

Available online at www.sciencedirect.com

ScienceDirect

journal homepage: <http://ees.elsevier.com/hsag/default.asp>

Full Length Article

Strategies to facilitate professional development of the occupational health nurse in the occupational health setting



Nicolene de Jager, Anna G.W. Nolte^{*}, Annie Temane

Department of Nursing, University of Johannesburg, DCur, 2014, South Africa

ARTICLE INFO

Article history:

Received 12 March 2015

Accepted 23 March 2016

Available online 25 July 2016

Keywords:

Professional development

Occupational health nurse

Occupational health setting

ABSTRACT

Background: Education and experience are important components in the ability of occupational health nurses (OHNs) to promote high-quality care and competence. OHNs will increasingly require the skills and knowledge to base care on best evidence, to use critical thinking and demonstrate advanced leadership and decision-making skills to develop and enhance services in a more complex and diverse occupational healthcare environment.

Objective: The purpose of this study was to identify the needs for professional development of the OHN in the occupational health setting.

Method: An explorative, descriptive, contextual generic and qualitative research method was used in this study. The purposive sampling method was used as the OHNs surveyed described their personal need for professional development in the occupational health setting. Data was collected by means of semi-structured individual interviews. Eight interviews were done by an interviewer who held a doctoral degree in community health nursing and a qualification in occupational health and was affiliated with a private occupational health institution at the time of the study. The interviews were conducted during August 2012.

Results: The OHNs reported that professional development needs have to be identified by the OHNs. Short courses need to be designed by training institutions and should be attended by the OHNs to improve their operational functioning on a day-to-day basis in the occupational health setting. The OHNs experienced that their role and function in the workplace were not valued by their managers. The results of this study revealed four major themes, namely constraints hindering the OHN in developing professionally, positive aspects identified by the OHNs regarding the need for professional development, professional development needs of the OHN and suggestions of how to meet the OHNs' professional development needs.

Conclusion: There is a need for OHNs to identify their professional development needs and recommendations were made to meet these needs.

© 2016 The Authors. Publishing services by Elsevier B.V. on behalf of Johannesburg University. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

^{*} Corresponding author. Department of Nursing, University of Johannesburg, PO Box 524, Auckland Park 2006, South Africa.

E-mail address: agwnolte@uj.ac.za (A.G.W. Nolte).

Peer review under responsibility of Johannesburg University.

<http://dx.doi.org/10.1016/j.hsag.2016.03.003>

1025-9848/© 2016 The Authors. Publishing services by Elsevier B.V. on behalf of Johannesburg University. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

1. Introduction and background

Occupational health is a diverse specialisation of healthcare with a holistic approach to enhancing the relationship between work, the workplace and the employee's health and wellbeing (Wicht, 2011).

OHNs work in numerous and diverse settings, including industry, construction, health services, banking and mining. They can be employed as an independent nurse or as part of a larger team which is often attached to a personnel department or as part of a professional occupational health outsourced service.

In developed countries, international reform is taking place in matters affecting the health of the worker. The importance of education of the medical and nursing profession in occupational health matters is increasingly recognised and thus through undergraduate and postgraduate curricula, both medical and nursing students receive more information and teaching in occupational health. This results in more qualified medical and nursing personnel being employed by industry, and better coordinated state-sponsored basic and applied research into health hazards relating to the working environment being undertaken (Wicht, 2011). Education and experience are important components in OHNs' ability to promote high-quality care and perform a satisfactory job, but a great deal depends on their work circumstances and the demands and opportunities in the workplace (Hallin & Danielson, 2008). Acquiring professional competence is a lifelong continuing process and is therefore not completed at graduation. OHNs are educated to improve the quality of practice, carry out research-based practice and be responsible for keeping up to date with developments in the profession (Hallin & Danielson, 2008).

Courses in occupational health nursing, based on Regulation 212 of February 1993, of the South African Nursing Council, are offered by a variety of institutions around the country. Successful candidates are awarded either a diploma or a Bachelor's Degree of Technology, depending on the institution and the duration of study. Both the private and public sectors offer these courses. In addition, OHNs have the opportunity to complete master's and doctoral degrees in occupational health nursing. What is still lacking is distance-based training for candidates working or living in areas not served by a tertiary education institution (Coetzee & Michell, 2011).

In-service training is important, but fails to cover certain areas or hazards which do not occur in particular workplaces. OHNs should be encouraged to belong to their professional societies, e.g. the South African Society of Occupational Health Nursing Practitioners (SASOHN), and to attend scheduled meetings on a regular basis. Contact with colleagues helps to prevent an insular outlook and provides professional stimulation. This serves as in-service training of the latest trends and developments in occupational health nursing. For a similar reason, OHNs should attend refresher courses from time to time to keep up to date with legal and other related changes (Rapas, 2012).

