptions of operating room qualified professional nurses regarding their role as mentor.

The study will be conducted in a form of group interviews, where the participants will be able to describe their perceptions freely.

Permission to conduct the interviews is obtained from the participating institutions. All the participants will sign a voluntary consent form to take part in the study.

The privacy of all the participants will be protected as no names will appear on the interviews, neither the names of the participating institutions.

All the information shared during the interviews will also be kept confidential and all the participants will sign a confidentiality pledge to ensure none of the information obtained during the interview is given to anyone else.

There are no foreseen risks or harm for any of the participants and your participation is completely voluntary.

**If you are willing to participate in this study please sign the attached Declaration of Consent and hand it to the investigator.**

Yours sincerely

A handwritten signature in black ink, appearing to read 'M Liebenberg', written in a cursive style.

**M Liebenberg**  
**Principal Investigator**

## **DECLARATION BY PARTICIPANT**

---

By signing below, I ..... agree to take part in a research study entitled: PROFESSIONAL NURSES' PERCEPTIONS OF THEIR ROLE AS MENTORS OF NOVICE NURSES IN THE OPERATING ROOM

I declare that:

- I have read the attached information leaflet and it is written in a language with which I am fluent and comfortable.
- I have had a chance to ask questions and all my questions have been adequately answered.
- I understand that taking part in this study is **voluntary** and I have not been pressurised to take part.
- I may choose to leave the study at any time and will not be penalised or prejudiced in any way.
- I may be asked to leave the study before it has finished, if the researcher feels it is in my best interests, or if I do not follow the study plan, as agreed to.

Signed at (*place*) ..... On (*date*) ..... 2017.

.....

**Signature of participant**

---

## ***APPENDIX 4***

### ***Interview guide***

---

# **INTERVIEW GUIDE FOR FOCUS GROUP INTERVIEW**

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Interview guide for focus group interview: .....

## **SECTION A: Biographical data**

Participant nr: .....

Age: .....

Gender: .....

Years' experience: .....

## **SECTION B: Example of open-ended questions for interview:**

1. Can you tell me what is your experience is regarding mentoring the novice nurses in the operating room?
2. How do you see your role as a clinical teacher or mentor in the operating room?
3. Is there anything possible factors that you feel prevent you from mentoring the novice nurses?
4. Are there any suggestions that you have regarding the professional nurses mentoring the novice nurses in the operating room?

## ***FIELD WORKER INFORMATION LEAFLET***

---

**TITLE OF THE RESEARCH PROJECT: PROFESSIONAL NURSES' PERCEPTIONS OF THEIR ROLE AS MENTORS OF NOVICE NURSES IN THE OPERATING ROOM.**

**REFERENCE NUMBER: S16/10/220**

**PRINCIPAL INVESTIGATOR: M Liebenberg**

**ADDRESS: Division of Nursing  
Faculty of Medicine and Health Sciences  
University of Stellenbosch  
Cape Town  
Francie van Zijl Drive  
Tygerberg  
7505**

**CONTACT NUMBER: 051 451 9292 / 082 673 4198**

Dear Colleague

My name is Maruanda Liebenberg, and I am a Masters in nursing student at Stellenbosch University. I would like to invite you to participate in a research project that aims to investigate the perceptions of operating room qualified professional nurses regarding their role as mentors of novice nurses in the operating room.

Please take some time to read the information presented here, which will explain the details of this project and contact me if you require further explanation or clarification of any aspect of the study. Also, your participation is **entirely voluntary** and you are free to decline to participate. If you say no, this will not affect you negatively in any way whatsoever. You are also free to withdraw from the study at any point, even if you did agree to take part.

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The privacy of all the participants will be protected as no names will appear on the interviews, neither the names of the participating institutions.

All the information shared during the interviews will also be kept confidential and all the participants will sign a confidentiality pledge to ensure none of the information obtained during the interview is given to anyone else.

There are no foreseen risks or harm for any of the participants and your participation is completely voluntary.

Your participation and input in this study will be greatly appreciated.

**If you are willing to participate in this study please sign the attached Declaration of Consent and hand it to the investigator.**

Yours sincerely



**M Liebenberg**  
**Principal Investigator**

## **APPENDIX 5**

***Confidentiality agreement with data  
transcriber (if applicable) / permission  
for use of an instrument***

**Confidentiality agreement: data transcriber**

Agreement reached in support of participants right to privacy of information throughout the research process of the study entitled:

Professional nurses' perceptions of their role as mentors of novice nurses in the operating room.

