A conceptual framework for cost management training in the Limpopo Province of South Africa

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Aims This paper describes the perceptions of nurse managers about their dual role in nursing units as cost centres.
Background The tertiary hospital in the Limpopo province is the first institution to appoint nurse managers with a dual role in cost centres. The development of a conceptual framework for a context-specific programme for Cost Centre Managers is the first of its nature in South Africa.
Method A qualitative, exploratory, descriptive design was followed. The target population included nurse managers (n = 35) formally appointed as cost centre managers with a dual role of delivering quality care and cost management. A focus group and individual interviews were conducted until data saturation occurred.
Results Personal and professional distress, an empowering potential of being a cost centre manager, and the need for decentralized cost centre management were indicated as barriers for nurse managers that led to a framework for a context-specific training programme.
Conclusion There is a need for a context-specific training programme for cost centre managers in a hospital with cost centres.
Implications for nursing management The training of cost centre managers for their dual role in cost centres could enhance cost effectiveness, quality care and staff satisfaction.

Keywords: cost centre management, dual role, nurse manager, public hospital training, training programme

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Introduction and rationale

A cost centre in a hospital setting is an identifiable department, such as a nursing care unit, that has been practically assigned an account number in the hospital accounting system for the purpose of controlling clinical and administrative costs as well as accumulated expenses by that department (Cleverley & Cameron 2003). This definition highlights the importance of a trained cost manager to run a unit or department.

Cost centre management (CCMT) is seen as a comprehensive strategy that has a greater impact on the success of an institution and it can be accomplished by identifying leaders who can achieve the expected outcomes. The comprehensive nature of CCMT distinguishes it from a single financial management function

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such as budgeting or procurement (Sullivan 2009, Karen 2009). In addition, Warmer (2002), in the *International Encyclopaedia of Business and Management*, explains that in an organisation, CCMT serves as a primary objective to assign responsibility to a single unit to account and make costing decisions. According to Drury (2004), managing cost centres can be assigned directly to the nurse managers of those specific departments or areas in order to be accountable for the costs in the capacity as cost centre managers (CCMs). Since the inception of CCMT in the 2004–2005 financial year at the tertiary hospital complex in the Limpopo Province, South Africa, nurse managers are appointed with a dual role. While they execute CCMT functions, CCMs are simultaneously ensuring quality care to patients in the unit. They receive no formal training for their dual role: a dual role is a function comprising two activities performed by an individual who is allocated those responsibilities (Allen *et al.* 2004). According to Guthridge and Komm (2008), training in CCMT results in high performance by the employees, which in turn leads to achievement of set goals.

Cost centre management is outlined in the context of the legal framework of South Africa. According to the Constitution of the Republic of South Africa (1996) and the Public Finance Management Act (No. 1; South Africa 1999), the South African Government Departments receive funds from the National Revenue Fund. The South African National Treasury prescribes measures to ensure that transparency and expenditure are accounted for by the appointed accounting officer as stipulated in the Public Finance Management Act, No. 1 of 1999, Section 38 (South Africa 1999). At the tertiary hospital complex, accounting officers are the appointed CCMs who are nurse managers managing nursing care units.

Another South African document that provides guidance to CCMT is the Negotiated Service Delivery Agreement (National Department of Health 2010) which is a charter that reflects the commitment of key partners in South Africa to the delivery of identified outputs in health care. The agreement focuses on 12 key outcomes for the period 2010–2014. Each outcome is linked to a number of outputs (National Department of Health 2010). The National Department of Health states that one of the key outcomes, that the effectiveness of health systems be strengthened by the output of equitable distribution of health care, requires relevant tools to implement the management of costs in all provinces (National Department of Health 2010). A training programme on cost management can be used as one of these tools.

The National Health Insurance (NHI) Green Paper describes the broad policy proposals for the NHI and was published for comment and consultation by the National Department of Health in 2011. National Health Insurance is a health-care funding system that aims to provide universal coverage (i.e. everyone will have access to quality health-care services and be protected from financial hardships related to accessing these services) . The Green Paper does not specifically refer to cost management systems and focuses on reimbursing hospitals according to diagnosis-related groups instead of recognizing costs incurred as a method for analysing quality and reducing risk.

The Policy about Quality in Health Care in South Africa (National Department of Health 2007) gives priority to conditions where most improvement can occur, where there is wide variation in service and that are common and costly. Costly conditions in health care is a problem to be addressed where improvements will most broadly result in better health of the population and more appropriate use of health resources.