Professional development of the OHN consists of planned learning experiences designed by or in collaboration with individuals who have the intention of advancing knowledge and skills to be used in their employment (Guidotti, 2011). The

OHN will increasingly require the skills and knowledge to base care on best evidence, to use critical thinking and demonstrate advanced leadership and decision-making skills to develop and enhance services in a more complex and diverse occupational healthcare environment (Casey & Clark, 2009).

1.1. Problem statement

The researcher attends the SASOHN meetings in her region on a monthly basis. After observing discussions of the OHNs in these meetings, she realised that there is a common theme in their discussions. As in the occupational health setting, the OHNs mostly work independently, but require expertise in many disciplines to ensure safe and healthy working conditions. After observing these OHNs, she decided to use the following case study to explain their main problem:

Nurse X works full time at a company as an OHN. She is responsible for 1200 employees. She is the only OHN employed with an occupational health medical practitioner (OHMP) visiting the clinic only once a week for an hour. Some of her main functions are conducting pre-placement medicals and annual medicals on all employees, replacing first aid equipment, conducting health risk assessments (taking about two months to complete), attending meetings at least on a daily basis, writing reports, filing documents and training employees on risks. Nurse X has extended her working hours to conduct all her functions. She takes work home to complete the reports. She says that the workload is overwhelming and that she does not have enough time to do what is expected of her. She does not have time to attend SASOHN development sessions or any other training and development sessions. She does not know what the latest legislation, trends or changes in occupational health nursing are. She feels unsure about her role as she is not developed in her field as an OHN and experiences the need for further development.

Increasingly, OHNs will need to acquire and develop the skills and attributes required to deal with a range of new and emerging occupational health nursing responsibilities, as this field of nursing becomes more diverse. There will be greater requirements to review existing learning needs and to plan future professional development. At present the South African Nursing Council (SANC) also works on a Continuous Professional Development (CPD) strategy and it will become a requirement from SANC to maintain OHN registration.

This led the researcher to ask the following question:

What are the needs of the OHN working in the occupational health setting in relation to professional development?

1.2. Purpose and objectives of the study

The purpose of this study was to identify the needs for professional development of the OHN in the occupational health setting.

The objective of this study was as follows:

To explore and describe the needs of the OHNs in relation to their professional development.

1.3. Key concepts

1.3.1. Professional development

According to the [Macmillan Dictionary \(2009\)](#), professional development is the process of obtaining the skills, qualifications and experience that allow OHNs to progress in their career in occupational health nursing. [Torstad and Bjork \(2007\)](#) state that professional development includes the acquisition of new knowledge, skills and attitudes to enable the OHN to be competent. Professional development thus denotes a learning process and competence is the outcome of this process.

1.3.2. Occupational health nurse

The OHN is a registered nurse who practises in accordance with relevant nursing legislation, codes of ethics, practice standards, workplace policies and procedures and other legislation applicable to the workplace and holds a qualification in occupational health recognised as such by the South African Nursing Council (SANC) as referred to in the Nursing Act 33 of 2005 ([Department of Labour of South Africa, 1993](#)).

1.3.3. Occupational health setting

The practice site of the OHN refers to the medical facility or clinic in the factory, industry or corporate environment. Operations of these sites can vary from food, heavy machinery to very light machinery. Depending on the nature of the industry, the OHN will identify the hazards related to the operation and exposure to the employees ([Guzman, 2012](#)).

2. Research method and design

The objective of the study was to explore and describe the needs of the OHNs in relation to their professional development.

2.1. Design

An explorative, descriptive, contextual generic and qualitative research method was used in this study. The OHNs surveyed described their personal need for professional development in the occupational health setting ([Burns & Grove, 2009](#)).

2.2. Population and sampling

The target population consisted of OHNs in an occupational health setting in Gauteng Central Region ($n = 599$) (list members of SASOHN). The researcher used the purposive sampling method ([Burns & Grove, 2009](#)). In this type of sample, the researcher gains an in-depth understanding of a complex experience or event.

A sampling frame was developed from a list of all the members of SASOHN in Gauteng Central Region. The researcher invited participants to share their professional development needs. All participants had to be in possession of a qualification in occupational health nursing ([Department of Labour of South Africa, 1993](#)). The total sample size depended on saturation, in other words when no new information was gathered ([Creswell, 2007](#)).

2.3. Data collection

The data for this research project was collected by means of semi-structured individual interviews. An external interviewer was used by the researcher whom conducted eight interviews at the participant's workplace. The interviews were conducted during August 2012. An appointment was made with the participants for the interviews to be conducted ([Burns & Grove, 2009](#)). Confidentiality was ensured as no details of the participants were included in the study or will be revealed to anyone. All information was stored in a safe place and will be stored for two years and no one other than the researcher has access to it.