Ethics Reference: S16/10/220

I, Bahida Koby..... agree to keep all information on the audio recorded interviews confidential. Information provided in the interviews will not be disclosed. The original audio recordings and transcriptions will not be duplicated or used for any purposes.

Signature: Geetje.....

Date: 10-07-2017

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## **APPENDIX 6**

### ***Extract of transcribed interview***

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## **TRANSCRIPTION EXTRACT FROM INTERVIEWS**

<b>PERSON SPEAKING:</b>	<b>PARAGRAPH NUMBER:</b>	<b>FOCUS GROUP 3 TRANSCRIPTION:</b>
Participant 13 [P13]	11	I think the role very critical kind very important as in an experience theatre trained nurse because of the medico-legal risks in theatre, so that a newly employed, or whoever, what did you say the name again?
Fieldworker [F2]	12	A novice nurse
Participant 13 [P13]	13	novice nurse yes, the... the to make the... the stay of the novice nurse to more comfortable and to be more she or he must have the feeling of being more, more a welcomed in the department, yes it's very important so we must orientate him or her we must teach her accordingly the, the policy of the department the she or he must be confident about what his doing or what is been expected of him or her especially in the theatre complex so because it's different from the wards, ordinary wards, so very critical the wards is very critical it she mustn't be frustrated or being letting trouble and then she feels she can quits the profession or be depressed or whatever ..so it's always the supportive side with anything.
Participant 10 [P10]	14	Ja, I'm just going to add on that, I think you've got the knowledge and you've got the expertise so, you're role is on knowledge, it's on teaching and on experience, so I think experience is the important part.
Participant 11 [P11]	15	You need the knowledge and expertise if you allocate this new person you have an important role to the, you must act it so you can really see that listen this person is done by this we do you follow this standards you don't compromise you do ever according to the laws of the institution of the department.
Fieldworker [F2]	16	so you say they should be role models?
Participant 12 [P12]	17	And then, Good day, if you teach your part you have to teach especially the standards from the start you must know the rightfully and make sure she doesn't compromise, cause for example if you talking about infection, once you compromise, you leave the patient with infection, so infection is very crucial.
Fieldworker [F2]	18	We talk about orientation now after orientation what will we teach them? They done general orientation they come into our theatre what extra do you think we must teach them?

<b>PERSON SPEAKING:</b>	<b>PARAGRAPH NUMBER:</b>	<b>FOCUS GROUP 3 TRANSCRIPTION:</b>
Participant 13 [P13]	19	I think firstly we teach them the, eh, eh, we at our institutions we normally teach them on a, what is this, anaesthesia, anaesthetic part of the work there yes... Before we can expose to this kind, to scrubbing and whatever, we start anaesthesia so the importance of anaesthesia the drugs are been used for to anaesthetise the patient, the role of him or her the as an anaesthetic nurse and then the role of anaesthetic doctor and how is she supposed to do things to assist the anaesthetist within induction of the patient, yes and after teaching the anaesthesia and the other one can continue...
Participant 10 [P10]	20	Ye I think a on the first day is observation and observe what to do, they shadow, then we teach them then recovery identification we start from the beginning, and we, the following week they go to CSSD they, then it will be scrubbing or depending if it's the sister or the nurse.
Participant 12 [P12]	21	We also the reception area in the recovery room how they receive the patients they get comfortable, before we can enter the theatre if he is doesn't know the theatre you can't fright them for example that if he doesn't know the theatre or maybe the doctors are harsh, we can't let them run away or say this place, I'm going to leave..... Ya
Fieldworker [F2]	22	And form your side?
Participant 11 [P11]	23	I'm still add what sister said for the first day the they just following you after you taught them they follow you, you show, what I said maybe what sister said, preparation of the anaesthesia for instant, you have maybe to perform somebody who does know to do the drugs, how to prepare them to enter the theatre maybe they preparing it for savoury what it calls first how, how to prepare the theatre how to start by taking everything inside the theatre. Ready for operation.

## **APPENDIX 7**

### ***Declarations by language and technical editors***

## ***LANGUAGE EDITOR – DECLARATION***

27 November 2017

*Luna Bergh*

55 Jim Fouché Avenue  
Universitas, Bloemfontein

To whom it may concern

This is to certify that I language-edited Maruanda Liebenberg's thesis manually, excluding references and appendices. She effected the changes herself. In this way both linguistic excellence and the candidate's ownership of her text were ensured.