Literature review

In order to expedite the establishment of CCMT at any institution, Jasch (2006) suggests that information about the cost distribution to a specific cost centre is essential. Furthermore, it is stated that cost centres are intended to represent the output of the cost centres and not the output of the entire institution and usage of resources (Portz & Lere 2010). The implementation of hospital cost centre management is important to health-care policy makers, managers and researchers. The World Health Organization (WHO) acknowledges this idea because it will improve budgeting processes, the assessment of hospital efficiency and the economic assessment of different interventions for enhancing the quality of clinical outcomes (Basu *et al.* 2010).

In a hospital setting with CCMs, nursing care funds are allocated to units that are revenue-producing centres, such as operating theatres and emergency units. Managers in these units are expected to bill for services that have been provided to patients. Patients who are admitted to the nursing care unit receive the same daily charge for nursing care services (Chiang 2009). In the USA, nursing care costs are included in the daily room rate at hospitals. This accounting system is difficult in South Africa because nursing services are billed separately from daily room rates. Every health-care unit that is identified as a cost centre needs to bill for its own services (Chiang 2009).

Cost centre management supports improvements in decision making, helps with setting priorities in the cost centre and aims to improve the competitive advantage of an organisation (Ellram & Stanley 2008). The estimated nursing costs, like the services of a blood bank or laboratory, is billed separately because it will indicate the specific and accurate charges with the purpose of informing the hospital accountant before pricing decisions for nursing activities are taken. This will result in efficient cost management (Chiang 2009).

Appropriate training is crucial to the success of the cost centre (Basu *et al.* 2010). The challenge the nursing CCMs face relates to the difficulties of itemizing and billing nursing costs, even when these costs are significant (Chiang 2009). One of the factors that influences CCMT is the fact that managing a cost centre requires skilled personnel in order to achieve the set goals of that centre. The manager is expected to have the decision-making expertise for mitigating risks effectively because he/she should be able to select the best solution to a problem (Adam *et al.* 2010). Another factor influencing CCMT is the expectation that a cost centre has to generate funds for the smooth running of the centre (Ho 2012).

Problem statement

Cost centre management was introduced at the tertiary hospital complex in the Limpopo Province during the 2004–2005 financial year, as stated in the tertiary hospital complex Strategic Plan (2004–2005). The general manager of the tertiary hospital complex included the introduction of CCMT as an objective that addressed finance and procurement in the Strategic Plan (2004–2005) and South Africa (2004). It is stated in the strategic plan that the existing strengths available for the implementation of CCMT are to entrust nurse managers in each nursing care unit with the responsibility of CCMs. During the appointment of nurse managers as CCMs, consideration is not given to the fact that it implies a dual role for the nurse managers (i.e. facilitating the execution of quality nursing care by the nursing personnel under their supervision and running a cost centre at the same time). Since the introduction of CCMT in the financial year 2005–2006, no formal training in CCMT or management of their dual role has been provided to the appointed CCMs. This our research question is: What are the experiences of the CCMs with a dual role in nursing care units identified as cost centres at the tertiary hospital complex in the Limpopo Province?

Objectives of the study

The two objectives of the study are to explore and describe experiences of the CCMs about their dual role at a tertiary hospital complex in the Limpopo Province and to describe a conceptual framework for the development of a training programme of cost managers at a tertiary hospital complex in the Limpopo Province.

Theoretical assumptions

This study was derived from the theoretical assumptions of the practice-orientated theory of Dickoff *et al.* (1968). The components that Dickoff *et al.* (1968) included in their situation-producing theory informed the framework of the study:

- The activity in this study refers to a training programme that aims at developing a competent CCM by the agent.
- The recipients in this study are described as the CCMs with a dual role at the tertiary hospital complex who were appointed without training as cost managers in identified cost centres in cost management.
- The context of the training programme is the tertiary hospital complex in the Limpopo Province, Republic of South Africa.
- The study explains the dynamics that were the essential qualities of the agent and recipients in the specific context to enable the successful implementation of the programme.
- The procedure focused on the processes to be included during the implementation of the context-specific training programme for CCMs.
- For purposes of this study, the finishing point is a CCMT programme for the training of CCMs to be competent in the implementation of CCMT in cost centres at the tertiary hospital complex in the Limpopo Province.

In this study, the researcher conceptualized a framework for the nurse manager (agent) to develop a training programme that will be implemented for CCMs at a tertiary hospital complex in the Limpopo Province.