The following two open-ended questions were asked:

- Tell me about your needs for professional development as an OHN.
- What suggestions do you have for professional development of an OHN?

Different communication skills were used by the external interviewer to obtain more information in a specific area of the interview ([Burns & Grove, 2009](#)). Field notes were made by the researcher during the interview while the external interviewer conducted the interviews and the field notes reflected expressions, tone of voice, or mannerisms of the participant being interviewed. The semi-structured interviews were audio-taped and later transcribed and coded. The transcriptions formed the primary source of data for analysis.

2.4. Data analysis

The researcher transcribed all interview recordings and notes made during the interview. Tesch's open coding was used ([Creswell, 2007](#)). Coding of transcriptions and notes was verified by using an external coder.

2.5. Ethical considerations

2.5.1. Ethical clearance

Ethical clearance was obtained from the Ethics Committee of the University of Johannesburg (AEC 32-01-2012; HDC 33-01-2012) as per the guidelines of the Democratic Nursing Association of South Africa, 2010. The researcher explained the objectives, rationale, potential benefits and risks of the study to the participants. She designed a consent form which the participant had to sign to take part in this research. The researcher adhered at all times to the rights of privacy, confidentiality and anonymity of the participants. She explained to those participating in the study that they had the right to withdraw at any given time during the study ([Burns & Grove, 2009](#)). There were neither risks nor direct benefits for the participants in participating in this research project.

2.5.2. Trustworthiness

According to the model of [Guba \(1981\)](#) on trustworthiness, four aspects are relevant to explain this concept: truth value, applicability, consistency and neutrality. Truth value in this study was obtained by determining how the OHNs experienced their professional development and how they lived and

perceived these experiences when interviewed by the researcher. Trustworthiness depends on how applicable the data is assessed to be by the researcher. The researcher was consistent selecting the participants as per the population criteria. Neutrality was ensured by not being biased and by validating the findings with a co-coder (Polit & Beck, 2010). Trustworthiness was enhanced by the following strategies: credibility, transferability, dependability and confirmability.

2.5.2.1. Credibility. Conceptualisation of concepts was described in detail by the researcher. Enough time was given to the participants during the interview. Triangulation of data collection was ensured through the use of field notes during the interview and a co-coder to verify the findings of the researcher. The participants were given the opportunity to refuse to participate at any time. The external interviewer probed with statements during the interview to give the participants the opportunity to elaborate on statements made (Burns & Grove, 2009). The background, qualifications and experience of the external interviewer as an OHN ensured the credibility of the information gathered as she lived the experiences of the participants.

2.5.2.2. Transferability. Sufficient contextual information was supplied by the researcher (Creswell, 2007).

2.5.2.3. Dependability. The interviews were audio-taped and then transcribed. The findings were coded. The researcher revisited the coded findings after two weeks to recode them and compare the findings. A co-coder was used to ensure consistency and dependability (Creswell, 2007).

2.5.2.4. Confirmability. The methodology of the research was described in as much detail as possible and an audit trail was kept (Burns & Grove, 2009).

3. Theory and results

The data for this study was gathered from eight participants (OHNs) who had to be in possession of a qualification in occupational health. Seven of the eight OHNs had been in occupational health nursing for more than ten years. One of the OHNs had entered occupational health nursing recently after leaving the profession a few years before to be self-employed as a consultant in occupational health nursing. All eight OHNs were in the age group of 30–40+ years of age and all were female. The employment of the OHNs ranged from the private sector to manufacturing services, and ranged from the industries of mining, aviation, retail and glass manufacturing. The reporting structure varied from company to company. The direct managers of these OHNs were mostly from the human resources department and one OHN reported to the Occupational Health Medical Practitioner (OHMP). One OHN had staff reporting to her as the senior OHN, whilst another was the junior OHN reporting to a senior OHN. The remaining six OHNs were employed as the only OHN at their companies. The researcher used an interviewer to conduct the interviews. The researcher knew all the participants and felt that she could be biased and lead the participants in what she wanted to hear if

she conducted the interviews herself. The interviewer held a doctoral degree in community health nursing and a qualification in occupational health and was affiliated with a private occupational health institution at the time of the study.

The OHNs participating in this study reported that professional development needs have to be identified by the OHNs and their professional body SASOHN. Short courses need to be designed by training institutions and SASOHN, and should be attended by the OHNs to improve their operational functioning on a day-to-day basis in the occupational health setting. The OHNs experienced that their role and function in the workplace were not valued by their managers.

