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## Internal control systems in small and medium-sized medical practices in the Thulamela municipality, South Africa

### Abstract

The study analyzes the effectiveness of internal controls in small and medium-sized medical practices (SMMPs) in the Thulamela Municipality in the Vhembe District of Limpopo Province, South Africa. Questionnaires, complemented by interviews, were used to collect data pertaining to the five primary components of internal control systems in the sampled SMMPs. The key findings are that: 1) all owner/managers of the sampled SMMP strongly agree that effective internal controls are necessary for business success; 2) 80% of SMMP are owned by males while 20% are owned by females; 3) 76.6% of the surgeries are owned by persons aged between 26-40 years, while approximately, 25% are owned by those aged over 40 years; 4) majority (86.7%) of the respondents indicated that they usually identify and analyze risk to ensure that their businesses objectives are achieved; 5) about 30% of the medical practices do not have insurance cover even though they have expensive equipment in their businesses.

**Keywords:** internal control, medical practices, Thulamela municipality, South Africa.

**JEL Classification:** M42.

### Introduction

Internal control (IC), which is synonymous with management control, can be broadly defined as a process designed by an entity's board of directors, management, and other personnel, to provide reasonable assurance regarding the achievement of objectives in effectiveness and efficiency of operations, reliability of financial reporting, and compliance with applicable laws and regulations (The US Committee of Sponsoring Organizations of the Treadway Commission (COSO), 1992). Since the COSO definition (also known as COSO framework) is widely used all over the world to measure the effectiveness of internal controls (DiNapoli, 2008), this study adopts this definition to study the relationship between internal control and organizational success. Among other things, the COSO framework provides criteria for evaluating internal control. These are: 1) fostering a favorable control environment, 2) conducting risk assessment, 3) providing for effective information and communication throughout the organization, 4) designing and implementing control activities in the form of policies and procedures, and 5) conducting ongoing monitoring of the effectiveness of control-related policies and procedures. The overall success of a system of IC is dependent on how effectively each of the above five elements function and how well they are coordinated and integrated with each other (DiNapoli, 2008). According to COSO (1992), these five components of IC need to be present to conclude that IC is efficient.

A major problem that organizations face, especially SMMPs, is that the objectives of internal controls may not be achieved due to a miscellany of factors. These include, but not limited to: 1) management override of

internal control systems for the purposes of manipulating financial reporting, 2) collusion by personnel to overcome controls, 3) human error, and cost benefit considerations (Deshmukh, 2004). Obviously, small businesses such as medical practices should care about internal controls to protect their assets, reduce the risk of fraud, and concomitantly maximize the value of their businesses. As pointed out by Bode (2011), without adequate internal controls, a medical practice, clinic or any health entity would never attain optimum efficiency or profitability. It has further been established that small businesses have weak internal controls because majority of these entities view the implementation of an adequate system of internal controls as a costly exercise (Campbell and Hartcher, 2003). This view is further supported by Jackson and Stent (2007) who pointed out that a major limitation of implementing proper internal controls is that most SMMPs follow a cost-benefit-approach. According to this approach SMMP owner/managers weigh the costs of implementing a system of internal controls against the potential benefits that can be derived from having it implemented. Obviously this approach will result in inadequate internal controls and, consequently, creating a business environment that is susceptible to unwarranted risks.

Viviers and Venter (2008) investigate the management of fraud in small and medium-sized enterprises in the Nelson Mandela Bay area. The results show that more than 50% of the respondents identified fraud as a serious problem in South Africa. The results revealed, however, that only 10 percent of the sampled SMMPs made provisions in their budgets for combating fraud. In another study, Tekel and Berhann (2009) examined the effectiveness of internal control systems in a sample of 7 Swedish SMMPs (4 medium and 3 small). One of the key findings of the study is that managers of small as well as medium

sized enterprises are aware of the importance of internal control to their operations, although the degree of awareness varies from one SMMP to the other. In addition, the study revealed that efforts were made by the SMMPs to establish standard codes of conduct. Lastly, the study reported that SMMPs were involved in cautious reconciliation of transactions. In a similar study, Noorvee (2006) analyzed the effectiveness of internal control over financial reporting in three medium-sized Estonian manufacturing firms. Both qualitative and quantitative data were collected using a questionnaire (based on COSO framework). After comparing the three companies' financial results, the one which scored the highest score for effectiveness of internal control over financial reporting, appears to have the smallest and modest growth, compared to the other two companies. From that relation the author drew several conclusions. First, that it is easier to develop a good internal control system in small companies because of the small size of personnel, more personal contacts and less administration. This observation was also made by COSO. Second, the effectiveness of internal control does not automatically mean financial success for the firm due to the inherent weaknesses of internal control systems. Lastly, in fast growing businesses, managers' primary focus is on growth of sales, and less on strong internal controls. However, the lack of sound internal control may inevitably become as issue in the future.