Research design and method

A qualitative, descriptive, exploratory and contextual design was used. Qualitative research is appropriate for addressing issues with regard to nursing care in clinical settings where nurses delivered care in order

to understand how a particular phenomenon is managed (Coffey 2004, Burns & Grove 2009). A descriptive design assists the researcher in obtaining complete and accurate information (Babbie & Mouton 2009, Burns & Grove 2009) about the experiences of CCMs in the nursing care units. An exploratory design was used in this study to gain insight into, and an understanding of, the phenomenon (Babbie & Mouton 2009) of CCMs with a dual role. The contextual interest of the researcher aims to achieve an understanding of events of the research phenomenon (Brink 2006).

Study setting

The Limpopo Province is considered as the most rural province in South Africa comprising mainly poor communities. The province is situated in the north east of South Africa and is divided into five districts: Vhembe, Mopani, Capricorn, Sekhukhune and Waterberg. The health service structure in this province consists of regional and district hospitals delivering health care on Levels 1 and 2 and a tertiary hospital complex. The tertiary hospital complex is a referral hospital for Level 1 and Level 2 hospitals within the province. The Provincial Department of Health allocates a larger budget to the tertiary hospital.

Population and sample

The accessible population for this study consisted of all the nurse managers ($n = 36$) who were appointed as CCMs and employed permanently at the tertiary hospital complex. Homogenous purposive sampling was used in this study. It was the judgment of the researcher to select participants who were similar based on the knowledge they had was of interest and that assisted in achieving the research purpose and objectives. Inclusion criteria were that participants had to be appointed as a nurse manager at the tertiary hospital complex and executing a dual role of CCMT and ensuring the provision of quality care to patients, and managing a nursing care unit that was an identified cost centre for at least 2 years.

A focus group interview would usually involve a small group of participants comprising nine to 12 people, enabling all participants to have an opportunity of sharing their insight with regard to the research topic (de Vos *et al.* 2001). Nine participants took part in the focus group and 12 individual interviews were conducted during August and September 2009. Interviews were conducted until saturation of data was reached, while probing was used to seek clarity about issues that were not clear to the researcher (de Vos *et al.* 2006).

Data collection

Investigator triangulation was used in this study to enhance trustworthiness of the data collected. de Vos *et al.* (2001) described investigator triangulation as an involvement of more than one interviewer in the particular study. The primary researcher used the skills of an experienced researcher to conduct a focus group interview session. Similar to Sim and Wright (2000), the researcher used a focus group interview to generate qualitative data that explored and described the experiences of the participants to develop the best possible guidelines to use for improving health. In accordance with the view of Gomm (2004), unstructured individual interviews were conducted with the aim of producing a picture of the participants as people with their own means of understanding their life. The central question to participants during individual interviews and focus group interview was: 'How is it for you as a CCM in your nursing care unit?'. The study followed the guidelines of Maree (2010), which stated that during qualitative data collection it was important to record the proceedings of the interview sessions, write field notes and capture all non-verbal cues that were displayed because they were all important for yielding genuine research findings.

Two pilot individual interviews were conducted in order to detect possible flaws that could occur during the data collection process (de Vos *et al.* 2006). A debriefing session was held in this study for 'debriefing of the interpretive researcher'. According to Onwuegbuzie *et al.* (2008), a debriefing interview represents a useful technique for collecting comprehensive data, supplementing data analysis, augmenting data interpretation and assessing the legitimacy of the research findings. The rationale of conducting the debriefing session was for the researcher to be assisted by an experienced researcher during the comprehensive collection of valuable data for this study, to compliment what the researcher had done well and to provide assistance with improving interviewing skills.

Data analysis

Based on Tesch's method of qualitative analysis in De Vos (1998), themes were systematically identified during the data analysis phase of this study. The purpose was to gain a sense of the magnitude of the themes

identified while reading the transcripts and jotting down ideas that came to mind. One interview at a time was randomly picked to be read. While the researcher was listening to the responses to the central question ideas were jotted down in the margin as and when they came to mind. After this task had been completed for several participants, a list of all the topics was compiled. Similar topics were clustered together and grouped into columns which were arranged into major topics, unique topics and exceptions. The topics were abbreviated as codes and the codes were written next to the appropriate segments of the text. The researcher identified the most descriptive wording for the topics and turned them into themes. A final decision on the abbreviations for each category was then made and data belonging to each theme were assembled in one place and a preliminary analysis was performed. An independent coder (who was an experienced qualitative researcher) was requested to analyse verbatim transcripts independently. A consensus meeting was held between the independent coder and the researcher to discuss the themes and subthemes that were independently identified. Table 1 provides an overview of the main themes and subthemes.