The results of this study revealed four major themes, namely:

- Constraints hindering the OHN in developing professionally
- Positive aspects identified by the OHNs regarding the need for professional development
- Professional development needs of the OHN
- Suggestions of how to meet the OHNs' professional development needs (Table 1)

3.1. Constraints hindering the OHN in developing professionally

The OHNs reported several managerial challenges in identifying their need for professional development. (Only selected challenges will be discussed in this article.)

OHNs revealed that there was a lack of insight into the role and function of the OHN in the workplace. They reported that their managers did not know or understand what occupational health nursing was as a profession. This was confirmed as a challenge by the following verbatim quotes of OHNs:

“they need to know of what a occupational health nurse function is in a company”; “they don’t have a clue what a function of a occupational health nurse is and the value of her in a company” and “one day I will definitely get my time to say exactly what it is what I am doing in the company”

Another said:

“at the moment I don’t think our managers or senior managers they know exactly what occupational health is” and “I think management need to be educated by SASOHN of what the function of an occupational health nurse is in the company and that she actually report to management and she’s not just a nurse”

There is limited research on the professional development of OHNs; however, the literature is clear on the roles and function of the OHNs (WHO, 2011). It is stated in *Nursing Economics* (2006) that the workplace management's perception and expectations of the role and development of the OHN may differ from those of the OHN. This discrepancy may lead to role conflict (Rogers, 2003). The size of the factory can influence the perception of management of the role, function and further development of the OHN and this leads to the

Table 1 – OHNs' needs for professional development.

Theme	Category	Subcategory
1. Constraints hindering the OHN in developing professionally	1.1 Challenges in identifying need for professional development of the OHN 1.2 Challenges of the OHN in the workplace 1.3 OHNs' disillusionment with their professional body (SASOHN)	1.1.1 Managerial challenges <ul style="list-style-type: none"> • Lack of insight into the role and function of the OHN • Poor working relationship between the OHN and line managers • Lack of support from management to requests of the OHNs for professional development • Turnover of managers and reporting lines of the OHNs cause uncertainty of employment of the OHN • No scope for promotion for the OHN • Management versus union in relation to professional development 1.1.2 Financial constraints <ul style="list-style-type: none"> • Lack of funds for OHNs to attend continuous professional development courses/workshops • Staff retrenchment 1.2.1 Challenges <ul style="list-style-type: none"> • Workload • Qualification hunting to develop professionally • Lack of motivation to develop professionally in relation to: • Low self-esteem • Long years of service in the OHN profession • Unsure/uncertain of OHN's own developmental needs • Personal tragedy 1.3.1 Lack of support from the professional body in relation to: <ul style="list-style-type: none"> • Training and skills development • No planned staff development programme 2.1.1 Support source through <ul style="list-style-type: none"> • Informal discussions and networking with fellow OHNs • Conferences and academic days • Provision of information (e-mails, internet and journals) 2.2.1 Contributions: <ul style="list-style-type: none"> • Financial support to attend conferences, academic days and monthly meetings • Recognition of management for new ideas and changes made by the OHN • Mentorship of the OHMP 2.3.1 OHN's are: <ul style="list-style-type: none"> • Self-driven to meet professional development needs • OHNs' enthusiasm about their profession
2. Positive aspects identified by the OHNs regarding the need for professional development	2.1 SASOHN as support source for professional development 2.2 Contribution of management towards the OHNs' professional development needs 2.3 OHNs' motivation to develop professionally	<ul style="list-style-type: none"> • Gender • Cultural diversity
3. Professional development needs of the OHN	3.1 Managerial/administrative skills e.g. conflict 3.2 Financial management	

(continued on next page)

Table 1 – (continued)

Theme	Category	Subcategory
4. Suggestions of how to meet the OHNs' professional development needs	3.3 Computer literacy	• Language
	3.4 Professional practice	• Clinical skills: audiometry, spirometry, vision screening and family planning
	3.5 Integration of theory and practical skills	• Occupational health diseases: specific skin disorders, occupational health diseases
	3.6 Diversity	• Occupational health: health risk assessment and medical surveillance
	3.7 Short updating courses	• Primary health: primary healthcare, dispensing of medication, pharmacology and competency-based physical examination
	4.1 OHNs rendering services on site to the employees, rather than outsourcing, which has a financial impact on the company	• Emergency care: first aid (emergency preparedness) and wound care
	4.2 Mentoring of the OHNs	• Operational skills: counselling skills, industrial relations, time management, basic research on interpreting statistics and basic teaching skills
	4.3 Implementation of Continuous Professional Development (CPD) points	
	4.4 Short courses or distance learning to be offered by universities and other training institutions	

OHN being frustrated which contributes to one of the major challenges in identifying the need for professional development (Nursing Economics, 2006).