The findings from the above studies suggest that there is the need to examine the role of internal control in mitigating challenges facing SMMP medical practices which contribute tremendously in filling the gap in healthcare delivery in South Africa.

**Definition of small business**

Before analyzing internal control systems in SMMP medical practices, it is necessary to define the term small business. The South Africa's National Small Business Act No. 102 of 1996 defined small business as, "a separate and distinct business entity, including cooperative enterprises and non-governmental organizations, managed by one owner or more which, including its branches or subsidiaries, if any, is predominantly carried on in any sector or sub-sector of the economy". The Act classifies small businesses into four main categories using three parameters: full-time employees, turnover, and asset value. Table 1 summarizes the definition.

Table 1. Classification of small business enterprises

Enterprise size	Number of full-time employees	Annual turnover (South African Rand)	Gross assets, (Excluding fixed property)
Medium	Fewer than 100 to 200, depending on industry	Less than R4 million to R50 m depending upon industry	Less than R2 m to R18 m depending on industry

Small	Fewer than 50	Less than R2 m to R25 m depending on industry	Less than R2 m to R4.5 m depending on industry
Very Small	Fewer than 10 to 20 depending on industry	Less than R200 000 to R500 000 depending on industry	Less than R150 000 to R500 000 depending on industry
Micro	Fewer than 5	Less than R150 000	Less than R100 000

Source: Patricia Agupusi (2007).

For the purpose of this study small business is defined based on the number of full-time employees to mean small, very small and micro enterprises (SMMPs).

**Problem statement**

In South Africa, an important sector where small businesses have been mushrooming in recent years is the private healthcare sector. These businesses, popularly known as *Surgeries* provide essential health care services to the community, in both urban and rural communities. Yet little or no study has been carried out to investigate a key aspect of management, that is, internal control systems in these businesses. The present study therefore, attempts to fill this gap by addressing the question: *How effective are internal control systems in small and medium-sized medical practices in the Thulamela Municipality in the Vhembe District (Limpopo Province) of South Africa?*

**Research questions**

- ◆ What is the level of medical practitioner's understanding of the concept of internal control?
- ◆ How do internal control systems contribute to the efficient operation of SMMP medical practices in the Thulamela Municipality?
- ◆ What is the relationship between internal control and reliable financial reporting in SMMP medical practices in the Thulamela Municipality?
- ◆ To what extent has internal control contributed to efficient compliance with laws and regulations by SMMP medical practices in the Thulamela Municipality?

**Objectives**

The objectives of the study are: 1) to assess the level of medical practitioner's level of understanding of internal control; 2) to evaluate the extent to which internal control systems have contributed to efficient operation of SMMP medical practices; 3) to determine the relationship between internal control and reliable financial reporting by SMMP medical practices; and 4) to evaluate the extent to which internal control systems have contributed to compliance with laws and regulations by SMMPs medical practices in the Thulamela Municipality.

**Methodology**

A questionnaire (comprising both structured and semi-structured questions) was constructed based on previous studies (Teketel and Berhanu, 2009) to collect data for a sample of 30 small medical practices. The questionnaire captured information on owners/managers' general understanding of internal control as well as their knowledge and application of the five primary elements of internal control: control environment, control activities, risk assessment, information and communication, and monitoring.