Trustworthiness of the study

Trustworthiness was maintained by using the criteria of Guba's model (de Vos *et al.* 2006, Babbie & Mouton 2009): credibility, transferability, confirmability, dependability and authenticity. Credibility was ensured by extended engagement while conducting a focus group interview and unstructured individual in-depth interviews. Participants were allowed to describe their experiences with regard to research phenomena over a period of 2 months until data saturation occurred. Triangulation of data collection methods was achieved by capturing field notes and voice recordings of all unstructured individual interviews and a focus group interview (Babbie & Mouton 2009). Transferability referred to the extent to which the findings of the study could be transferred to another context or with other participants. A thick description of the research methodology was completed (Babbie & Mouton 2009). The findings of this research were the product of the inquiry and not the researcher's bias in order to ensure credibility. Dependability was ensured by a thick description of the research method (Babbie & Mouton 2009).

A conceptual framework for training in cost management

The survey list of Practice Oriented Theory of Dickoff *et al.* (1968) served as the point of departure for the conceptual framework of a training programme described from the emerging results of the collected data. The conceptual framework is based on the findings in Table 2. The survey list responds to six crucial questions about the activities to be performed and the responses to the questions that have interactive significance to one another during implementation and is indicated in each question below.

Who or what performs the programme? (Agent)

The CCMs need assistance with becoming competent and answerable during the management of the cost

Table 1
An overview of main themes and subthemes reflecting the experiences of being a cost centre manager (CCM) with a dual role at a tertiary hospital complex in the Limpopo Province, South Africa.

Themes	*Subthemes*
1. Dominant stories of perceived constraints related to the role as a cost centre manager resulting in personal and professional 'suffering'(including negative attitude)	1.1 An account of the cost centre management process 1.2 Constraints related to the role of a cost centre manager 1.3 Unsafe external environment that reflected attitudes of distrust 1.4 Personal and professional 'suffering'
2. Empowering potential of being a cost centre manager resulting in personal and professional growth (values)	2.1Values underlying the process of cost centre management 2.2 Personal growth 2.3 Professional growth
3. Needs for decentralized cost centre management (knowledge and skills)	3.1 Decentralization of the budgetary process 3.2 Accessibility of available funds 3.3 Availability of resources 3.4 Support from management 3.5 Team work
4. More suggestions about a context-specific training programme for cost centre managers	4.1 Nature of the programme 4.2 Programme participants 4.3 Programme themes/topics 4.4 Context of training support

Table 2
Themes and the link with components in the conceptual framework

Themes and sub-themes	*Summary of concluding statements*	*Components of conceptual framework*
Nature of the programme	Agent indicates the nature of activities of the participants based on a needs assessment Needs assessment is important before decisions are taken about the type of activities Top management support through budget to promote programme	Agent: characteristics of a teacher
Programme participants	Prerequisites for the category and level of the programme participants Empowerment of all CCMs without discrimination to increase productivity	Context: identified cost management nursing units
Programme themes/topics	Essential financial aspects Topics that cover areas of the dual role Underlying basic teaching principles in presentation of topics	Procedure: Programme on dual roles Paradigm for learning and different learning approaches Implementation guidelines for context-specific programme
Context of training support	Conducive for the CCMs to apply what is learned during training Focus on monitoring and evaluation of the execution of the dual role of the CCMs Including other personnel who are working in the cost centres so that everyone has to be committed to the outcomes of a cost centre	Context: Legal ethical framework Policies and procedures, monitoring and evaluation tools to achieve expected outcome
The CCMT process	Agent: awakens the empowering potential to raise awareness, responsibilities and accountability among the CCMs who are expected to be competent (terminus) focuses on the dual role includes CCMT and ensuring provision of quality care to patients be precise (educate) to the responsibilities and tasks that the recipient is expected to meet, namely the objectives of CCMT and ensure the provision of quality care to patients The recipients need: emotional support, empowerment and autonomy to overcome professional and personal suffering experienced empowerment through information and skills resulting in being autonomous, accountable and coping when executing their dual role. Procedure: a process/procedure in information needs to be given on the dual role with regard to problem solving in the team, business planning and comprehensive accountability by people involved Learning context and the approach: accommodation of individual learning that provides emotional support and development of critical thoughts a collective learning experience for all people involved	Agent: Empowering potential Recipient: Cost centre management qualities (leader, management skills) Leadership skills including emotional intelligence Procedure: Learning content aimed at competent and effective CCMs Terminus (programme): Autonomy in execution of dual role and decentralised CCM process
Constraints related to the role of a CCM	Constraints of the role of a CCM in relation to other key players have been pointed out and will be resolved by conducting training of CCMs that reflects the necessity for role clarification among team members Interactive facilitation of the training programme will overcome the constraints that	Dynamics: prerequisites for effective CCMT is interactive facilitation, constraints