Another challenge that the OHNs experienced was the lack of support from management for their request for professional development. OHNs commented:

"I don't get any assistance from my manager"

Another stated:

"it could have been five years ago that she went on a seminar somewhere" and "management overlook your needs"

Hallin and Danielson (2008) emphasise that it is essential that managers give priority to and motivate and support OHNs in developing professionally. Professional development and experience are important components in the OHNs' ability to perform a satisfactory job, but a great deal depends on opportunities available in the workplace and the support of management when OHNs request the chance to develop themselves. Warnings have been published about OHNs' job dissatisfaction in the occupational healthcare sector, and subsequently their decision to leave the profession. One of the reasons given is, for example, the lack of professional development and support from their managers (Hallin & Danielson, 2008).

The OHNs interviewed experienced financial constraints because they lacked the funds to develop professionally and to attend courses and workshops.

They commented as follows:

"It's money, they will tell you the company they don't have money, sometimes, but now the company is not doing very well and we need to cut down on costs and everything" (the OHN explained in the interview that 'everything' meant professional development)

and

"now I love conferences but now for me it is a hindrance, I must pay for myself and it is tough and I'd love to go"

The literature confirms that employment uncertainty is a universal phenomenon as in the current economic climate companies are experiencing financial difficulty and the OHNs' professional development is seen as "a nice to have" (Mohamed, 2011). In a study on nurse-independent prescribers, the participants were asked to give reasons why they were unable to access Continuous Professional Development; they revealed that there was a lack of funding from their employer (Carey & Courtenay, 2009). In a summer internship programme run for senior nursing students in Kansas the hospital paid all tuition fees, on condition that they worked back at least a year after they registered as nurses. The advantages of such internship programmes are that the students gain additional clinical experience and they improve their own learning outcomes (Toofany, 2007). Sufficient funds are needed for professional development that involves appropriate assessment, intervention and

evaluation to meet the challenges regarding OHN shortages, the workforce environment, staffing and the quality of occupational health nursing care.

The OHNs had excessive workloads in their occupational health setting and limited time to develop professionally. When asked how she coped with the day-to-day and additional tasks assigned to her, one OHN replied that there was no time for professional development:

“we start organising everything and the thing just gets cancelled and we end up doing it and our work is getting further and further behind it is terrible, it is not pleasant”

and

“so we were floundering then, our medicals are behind” and “we are drowning and something is going to happen”

Excessive workload has a negative impact on professional development. The increased scope of practice, further opportunities for role development and career promotion, financial support for further education and fiscal recognition for gaining further qualifications have all been identified as important factors in enhancing the workload of the OHN (Australian Nursing Federation, 2004). According to Hunt (2009), the reason for OHNs resigning from their job is three-fold: feeling overworked, not being able to manage the workload and a lack of career opportunities and support for career development.

OHNs indicated that they also lacked motivation to develop professionally due to their long years of service in the occupational health nursing profession. They said:

“you have reached your limit due to your age and years of service”

and

“I am older and I don’t want to work this hard anymore”

According to SANC (2009), the latest statistics reveal that fewer young nurses appear to enter the nursing profession and therefore the ageing nurses are the source of knowledge and skills. Senior nurses might not be receiving the necessary professional development for safe practice and they are not as likely to undergo mandatory training to update their skills (Drey, Gould, & Allan, 2009).

The OHN's also felt that their professional body SASOHN do not do enough for professional development.

3.2. Positive aspects identified by the OHNs regarding the need for professional development

The OHNs felt that the informal discussions at the monthly meetings and networking with fellow OHNs were helpful to share ideas, knowledge and skills and that problem solving took place. OHNs said:

“I find it's very good to go the meetings every month and to have communication with your peer group”

and

“It is very important the informal contacts the relationship and the information that you share between each other”

By working in the general nursing network, nurses can plan their career better and select skills and nursing knowledge in preparation for it. Informal discussion or networking is not only conducted in occupational health nursing, but is found extensively in the literature to be a tool to identify the need for professional development. By having informal discussion sessions, information can be sourced and guidance can be given on different professional development needs, which is an invaluable asset to nurses (Meiring, 2013).

The OHMP has the occupational health medical knowledge and the OHN uses the OHMP as a mentor to gain knowledge and skills in occupational health medicine (Rogers, 2003). OHNs confirmed that they gain knowledge from the OHMP and stated:

“Yes, most of the time I use him”

and

“if I find I am in doubt about everything I've always phone the doctor”

The OHMPs are perceived as management in the workplace as they take full responsibility for the occupational health programme in the workplace. According to Page (2012), OHNs have an obligation to constantly update their knowledge and skills in order to maintain competence, deliver high-quality services and meet the needs of the companies that they serve.