**Results**

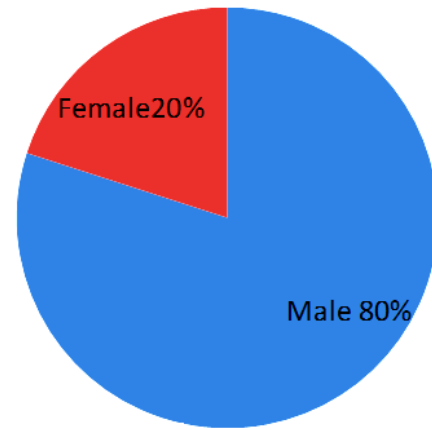
This section reports the results of the data analysis. The results of the analysis are divided into two main parts. The first part reports on the general aspect of each business such as gender and age of owner, type of medical practice and period of existence of the business. The second part focuses on specific issues relating to internal control systems in each business.

**Part a: general aspects of the business**

This section reports on ownership structure in terms of gender, and age of owner, type of medical practice, and age of business.

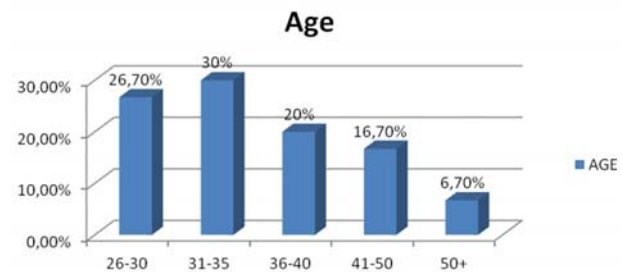
**Ownership of business by gender and age**

From the 30 medical practices surveyed, 80% (24) were male-owned while 20% (6) were owned by females (Figure 1). This clearly shows that the private medical services industry is male-dominated. This result corresponds with Bateman's (2014) study which reported that of the total pool of 34 961 medical practitioners registered with the Health Professionals Council of South Africa (HPCSA) in 2013, males outnumber females by 30%, compared with 45% in 2004.



**Fig.1. Ownership by gender**

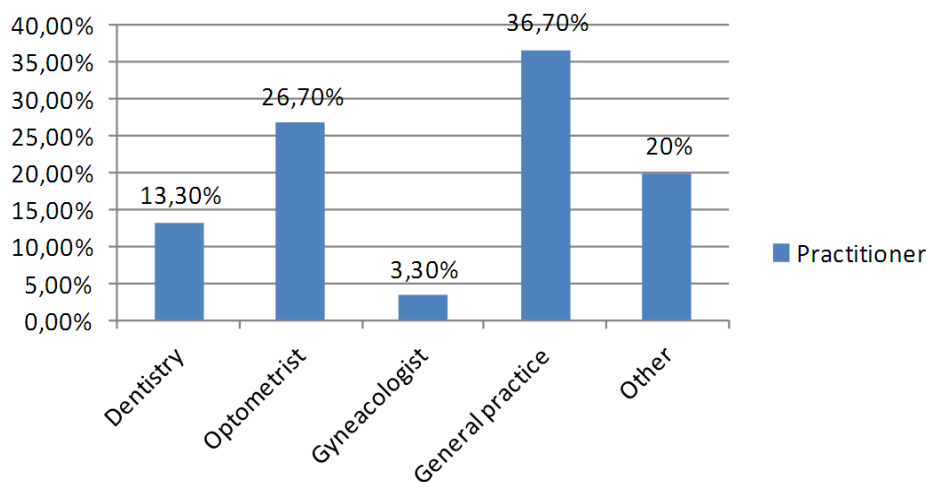
According to Figure 2, approximately three quarters (76.7%) of SMMP medical practices are owned and run by the youth (those aged 26-40 years). This is a clear indication of the youth's positive contribution to job creation in the Thulamela Municipality.



**Fig. 2. Ownership by age**

**Type of medical practice**

Figure 3 presents the results on type of medical practices. From the graph it can be observed that majority of surgeris operate as general practitioners (36.7%) followed by optometrists (26.7%), dentistry, (13.3%) and gynaecologist (3.3%).



**Fig. 3. Type of medical practice**

**Period of existence of business**

The chart shows that 50% of the SMMP medical practices have been in existence for 5 years or

longer, nearly a quarter have been operating for 3-5 years and 20% have been operating for 1-3 years.