Table 2
(Continued)

Themes and sub-themes	*Summary of concluding statements*	*Components of conceptual framework*
	exist during CCMT Participatory teamwork addresses role clarification of the CCM and other role players The CCM as a recipient has to act as a leader in her dual role during the CCMT process. The CCM needs to be trained timely and prioritize between care and cost functions. There is a need to broaden the responsibilities, need for power and control in order to execute a dual role. Independence and autonomy in decision making are needed for the overall responsibility in CCMT and ensuring the provision of quality care to patients Need for CCMs to get support in order to cope with their dual role; it could be achieved by empowerment resulting in personal and professional growth An effective, transparent procurement system to be implemented and all stakeholders to be informed about the process	
Unsafe external environment that reflects distrust	Management to create a safe external environment and trust to combat distrust resulting from lack of resources, attitude from other staff members who are involved in CCMT and provision of quality care to patients The goal of a training programme entails the clarification of roles and values, creating a safe environment for CCMs and building a trusting relationship between all role players Top management and the agent could promote healthy interpersonal relationships; provide managerial support and resources for the CCMs to execute their dual role Adequate resources to be allocated to all cost centres based on the business plan drawn up Address the process of accountability, which includes knowledge, skills, attitudes and values	Agent: promotes interpersonal relationships Context: empowering environment with resources and management support
Personal and professional 'suffering '	Personal suffering of CCMs leads to emotional and attitudinal consequences; mainly related to dominant feelings of frustration, tension, strain, stress; fear of failure owing to disappointment because initial expectations were not met. Self-management and self-reflection are needed to address feelings of frustration, tension, stress and failure Create a context to empower the	Dynamics: strategies utilized to cope with factors that hinder effective CCMT Terminus (Programme): competence – positive attitude about being a competent CCM

Table 2
(Continued)

Themes and sub-themes	*Summary of concluding statements*	*Components of conceptual framework*
	CCMs with self-reflecting skills in a process that will assist them with managing their dual role effectively The CCMs are further expected to be willing to complete the training programme.	
Values underlying the process of CCMT	The important values are embedded in the process of CCMT (e.g. equality, integrity, quality and personal accountability) to be seen as part of CCMs during the execution of their dual role. Participants have a lack of value clarification The interactive participation during CCMT among all stakeholders involved in CCMT and provision of quality care to patients needs value clarification	Dynamics (Interactive participation) Values clarifivacation of everybody involved in CCMT
Personal growth	CCMT process increases awareness and sense of empowerment when duties are performed. Having power in controlling a cost centre is also experienced during the process. The CCMs are expected to make decisions on issues that concern their cost centres, for example taking part in drawing up a budget and deciding about the number of staff posts they need.	Terminus (programme): competence – values of being a competent CCM; empowered in dual role leading to personal growth
Professional growth	Empowerment results in the goal of personal and professional growth during the process of CCMT and provision of quality care to patients by values underlying the process (i.e. respect, equality, integrity, quality and personal accountability) Diligent attendance of workshops is needed in order to continuously maintain competent CCMs at a tertiary hospital complex	Recipient: attendance of training aimed at empowering CCMs Terminus (programme): competence – values of being a competent CCM; empowered in dual role leading to professional growth
Decentralization of the budgetary process	Training is needed in the process of decentralization of the budgetary process for financial activities to be well executed in the cost centres, resulting in effective participation by the CCMs with a dual role. Decentralization in the health-care environment improves service delivery and access while improving providers' response to client demand	Terminus (programme): competence – knowledge and skills of a competent CCM
Accessibility of available funds	The rules and procedures to be followed in order to access funds be known to every CCM (recipient) so that they know what is expected them when need arises CCMs expected to report on how funds are managed, including planning, implementation, monitoring and evaluation. Writing financial report indicates the good resource management in the specific area where funds are utilized. CCMs to be accountable and be able to control the funds allocated in their area of responsibility.	
Availability of resources	Procurement processes be transparent because every CCM (recipient) must have knowledge about availability of resources requested for their cost centres Transparency in procurement processes prevents discrimination in the allocation of material resources to different units	
Support from management	Agent and recipient: management (agent) support to	