The OHNs acknowledged that they were eager to identify their need for professional development and to gain knowledge and skills. OHNs confirmed this by saying the following:

“Informal education for occupational health nurses and ongoing refresher course are needed”

Another said:

“we need to keep ourselves up to date on that side of things”

OHNs were motivated through SASOHN and training institutions to further their studies by attending short courses as professional development in occupational health (SASOHN, 2011). Being self-driven and feeling successful in the occupational health profession encourages all OHNs to promote themselves, their teams, their organisations and profession (Butterworth, Henderson, & Minshell, 2008).

3.3. Professional development needs of the OHN

The following were identified as professional development needs: managerial/administrative skills, financial management, computer literacy, and professional practice, integration

of theory and practical skills, diversity and short courses for updating purposes.

(Only a few needs will be discussed in this article.)

The OHNs asserted that they needed development in managerial skills:

“Yes I would like go on managerial skills and managerial related development”

and

“I would say other areas, perhaps managing a clinic in other words”

Rogers (2003) indicates that it is important for OHNs to obtain and develop managerial skills to fulfil their role requirements. Furthermore, the author points out that the relative importance and degree of the skill depends on the situation and the nurse's position and authority in the organisation. It was also found by Govender and Parumasur (2010) that the need for nursing managers to be able to display optimal paradoxical capabilities and behaviour complexities is becoming more pronounced. In their study on evaluating the roles and competencies that are critical considerations for management development, it was highlighted that these are potential areas for management development, thereby contributing to managerial effectiveness.

Underdeveloped conflict management skills prohibit the OHNs from developing professionally in the workplace and the OHNs surveyed experienced this as a major factor. They said:

“interpersonal skills because in occupational health you need to be able to deal with unions and management and workers”

and

“he don't like conflict. If one of my staff without me go to him and complain, it is difficult he don't call you in and say well what is your side of the story” (this causes conflict between the manager and the OHN)

Differences regarding interpersonal skills, communication and management style in the occupational health setting may lead to conflict, especially where team members work closely together for 8 h a day in stressful situations. This can hamper the nurses' ability to perform and develop professionally. Iglesias, Elena, and Ricardo (2012) support this statement in their study on conflict resolution styles in the nursing profession and found that conflict is a factor that influences the professionalism of the nurse if not handled correctly. They found that the most common style for nurses to resolve conflict is compromise, followed by competing, avoiding, accommodating and collaborating, and suggested that nurses should be trained to handle conflict situations as a way to further their development.

Occupational health nursing is no exception when it comes to embracing technology. The rapidity of change in computer technology and literacy is hard to keep up with, especially today. The OHN has to become computer literate and use

computers in the occupational health setting to ensure professional development when conducting research, staying ahead with the latest trends legally and in the profession by searching the internet. OHNs experienced the use of computer technology as follows:

“Occupational health clinics should be set up with computers and Internet and Internet access and we should a lot more moving away from this hard copy business and being able to access sources”

The OHNs stated that there was a need to be able to use technology in the occupational health setting. Networking amongst OHNs is conducted on the internet and therefore accessibility, computer literacy, availability, email usage and website usage are important for the OHN. Computer-based clinic programmes are user friendly, free or have a limited cost, resulting in time and financial savings for the company. Eley, Fallon, Soar, Buikstra, and Hegney (2008) mention that nurses in their study who had computer training believed that it was adequate to meet the needs of their job, but most of these nurses said that they needed more training in computer technology. They suggest that for nurses to be competent and to seek professional development, more attention must be given to training and education of nurses.

The OHNs expressed their concern that they had the theoretical knowledge and also needed clinical experience as an integration of theory and practice in the occupational health setting. They said the following:

“Hands-on nothing beats hands-on” (referring to clinical skills and experience)

and

“Yes, they come more with knowledge and as they come into practice that's when they get the experience. They don't have experience inside the plant, they don't know what we talking about if we talk about a walk about, so yes they do have theory but they don't have the practical”

Rogers (2003) states that the function of professional bodies is to establish the scope of practice (practice and theory integrated) and desirable qualifications required for general specialty practice in occupational health. Godwin (2010) maintains that some OHNs believe that the balance has tipped too much in favour of educational training with too little time and attention devoted to hands-on vocational training. The result is a situation where good occupational health nursing students do not necessarily have the practical skills to conduct themselves competently in the workplace. Both the occupational health nursing students and some of the tutors need to get more practical experience in the field; they need to be finding out what is really happening, as the reality is very different from what is taught in the classroom. The focus should be on training and not on education (Godwin, 2010).

Diversity includes important and interrelated dimensions of human identity such as race, ethnicity, socio-economic status, nationality, citizenship, religion, sexual orientation, ability and age. Since all OHNs are products of their

environments, and since these environments that produced them are also different, it should therefore not be uncommon to find that there are real differences between individuals and groups. The OHN is trying to survive in the current South African environment, and the following diversity factors were identified as professional development needs: gender, cultural diversity and language.