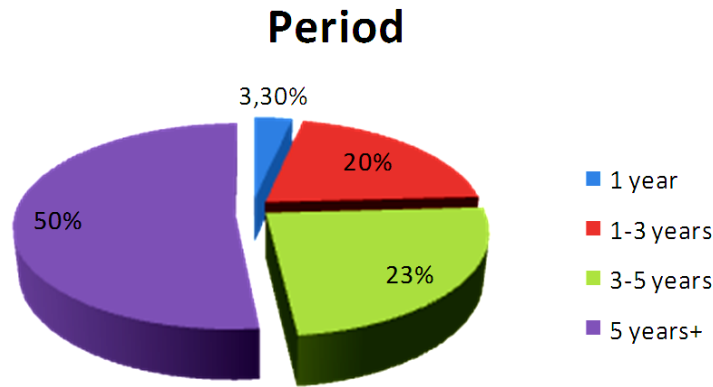


Fig. 4. Period of existence

**Part b: specific questions relating to internal control systems**

**Knowledge of internal control**

The study analyzed owner/managers’ knowledge of the concept of internal control. The results are presented in Table 2.

Table 2. Understanding the objectives of internal control

Internal control objective	No. of respondents	Percentage
Safeguarding of assets	5	16.7%
Ensure financial information is accurate and reliable	1	3.3%
Ensure compliance with all financial and operational requirements	4	13.3%
Timely preparation of reliable information	2	6.7%
All of the above	13	43.3%
Safeguarding of assets; compliance with all financial requirements, assistance in achieving business objectives and detection of fraud and error(s).	2	6.7%
Safeguarding of assets and timely preparation of reliable financial information	2	6.7%
Ensure financial information is accurate and reliable; reduce exposure to risk and detect fraud and error	1	3.3%
Total	30	100%

The table shows that 43.3% of respondents believe that all four elements of a good internal control are necessary for the achievement of an organization’s objectives, while 16.7% believe that only safeguarding of assets is important. Furthermore, 13.3% opined that compliance with financial and operational requirements alone is important while, 6.7% are of the view that only timely preparation of reliable information is important. Finally, 3.3% suggest that ensuring financial information is accurate and reliable is the only important aspect of internal control.

**Control environment**

The information addressed under the control environment includes the establishment of policies regarding such matters as acceptable business practice, conflict of interest and code of conducts and whether employees informed about these policies; extent to which the surgery is committed to employee competence; whether employees have adequate or relevant training; whether surgery/practice have a clear set of management philosophy and operating style including clear

statement of vision, mission and objectives; and whether there are written job descriptions for each employee in terms of specific duties. The results are shown in Figure 5.

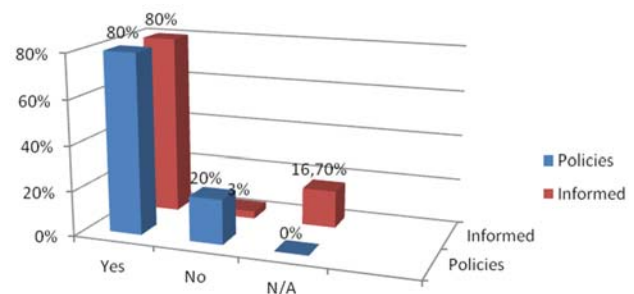


Fig. 5. Established policies which management has and if employees are informed

According to Figure 5, an overwhelming majority of the businesses have a strong control environment as demonstrated because 80% of the respondents indicated they have established policies and acceptable business practices. Similarly, 80% of the businesses indicate that their employees are informed about these policies.

