Chapter 5

Research results: preparation of nurse managers, productivity, personnel issues relevant to cost containment in public hospitals

5.1 INTRODUCTION

In this chapter the responses to the questionnaire are analysed and discussed. Each response was coded to give it a numerical value for purposes of computer analysis. Using the SPSS program, data were arranged in tables and graphs so that the information could be summarised.

Four provincial hospitals in the Port Elizabeth metropolitan region of the Eastern Cape were included in the research. A total of 211 questionnaires were received from nurse respondents who occupied managerial positions in wards and departments as well as in nursing administration offices, formerly known as matrons’ offices. Responses were analysed according to sections as indicated on the questionnaire (see Annexure C).

This chapter discusses the research results regarding the first three research questions, namely:

- preparation/orientation of the nurse manager in budgetary and financial matters in
the hospital, including general cost containment in the hospital

* nurse managers’ perceptions regarding productivity

* personnel issues

5.2 CONSIDERATIONS REGARDING ANALYSIS OF RESEARCH RESULTS

• Where respondents had to use a four-point Likert scale, ranging from ‘unimportant to extremely important”, the results were linked together as follows: “unimportant” and ‘fairly important’ were counted together and represented as “unimportant”. Similarly “important” and “extremely important” were linked together to represent “important”. This reduction of four categories of responses to two (“unimportant” and “important”) was done at the recommendation of a statistician.

• Where the scale on the questionnaire provided three response options, namely: “included completely”, “included partially”, “omitted”, the two categories of “included completely” and “partially” were counted together and shown as “included” or “covered” versus “omitted”.

• In the case of the four-point Likert scale ranging from “do not know” to “fully agree”, the “do not know” and “do not agree” were counted together, and shown as “disagreed” and the “tend to agree” and “fully agreed”, were counted together and shown as “agreed”.

• Where the respondents had to indicate on a five-point Likert scale ranging from “highly acceptable” to “totally unacceptable”, the percentages of the two columns “highly acceptable” and “acceptable” were linked together and those for “not sure”, “unacceptable”, and “totally unacceptable” were also counted together and shown as “unacceptable” versus “acceptable”.

• A random test was done to see whether the respondents from the different hospitals differed significantly (accepted to be 25,0% or greater) in their responses to the respective questions/statements contained in the questionnaire. At least four items were selected from the questionnaire’s different sections, plus another eight items which were randomly picked from the sections. The basis for an item’s selection
was its relative importance to cost containment issues in public hospitals. With the assistance of a statistician, it was discovered that of the 60 randomly selected items, out of a possible 107 answers, only 10 showed a significant difference. On the basis of this outcome, it was then decided to report only the combined response percentages for the four hospitals, without making distinctions regarding the responses from each hospital. It was reasoned that the relatively small differences occurring here and there would not affect the outcome of the results and would thus not significantly impact on cost containment issues in public hospitals. Providing one set of responses to each item, representing the combined answers from the four participating public hospitals’ nurse managers, further enhanced the anonymity and confidentiality of the respondents’ perceptions.

During discussions with nurse managers prior to the distribution of the questionnaires, repeated requests were made by the nurse managers that data should not be reported separately for individual hospitals, but that only the combined responses for the four hospitals should be reflected in the research report. Even if the individual hospitals would never be named in the research report, the nurse managers maintained that each hospital would become recognisable to persons knowledgeable about public hospitals in the Eastern Cape. The nurse managers feared that anonymity and confidentiality would necessarily be lost if the hospitals’ results were portrayed individually.

- A cross-tabulation was also done on all the items to see whether there were important differences between the responses of the different groupings regarding their years of experience and their responses to each item, but no significant differences could be detected.

5.3 FINANCIAL MANAGEMENT TRAINING

The data analysed and discussed under financial management training relate to responses
obtained to questionnaire items pertaining to the

- orientation on hospital budgeting and financial management
- knowledge about principles of hospital cost containment
- ordering of items (supplies and equipment)
- perceived preparation of nurses for exercising negotiation skills
- hospital operational costs

5.3.1 Orientation on financial management and hospital budgeting (items 2.3 and 2.4)

Under these items 13 topics addressed the respondents’ orientation on financial management and hospital budgeting.

5.3.1.1 Orientation on financial management

Of the respondents who answered this question only 7.6% (16) claimed to have received any financial management training (item 2.3). The 16 respondents who claimed to have received financial management training indicated that the following aspects had been addressed during such training:

- the control of waste in ordering of sundries
- care and ordering of perishable goods such as food
- the prevention of waste in the daily ordering of supplies
- using the “topping up” system of ordering supplies, rather than keeping large ward stocks
- yearly ordering of equipment
- care of supplies and equipment
- time management
- tendering
- ordering and control of drugs
- control of stock and prevention of losses
- care and control of linen, including monthly linen stock-taking records
The importance of the orientation of new employees cannot be overemphasised. Loraine (1997:35) states that the type of functioning of new employees on the job stems from the type of orientation received. If the orientation is good, they will cope; if it is poor they will have to wade through the misinformation and overcome the inadequate teaching that will ultimately be more costly to everyone.