The OHNs attended post-basic courses in occupational health but they felt that they needed short updating courses to broaden their knowledge, skills and abilities and to keep them up to date with the latest trends in occupational health nursing.

3.4. Suggestions of how to meet the OHNs' professional development needs

Suggestions were made by the OHNs on how to meet their needs for professional development. Mentoring of the OHNs was identified as a suggestion for professional development of the OHN.

The OHNs suggested that experienced OHNs should mentor the new inexperienced OHNs. The following statements indicate this:

"I would love some mentor I don't want to be here like, I know it all"

another said:

"there is a bigger need for role models"

OHNs need to become more proactive by taking part in mentoring within their own profession to promote successful leadership and professional development. There is great potential for mentors to make important contributions to the career development of future OHNs (Wroten & Waite, 2009). Harrington (2011) suggests that a mentoring programme should be formulated which could help the new nurse practitioners develop further competencies and capabilities. She found in her study on mentoring new nurse practitioners to accelerate their development as primary care providers that productivity can accelerate, job satisfaction can increase and longevity can be provided in the primary care setting.

4. Limitations of the study

The researcher experienced no limitations regarding the design that was used. An explorative, descriptive, contextual generic and qualitative method was used where OHNs explored and gave insight into their needs for professional development. The cooperation of all OHNs was satisfactory as saturation was reached by means of semi-structured individual interviews.

The researcher had to use a variety of nursing and other specialties to discuss the literature background of professional development. Discussing the needs of OHNs regarding their professional development from a literature background was very limited from an occupational health point of view when searching literature.

5. Recommendations

5.1. Practice

This study highlighted that OHNs has a need to identify their professional development. The Constitution of South Africa (South Africa, 1996) states that all South Africans have a right to healthcare. If the needs of OHNs for professional development are met, it can contribute to a nursing practice where the OHNs are competent in the core practice and competencies that were identified and that provide the basis for the scope of practice, knowledge and skill of the OHN. SANC is busy to develop a strategy for the development of CPD points of all areas of nursing. Ways of collaboration with SANC should also be explored.

5.2. Education

Occupational health nursing is characterised by the possession of a scientific body of knowledge and it is therefore recommended that teaching occupational health skills and knowledge be based on identifying the needs for professional development of the OHN. The needs that were identified for professional development under the elements of situational analysis, planning professional development, implementation and evaluation can be used as a guide by the training institutions when the curriculum of occupational health nursing is discussed.

5.3. Research

The needs that were identified for professional development of the OHNs should be implemented. Further research can be conducted by implementing the suggestions of the participants and afterwards measure whether the needs were met.

6. Conclusion

The intention of this study was to explore and describe the needs of the OHNs in relation to professional development. This discussion emanated from the empirical data collected through semi-structured individual interviews. The results were grouped into four categories with sub-categories. The OHNs experienced constraints that hindered them in developing professionally, they indicated their need for professional development, they identified particular needs and they made suggestions on how to meet their professional development needs.

Authors' contributions

A.G.W. Nolte (University of Johannesburg) was the project leader, and A. Temane (University of Johannesburg) was co-leader. N. de Jager (University of Johannesburg) was the researcher, DCur Nursing.