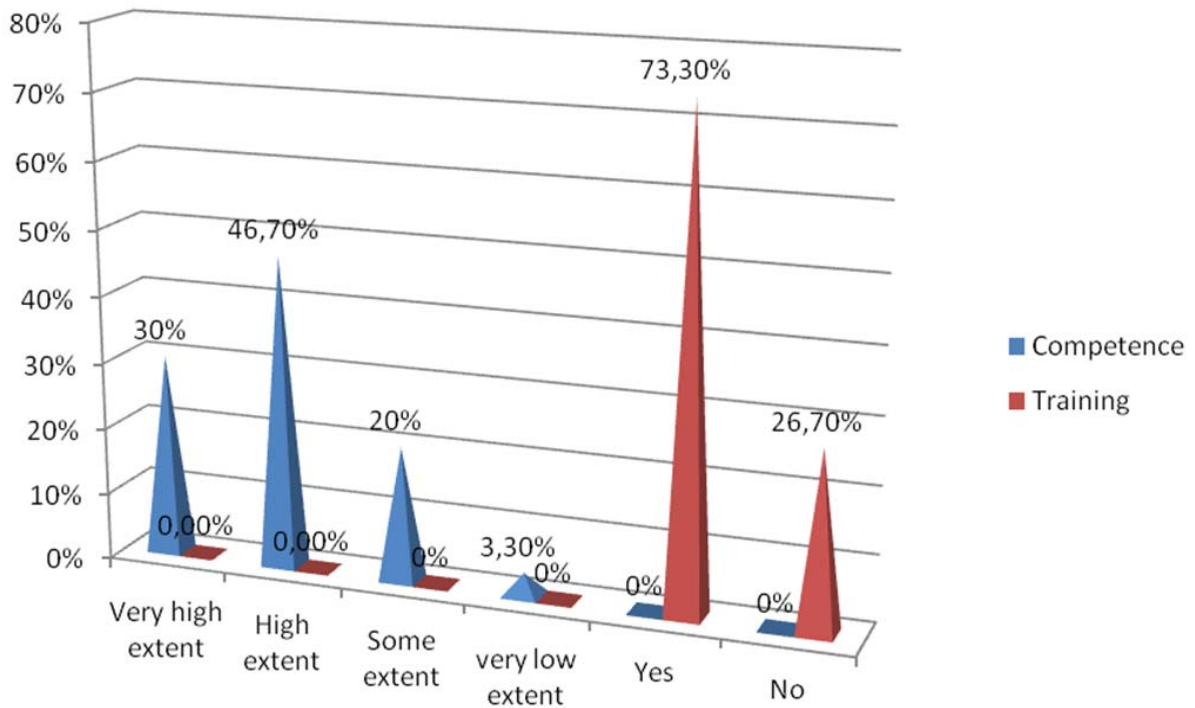


Fig. 6. Employee competence and relevant training

It can be observed from Figure 6 that nearly 75% indicated that employees are provided with the relevant training, while 46.7% of the respondents indicated that they are highly committed to employee competence. Clearly, the two results need further investigation because it is expected that there

should be a positive correlation between the provision of training and employee competence.

Figure 7 shows the results of the analysis on whether there are written job descriptions for employees and importance of internal control objectives.

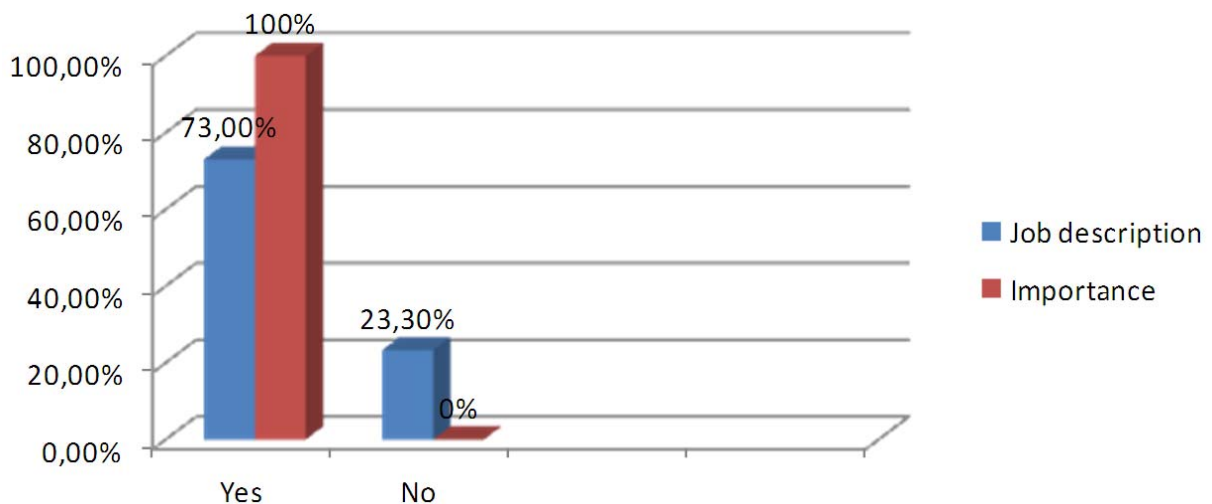


Fig. 7. Written job description for employees and importance of internal control objectives

The graph shows that all respondents strongly agree that internal control objectives are important for business success. Most (70%) of the respondents said they provide employees with written job descriptions.