5.3.1.2 Orientation on hospital budgeting

Questionnaire items relevant to this section pertained to respondents’ perceived orientation about preparing a hospital budget and a manpower budget.

The information in table 5.1 shows that 66,3% of the respondents were reportedly not orientated on the preparation of hospital budgets. Yet their level of seniority would necessitate some knowledge of the hospital budgetary system, for the respondents’ own use as well as for guiding their subordinates in implementing cost control measures. The successful implementation of hospital cost containment efforts depends on nurse managers’ understanding of and participation in the preparation of hospital budgets.

<table>
<thead>
<tr>
<th>INCLUSION OF TOPIC: HOSPITAL BUDGET PREPARATION</th>
<th>FREQUENCY</th>
<th>PERCENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Included completely</td>
<td>13</td>
<td>6,6</td>
</tr>
<tr>
<td>Included partially</td>
<td>53</td>
<td>27,1</td>
</tr>
<tr>
<td>Omitted</td>
<td>130</td>
<td>66,3</td>
</tr>
<tr>
<td>TOTAL</td>
<td>196</td>
<td>100,0</td>
</tr>
</tbody>
</table>

◆ Preparation of a budget for nurses (manpower budget)

Figure 5.1 shows that the majority of the respondents (61,2%) perceived orientation on budget preparation for nurses’ manpower to have been omitted, while 25,5% reported it to have been partially included, and only 6,2% reported it to have been completely included
during nurse managers’ orientation and/or in-service education sessions.

The manpower budget can at times account for as much as 90,0% of the total nursing service budget (Koch 1993:170), but usually this figure is estimated to approximate 60,0%. This budget includes salaries, compensation for sick leave, overtime payments, merit increases, staff orientation and in-service education. Knowledge about this type of budget is essential in order to budget realistically and to contain hospital costs. The finding that 86,7% of the respondents were not fully prepared for compiling manpower budgets could have serious implications for cost containment in the selected hospitals.

![Figure 5.1](image-url)

**Figure 5.1**

*Respondents’ orientation on the preparation of a budget for nurses (manpower budget) (n = 196)*

### 5.3.2 Knowledge about principles of hospital cost containment

Only 21 (10,7%) of the respondents perceived this topic to have been fully covered, while 58 (29,6%) reported it to have been partially covered. As many as 117 (59,7%) of the respondents perceived the topic to have been omitted, while the hospitals’ cost containment efforts require each and every member of the hospital team to be involved in ensuring that hospital costs are kept to a minimum. “Financial thinking skills are the cornerstone of cost-conscious nursing practice and are essential for all nurses. Also, nurses must determine whether or not the services they provide add value for patients. Services that add value are of high quality, positively affect health outcomes, and minimize
Specific principles of hospital cost containment that were further explored by specific questionnaire items related to the

- establishment of units as cost centres
- empowerment of unit staff regarding cost containment in the units
- programme planning for nurses’ in-service education concerning cost containment

**Establishment of units as cost centres**

In this report a unit represents a hospital ward or department. When each unit becomes responsible and accountable for its own costs it is called a cost centre. A cost centre is the smallest functional unit for which cost control and accountability can be assigned under an existing accounting system (Barnum & Kerfoot 1995:188). Thus each unit in the hospital would identify and account for its own budget, reflecting its separate income and expenditures.

Out of a total of 195 respondents only 21 (10,8%) perceived the establishment of units as cost centres to have been completely addressed during in-service education sessions, while 45 (23,1%) indicated that it had been partially covered and 129 (66,1%) that it had been omitted.

The difference in respondents’ views regarding the establishment of cost centres appeared to be contradictory. The nurse managers in charge of the four hospitals were asked telephonically whether cost centres had indeed been established in these hospitals. The nurse managers indicated that cost centres were in the process of being identified, but had not yet been established at the time of gathering data for this survey. The difference in responses could, therefore, be attributed to the fact that the concept of cost centres was relatively new to the respondents or not known nor understood by all the respondents. However, there were indications that nurse managers required more knowledge about cost centres.

**Empowerment of nurses regarding cost containment in the units**
Under this item the term “empowerment” is used in the sense of enabling the unit staff to gain expertise in cost containment through enhanced knowledge and skills. The empowered staff may gain freedom to participate confidently in cost-effective activities. Barnum and Kerfoot (1995:114) enumerate four common sources for the enhancement of such empowerment: expanded expertise; new legal powers; new roles; and changed self-perceptions.

The responses illustrated in figure 5.2 indicate that 113 (57,7%) of the respondents regarded this topic to have been omitted, 52 (26,5,%) perceived it to have been partially covered, and only 31 (15,8%) of the respondents perceived it to have been fully covered.

It would, therefore, appear that cost containment may not have been addressed adequately enough to increase confidence in dealing with the situation. The lack of empowerment could result in weaknesses in cost control in the units. (It must, however, be pointed out that although many aspects of unit cost control were not perceived to have been covered, the few respondents who reported having had some form of financial management training (item 2.3), did list some of the relevant aspects that she addressed during their training).