Table 2
(Continued)

Themes and sub-themes	*Summary of concluding statements*	*Components of conceptual framework*
	the recipient is expected during the execution of the dual role. Support provided by the management results in CCMs developing professionally and socially during the end-to-end process, because the agent coaches them to become able performers of expected duties. Lack of support from management (agent) leads to a lack of performance by the CCM (recipient) and results in unmet set objectives of the institution (terminus) Managers (agent) can provide support to recipient for set objectives to be met	
Team work	Training about teamwork is needed in the process of implementation of activities Decentralization of CCMT, budgeting process, funds allocation, team work issues Agent and recipient: management support (agent) to CCMs (recipient) when working in teams to be outlined	

CCM, cost centre manager; CCMT, cost centre management.

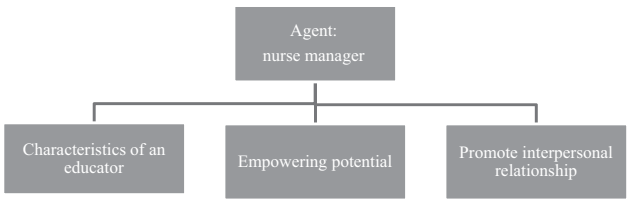

Figure 1
Agent.

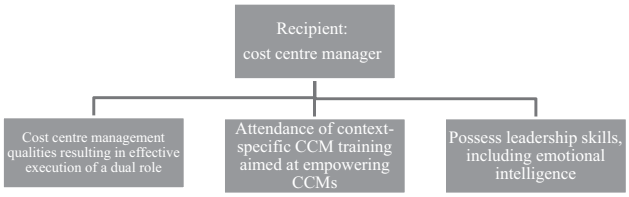

Figure 2
Recipient. CCM, cost centre manager.

centres. This could result in professional and personal growth while providing the strategies to deal with the constraints met during the process (Figure 1). It is expected that the agent have qualities such as being competent and an ambassador for the implementation of the context-specific training programme developed by the researcher. The nurse manager, in the capacity of agent, is further expected to have characteristics of an educator: to be competent in CCMT, empathetic, be a creative builder, have impartiality, be trustworthy and have respect others, be committed and confident in order to achieve the objectives of the training programme. Based on the qualities listed above, she/he will be able to provide support and guidance to CCMs, while monitoring, developing and assessing skills in cost centre management. There is a need for the establishment of good interpersonal relationships between the agent and the recipients of the programme (i.e. the CCMs). The agent will focus on empowering the recipients with the skills and information that will assist them in executing their dual role in order to manage the cost centres effectively and efficiently.

The agent needs to build good interpersonal relationships with other stakeholders, with the purpose of creating an opportunity for implementing a training programme for CCMs with a dual role at the tertiary hospital complex.

Who or what are the recipients of the programme? (Recipient)

A training programme is expected to address problems experienced while executing a dual role at the tertiary hospital campus in the Limpopo Province. Dickoff *et al.* (1968) describe the second aspect on the survey list of Theory in a Practice Discipline as the recipient (Figure 2). For this study, the recipients were the CCMs with a dual role at the tertiary hospital complex. The findings of the study reveal that the CCMs

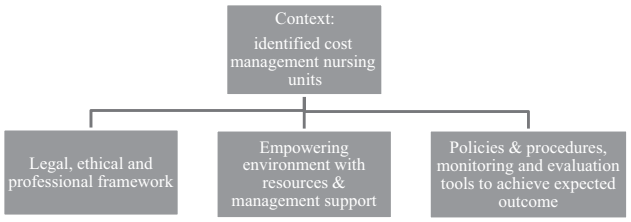

Figure 3
Context.

lack CCMT skills and experience, which results in an emotional burden during the process of CCMT. The recipients need to be empowered with strategies to deal with constraints during the process of managing cost centres and providing care to the patients. The recipient of the programme needs to be emotionally intelligent and a leader to enable them to cope during cost management.