**Risk identification, potential for fraud and insurance cover**

This aspect of the study focused on determining the extent to which businesses identify and analyze

risks in order to achieve their objective; the extent which businesses consider the potential for fraud, theft and other sundry crimes in assessing the risks to the achievements of the surgery’s objectives; and whether the surgeries have insurance cover against possible losses due to risk, theft and other unforeseen disasters. The results of the analysis are shown in Figure 8.

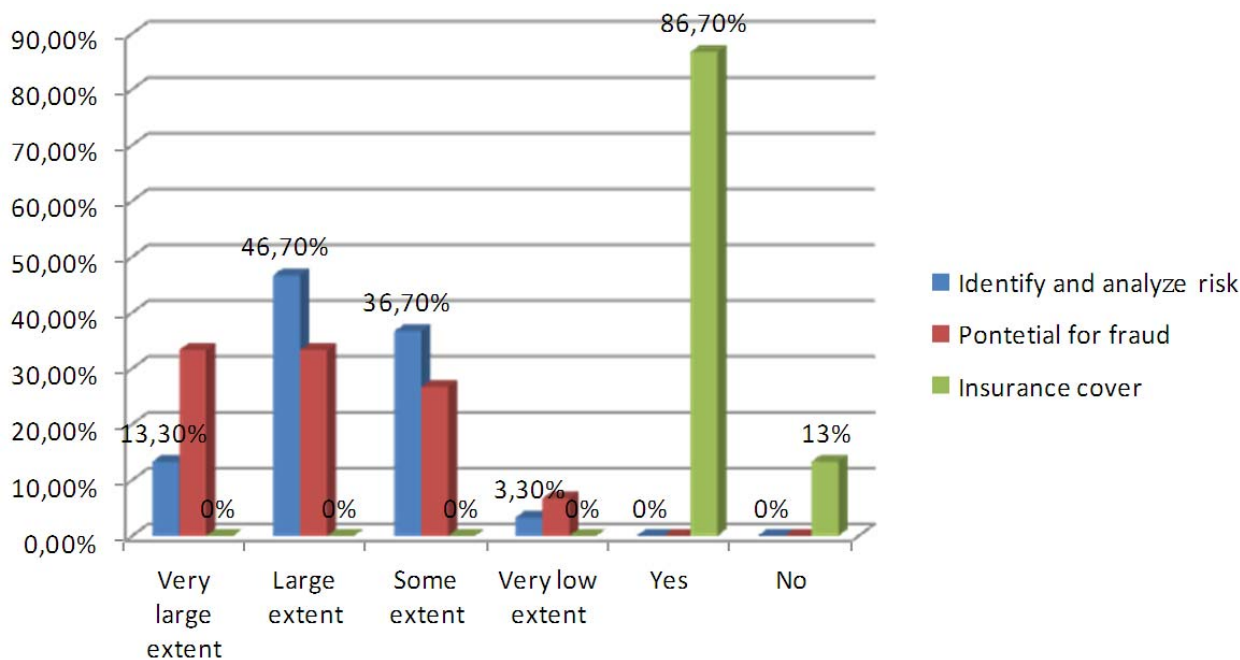


Fig. 8. The extent to which business identify and analyze risk

Figure 8 shows that 13.3% of the respondents identify and analyze risks to very large extent, 46.7% to a large extent and 36.7% to some extent, respectively. Moreover, an overwhelming majority (86.7%) have insurance cover. Only 13% of the businesses do not have insurance cover. These businesses consider insurance cover a luxury, not a necessity, because their type of practice required machines which would not be easily stolen, and some are in-built, which would make it almost impossible for them to be stolen. Another reason was the period of existence of the practice. Newly-established medical practices could not afford the

insurance cover. The respondents tend to forget that theft is not the only reason to have insurance as there are other factors such as natural disasters, arson, and so forth.

**Control activities**

Control activities focused on actions in place to mitigate eventualities that may prevent the business from achieving its objectives; controls over prescription and dispensing of medication; controls over the segregation of duties and also isolation of responsibilities; and safeguarding of patients' information from unauthorized access.