Sincerely



Luna Bergh

D Litt et Phil

Language and writing specialist

## ***TECHNICAL EDITION – DECLARATION***

\*1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100 101 102 103 104 105 106 107 108 109 110 111 112 113 114 115 116 117 118 119 120 121 122 123 124 125 126 127 128 129 130 131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146 147 148 149 150 151 152 153 154 155 156 157 158 159 160 161 162 163 164 165 166 167 168 169 170 171 172 173 174 175 176 177 178 179 180 181 182 183 184 185 186 187 188 189 190 191 192 193 194 195 196 197 198 199 200 201 202 203 204 205 206 207 208 209 210 211 212 213 214 215 216 217 218 219 220 221 222 223 224 225 226 227 228 229 230 231 232 233 234 235 236 237 238 239 240 241 242 243 244 245 246 247 248 249 250 251 252 253 254 255 256 257 258 259 260 261 262 263 264 265 266 267 268 269 270 271 272 273 274 275 276 277 278 279 280 281 282 283 284 285 286 287 288 289 290 291 292 293 294 295 296 297 298 299 300 301 302 303 304 305 306 307 308 309 310 311 312 313 314 315 316 317 318 319 320 321 322 323 324 325 326 327 328 329 330 331 332 333 334 335 336 337 338 339 340 341 342 343 344 345 346 347 348 349 350 351 352 353 354 355 356 357 358 359 360 361 362 363 364 365 366 367 368 369 370 371 372 373 374 375 376 377 378 379 380 381 382 383 384 385 386 387 388 389 390 391 392 393 394 395 396 397 398 399 400 401 402 403 404 405 406 407 408 409 410 411 412 413 414 415 416 417 418 419 420 421 422 423 424 425 426 427 428 429 430 431 432 433 434 435 436 437 438 439 440 441 442 443 444 445 446 447 448 449 450 451 452 453 454 455 456 457 458 459 460 461 462 463 464 465 466 467 468 469 470 471 472 473 474 475 476 477 478 479 480 481 482 483 484 485 486 487 488 489 490 491 492 493 494 495 496 497 498 499 500 501 502 503 504 505 506 507 508 509 510 511 512 513 514 515 516 517 518 519 520 521 522 523 524 525 526 527 528 529 530 531 532 533 534 535 536 537 538 539 540 541 542 543 544 545 546 547 548 549 550 551 552 553 554 555 556 557 558 559 560 561 562 563 564 565 566 567 568 569 570 571 572 573 574 575 576 577 578 579 580 581 582 583 584 585 586 587 588 589 590 591 592 593 594 595 596 597 598 599 600 601 602 603 604 605 606 607 608 609 610 611 612 613 614 615 616 617 618 619 620 621 622 623 624 625 626 627 628 629 630 631 632 633 634 635 636 637 638 639 640 641 642 643 644 645 646 647 648 649 650 651 652 653 654 655 656 657 658 659 660 661 662 663 664 665 666 667 668 669 670 671 672 673 674 675 676 677 678 679 680 681 682 683 684 685 686 687 688 689 690 691 692 693 694 695 696 697 698 699 700 701 702 703 704 705 706 707 708 709 710 711 712 713 714 715 716 717 718 719 720 721 722 723 724 725 726 727 728 729 730 731 732 733 734 735 736 737 738 739 740 741 742 743 744 745 746 747 748 749 750 751 752 753 754 755 756 757 758 759 760 761 762 763 764 765 766 767 768 769 770 771 772 773 774 775 776 777 778 779 780 781 782 783 784 785 786 787 788 789 790 791 792 793 794 795 796 797 798 799 800 801 802 803 804 805 806 807 808 809 810 811 812 813 814 815 816 817 818 819 820 821 822 823 824 825 826 827 828 829 830 831 832 833 834 835 836 837 838 839 840 841 842 843 844 845 846 847 848 849 850 851 852 853 854 855 856 857 858 859 860 861 862 863 864 865 866 867 868 869 870 871 872 873 874 875 876 877 878 879 880 881 882 883 884 885 886 887 888 889 890 891 892 893 894 895 896 897 898 899 900 901 902 903 904 905 906 907 908 909 910 911 912 913 914 915 916 917 918 919 920 921 922 923 924 925 926 927 928 929 930 931 932 933 934 935 936 937 938 939 940 941 942 943 944 945 946 947 948 949 950 951 952 953 954 955 956 957 958 959 960 961 962 963 964 965 966 967 968 969 970 971 972 973 974 975 976 977 978 979 980 981 982 983 984 985 986 987 988 989 990 991 992 993 994 995 996 997 998 999 1000

I hereby certify that the thesis by MARUANDA LIEBENBERG was technical edited.

Title of thesis:

PROFESSIONAL NURSES' PERCEPTIONS OF THEIR ROLE AS MENTORS FOR  
NOVICE NURSES IN THE OPERATING ROOM



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