REFERENCES

- Australian Nursing Federation. (2004). *Submission to the productivity commission research study: Implications of the ageing of Australia's population*. Available from <http://www.pc.gov.au/dates/assets/pdf> Accessed on 17.01.11.
- Burns, N., & Grove, S. K. (2009). *The practice of nursing research: Conduct, critique and utilization* (6th ed., p. 26). St Louis, Mo.: Elsevier, 122–123, 176–210, 341, 352, 353, 396–397.
- Butterworth, C., Henderson, J., & Minshell, C. (2008). Be a VIP. *Occupational Health*, 60(8), 32–33.
- Carey, N., & Courtenay, M. (2009). An exploration of the continuing professional development needs of nurses, independent prescribers and nurse supplementary prescribers who prescribe medicines for patients with diabetes. *Journal of Clinical Nursing*, 1(9), 208–216.
- Casey, D., & Clark, L. (December 2009). Professional development for registered nurses. *Art and Science Education*, 16(24), 35.
- Coetzee, A. C., & Michell, K. (2011). *A practical approach to occupational health nursing* (p. 21). Johannesburg: Walpro Printers, 22, 25.
- Creswell, J. W. (2007). *Qualitative inquiry & research design – Choosing among five approaches* (p. 36). California: Sage, 37, 65, 134, 159.
- Department of Labour of South Africa. (1993). *Occupational health and safety act 85 of 1993 and regulations*. Available from <http://www.labour.gov.za/docs/legislation/ohsa/index.html> Accessed on 22.05.09.
- Drey, N., Gould, D., & Allan, T. (2009). The relationship between continuing professional education and commitment to nursing. *Nurse Education Today*, 29(7), 740–745.
- Eley, R., Fallon, T., Soar, J., Buikstra, E., & Hegney, D. (2008). The status of training and education in information and computer technology of Australian nurses: a national survey. *Journal of Clinical Nursing*, 17, 2758–2767.
- Godwin, N. (2010). OH training – the state of play. Part 2: ON nurses, opportunities and the economy. *Occupational Health at Work*, 6(5), 24–27.
- Govender, P., & Parumasur, S. B. (2010). Evaluating the roles and competencies that are critical considerations for management development. *South African Journal of Industrial Psychology*, 36(1), 1–11.
- Guba, E. G. (1981). Criteria for assessing the trustworthiness of naturalistic inquiries. *Educational Resources Information Center Annual Review Paper*, 29, 75–91.
- Guidotti, C. (2011). State reports: Victoria. *Day Surgery Australia*, 10(3), 30–31.
- Guzman, J. R. (2012). *Occupational health in the Americas*. Paper presented at the 30th International Congress on Occupational Health, 18–23 March 2012, Mexico.
- Hallin, K., & Danielson, E. (2008). Registered nurses' perceptions of their work and professional development. *Journal of Advanced Nursing*, 61(1), 62–70.
- Harrington, S. (2011). Mentoring new nurse practitioners to accelerate their development as primary care providers: a literature review. *Journal of the American Academy of Nurse Practitioners*, 23(4), 168–174.
- Hunt, S. T. (2009). *Nursing turnover. Costs, Causes & Solutions*. Available from <http://www.successfactors.com> Accessed on 22.01.13.
- Iglesias, L., Elena, M., & Ricardo, B. D. V. (2012). Conflict resolution styles in the nursing profession. *Journal for the Australian Profession*, 43(1), 73–80.
- Macmillan Dictionary. (2009). Professional development – Definition. Available from <http://www.macmillandictionary.com/dictionary/british/professional-development> Accessed on 22.11.11.
- Meiring, A. (2013). Why must nurse leaders develop networks? *The Forum for Professional Nurse Leaders*, 5(1), 3.
- Mohamed, S. (2011). *Another year of global economic uncertainty*. Available from <http://www.polity.org.za/article/2011-another-year-of-global-economic-uncertainty-2011-01-14> Accessed on 05.02.11.
- Nursing Economics. (2006). *Occupational health nurses and case management*. Available from <http://www.goliathbusinessnews.com> Accessed on 10.02.11.
- Page, C. M. (2012). *Occupational health: Core areas of knowledge and competence, part 3*. Available from <http://www.ezinearticles.com> Accessed on 14.04.12.
- Polit, D. F., & Beck, C. T. (2010). *Nursing research – Principles, process and methods* (7th ed., pp. 147–149). Philadelphia: Lippincott, Williams & Wilkins, 312, 492, 563, 617–618.
- Rapas, L. (2012). *An interoperability model for the development of occupational health professionals*. Paper presented at the 30th International Congress on Occupational Health, 18–23 March 2012, Mexico.
- Rogers, B. (2003). *Occupational and environmental health nursing: Concepts and practice* (2nd ed., p. 1). Philadelphia: Saunders, 39, 82–83, 92, 93, 161, 252, 243, 332–335, 473, 480, 493, 500, 694–695.
- SANC. (2009). *Age distribution of registered nurses*. Available from <http://www.sanc.co.za/stats/stat2009/Age%> Accessed on 15.01.13.
- South Africa. (1996). *Constitution of the Republic of South Africa 108 of 1996*. Pretoria: Government Printer.
- South African Society of Occupational Health Nursing Practitioners (SASOHN). (2011). *Welcome – Goals of the society*. Available from <http://www.sasohn.co.za> Accessed on 23.04.11.
- Toofany, S. (2007). Making all pieces fit. *Nursing Management*, 13(9), 16–19.
- Torstad, S., & Bjork, I. T. (2007). Nurse leader's views on clinical ladders as a strategy in professional development. *Journal of Nursing Management*, 15, 817–824.
- Wicht, C. L. (2011). *A practical approach to occupational health nursing* (p. 25). Johannesburg: Walpro Printers.
- World Health Organization (WHO). (2011). *Role of the occupational health nurse in the workplace*. Available from http://www.who.int/occupational_health/publications/eunursing/en/index.html Accessed on 15.03.11.
- Wroten, S. J., & Waite, R. (2009). A call to action: mentoring within the nursing profession – a wonderful gift to give and share. *Association of Black Nursing Faculty Journal*, Fall, 106.