Opportunities have to exist for the recipient to interact with the agent with the goal of achieving the desired outcomes because positive interpersonal relationships are important to realize the purpose of the programme. The CCMs are expected to possess qualities that will enable them to manage a cost centre: planning skills, organising skills, qualities of a good leader, control, motivation, responsibility and accountability, good interpersonal relationships, and communication and negotiation skills.

In what context could the programme be performed?

This training programme is expected to be implemented in the same context where the CCMT process occurs (i.e. the tertiary hospital campus in the Limpopo Province). Dickoff *et al.* (1968) define the third aspect on the survey list of the Theory in a Practice Discipline as the context. Figure 3 illustrates the context in which the programme needs to be implemented.

The dynamics involved during the management of the cost centres and the provision of quality patient care occur within the legal, ethical and professional boundaries at different levels. The empowerment of CCMs with CCMT competencies (knowledge, skills, attitudes and values) could facilitate the management of cost centres identified as nursing care units at a tertiary hospital complex in the Limpopo Province. The availability and utilization of policies and procedures, monitoring and evaluation tools at operational level will assist with achieving the set goals during the CCMT process.

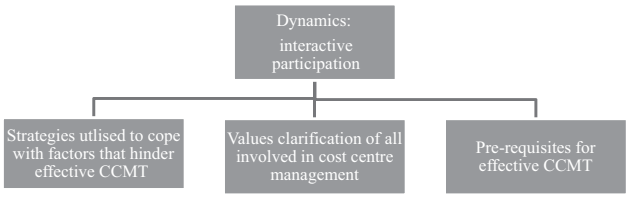

Figure 4
Dynamics. CCMT, cost centre management.

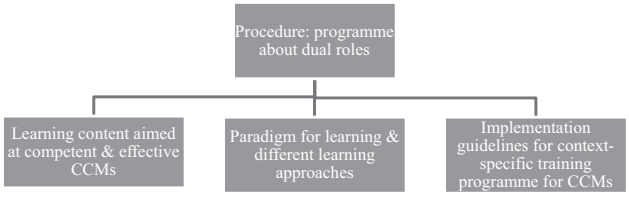

Figure 5
Procedure. CCM, cost centre manager.

What is the energy source for the programme? (Dynamics)

This training programme needs forces that can be utilized to accomplish the activities of the context-specific training programme developed for CCMs. Dickoff *et al.* (1968) describe the fourth aspect on the survey list of the Theory in a Practice Discipline as the dynamics/energy source for the activity (Figure 4).

Interaction is a dynamic process that needs to take into consideration the aspects of effective leadership: effective communication, leadership qualities, competence and effectiveness. The CCMs are expected to possess these qualities to equip them for managing cost centres effectively. The agent has the role of facilitating the accomplishment of the goals. The specific learning outcomes, assessment criteria and activities of the programme assist with addressing the themes that have emerged during data analysis of this study.

What is the guiding procedure, technique, or protocol of the programme?

This programme needs guiding principles in order to accomplish the activities of the context-specific training programme developed for CCMs. Dickoff *et al.* (1968) define the fifth aspect on the survey list of Theory in a Practice Discipline as the guiding procedure, technique or protocol of the activity (Figure 5).

The educational programme and the guidelines address the learning needs of CCMs that have been identified during the situation analysis (data analysis). The procedure is the course of action to be followed in order to achieve the set goals of the programme

(activity). The learning content aims at competent and effective CCMT. The topics address all the themes that have emerged during data analysis of this study: essential components of CCMT in the nursing care units, principles of CCMT in the nursing care units identified as cost centres, budgeting processes used in CCMT, procurement processes followed during CCMT, business management processes, and the leadership and management processes in CCMT.

The paradigm for learning and different learning approaches in the programme reflects coping strategies for transcending personal and professional distress experienced during the process of CCMT and providing quality care to patients in the context of the research. The time-frame for the realization of the programme is 6 months. The training programme will be facilitated by an agent who needs to be a nurse manager and an expert in CCMT. The approaches to expediting the implementation of the training programme are self-directed learning, facilitation that aims to engage the learner, enabling them to acquire knowledge by interacting with colleagues and facilitators during training, and reflective teaching that assists the facilitator in the planning of future training events. Problem-based learning encourages the recipients of the programme to solve work-related problems by completing the given activities. Contextual learning focuses on the context where the cost centre management process is occurring (i.e. tertiary hospital complex). Small group activities give the recipient an opportunity to meet with colleagues and to complete activities with group members to enhance their understanding of applying these activities, and their analysis, synthesis and evaluation of the learned aspects of the programme.