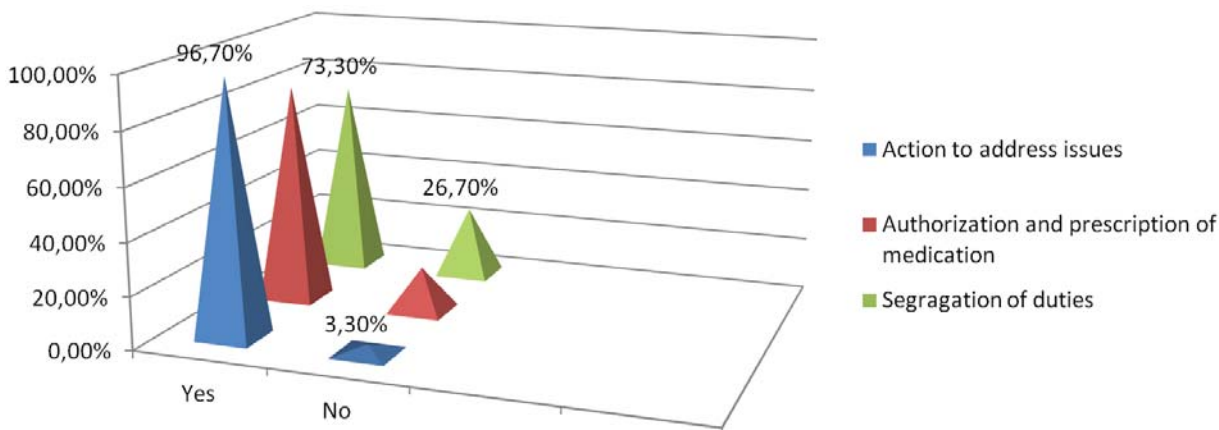
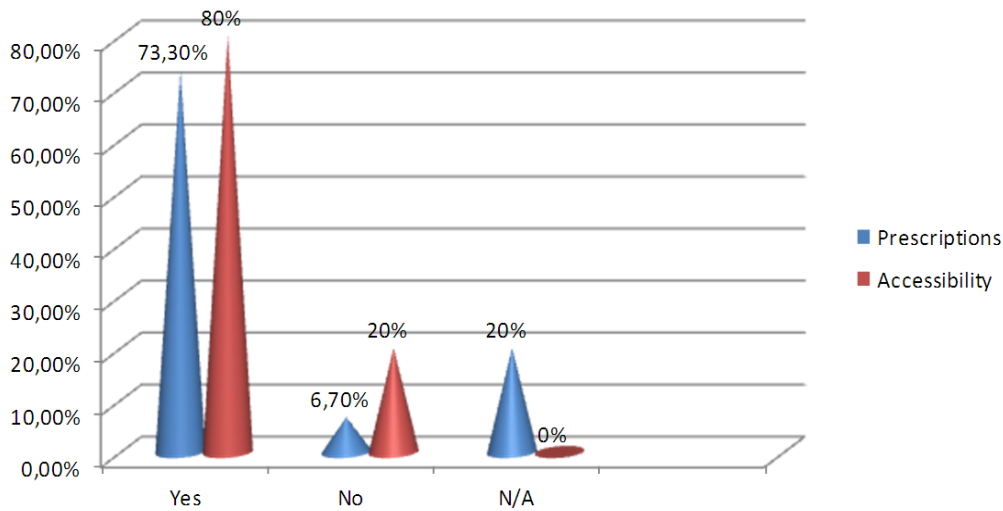


Fig. 9. Control activities

According to Figure 9, majority (96.7%) of the respondents said they tried to address issues that may hinder them from achieving their business objectives. For example, authorization and prescription of medication has to be done by qualified and competent personnel. Approximately,

73% of the businesses have adequate policies on segregation of duties and isolation of responsibilities. The remaining 27% of the respondents indicated that segregation of duties is not applicable in their practice as they do most of the work themselves.