The programme addresses the comprehensive purpose of the programme, programme outcomes, programme content, techniques of delivering the programme, and the assessment methods according to the South African Qualifications Authority (SAQA).

What is the end-point of the programme? (Terminus)

Dickoff *et al.* (1968) conclude that the sixth aspect on the survey list of Theory in a Practice Discipline is the end-point of the activity (Figure 6). The 'terminus' confirms whether the set goal has been achieved or not. The training-related needs of the recipients have to be accommodated in this training programme with the result of having competent CCMT. Figure 6 indicates the expected qualities of the recipients of the

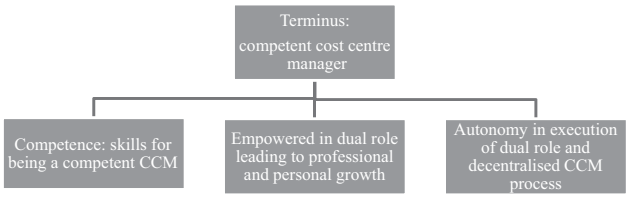

Figure 6
Terminus. CCM, cost centre manager.

training programme while executing their dual role during the CCMT process. In this context, the terminus is proficient CCMs who have proficiently completed a context-specific training programme. The CCMs could further be given autonomy to manage cost centres without interference from top managers. The CCMs are expected to be competent managing their cost centres by providing continuous professional development, which can be achieved by learning financial management skills and ensuring that they attend formal CCMT training before commencing their duties. Decentralization of cost centres must be implemented to give the CCMs the responsibility and autonomy to make choices about the use of the resources allocated to them (i.e. funds, resources, time and talents).

Limitations of the study

The study was limited to the tertiary hospital complex; it neither included all the public hospitals in the Limpopo Province, nor did it include hospitals in other provinces in South Africa because cost centre managers in the other provinces had financial responsibilities only.

Conclusion

Cost centre management training introduces additional benefits, such as increasing job satisfaction of CCMs, enhancing the development of CCMT skills, ensuring the provision of quality care, increasing self-confidence in managing a cost centre and improving standards of practice. Training assists nurse managers with coping during the CCMT process because they will then be empowered with appropriate skills.

Implications for nursing management

Management support and guidance in all aspects of CCMT can lead to the effective execution of a dual role by CCMs which involves CCMT and the provision of quality support to patients without undue

constraints imposed on available human resources. Top hospital management creates an environment that is conducive to the CCMs executing their dual role effectively while avoiding compromising service to patients. A conducive environment is important because it enables all the identified stakeholders in CCMT at the tertiary hospital complex to interact harmoniously with the aim of achieving the goals of the institution.

Hospital management and personnel need to recognize the underlying values they need to take into consideration while attempting to achieve the set goals of the institution. Values such as respect, equality, integrity, quality, taking responsibility and personal accountability have to be maintained at all times when executing duties because they result in professional and personal growth. The CCMs in their dual role need emotional support, empowerment and autonomy to overcome professional and personal distress and any negative attitudes experienced. More workshops on these aspects are needed to empower all staff members with skills and knowledge for personal and professional growth.

There is a need for a decentralized CCMT. Decentralized CCMT will enable cost centres to have their required resources without other stakeholders interfering because the CCMs are managing the funds of their own units. It is recommended that CCMT is completely decentralized to give the CCMs the responsibility of drawing up the budgets for their own cost centres, and of accessing the funds when a need arises to buy in resources or to recruit staff members. Management support and team work could be encouraged when CCMT is decentralized.

Furthermore, a budget for the skills development of CCMs is needed. The nurse manager (agent) has to encourage the CCM to enrol for other CCMT-related courses. Exposure to more CCMT-related knowledge will encourage them and foster a positive attitude.

Source of funding

No funds were received for the study.

Ethical considerations

Informed consent was obtained from each participant before commencing with a focus group interview and the unstructured individual interviews. The participants were informed that they could terminate their participation if they felt it would violate their rights and confidentiality. The participants were informed that field notes would be written down and a voice recorder would be used for capturing the proceedings of the interview sessions. Ethical clearance was obtained from the Research Ethics Committee of a University (Ethical Clearance Number: AEC25/2009). Permission to gain entry in the study field was granted by the Limpopo Provincial Department of Health and Social Development, and the tertiary hospital complex management. Confidentiality and anonymity were ensured by allocating numbers to each participant.

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