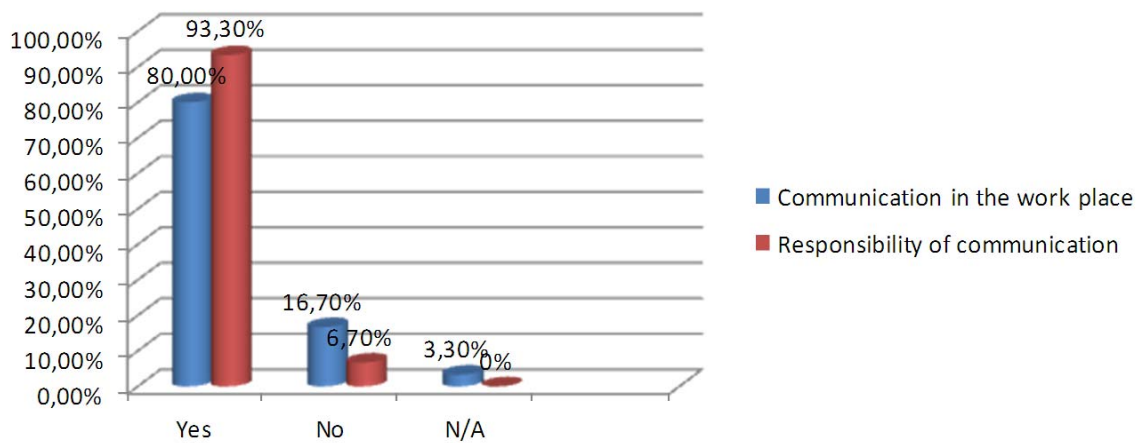


**Fig. 10. Dispensing of drugs and safeguarding of patients' information from unauthorized access**

The Figure reveals that 73.3% of the respondents indicated that prescriptions are signed before they are dispensed to patients, and 80% of the respondents strongly protect patients' information from unauthorized access.

**Information and communication**

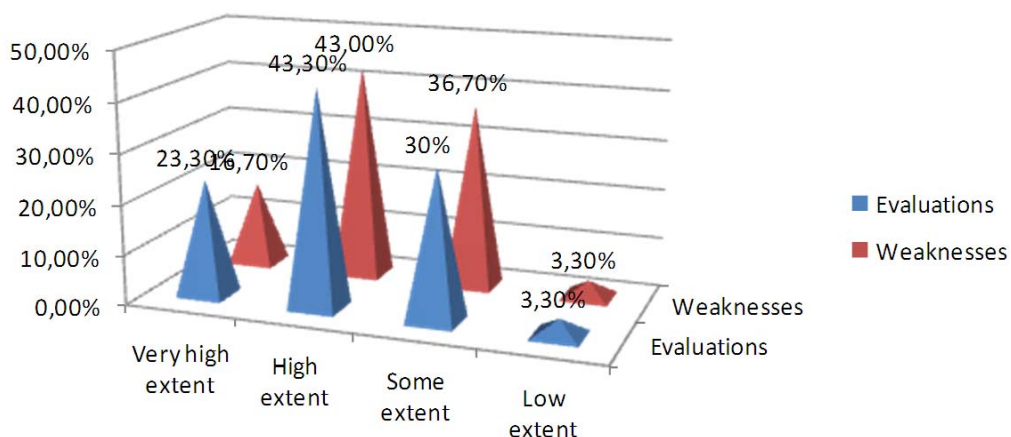
This section deals with means of communication of new product information to the nursing and medical staff, and general communication in the work place to enable staff to know their responsibilities.



**Fig. 11. Communication of new products and communication of duties to staff**

According to the graph, 80% of the respondents communicate new product information to their nursing staff.

Similarly, 93.3% agree that it is important to communicate with staff to ensure they are aware of their responsibilities.



**Fig. 12. Ongoing evaluations and weakness of internal control identified**

## Monitoring

This focuses on continuous evaluation in order to determine whether the surgery/practice is functioning properly, and the extent to which internal control weaknesses are identified and communicated in a manner to management for taking corrective actions. Figure 12 shows that 43.3% of respondents have established systems for continuous evaluations. Also 43.3% identifies and addresses internal control weaknesses.

## Conclusion

The key findings are that: 1) all owner/managers of the sampled SMMP medical practices strongly

agree that effective internal controls are necessary for business success; 2) 80% of SMMP medical practices are owned by males while 20% are owned by females; 3) 76.6% of the surgeries are owned by persons aged between 26-40 years, while approximately, 25% are owned by those aged over 40 years; 4) majority (86.7%) of the respondents indicated that usually they identify and analyze risk to ensure that their businesses objectives are achieved; 5) about 30% of the medical practices do not have insurance cover even though they have expensive equipment in their businesses.

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