AN ANALYSIS OF THE FACTORS THAT INFLUENCE THE POSSIBILITY OF INCURRING BAD DEBTS IN MEDICAL PRACTICES OF SOLE PRACTITIONERS

BY

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EXECUTIVE SUMMARY

The purpose of this study was to determine and analyse the factors that influence bad debts in medical practices of sole practitioners. The objective of the research was to establish a system of accounts receivable management which would lead to improved cash flows in such practices and ultimately influence a reduction in the cost of medical care.

To be able to establish such a system in medical practices conducted by sole practitioners, it was necessary to study the procedures used in the granting of credit, determine the collection policies in existence and ascertain the financial training and experience of staff employed.

The research data, collected by means of a questionnaire, found that accounts receivable management in such medical practices is not of an acceptable standard. Furthermore, the lack of trained staff leads to poor collection techniques and lengthy debt collection periods. These factors increase the demand for financing, which in turn leads to increased fixed costs in the form of interest payments on overdraft facilities. Consequently, this impacts negatively on the cash flow cycle of the practice.

In order to improve and speed up collections from debtors, recommendations are made in respect of the method in which accounts receivable should be managed in such medical practices. These include, among others, the separation of debt collections from other functions within the practice, the use of electronic media to collect accounts receivable, as well as the introduction of a course in basic business management within the curriculum of the Bachelor of Medicine.

It is envisaged that the proper management of accounts receivable would assist in reducing the cost of medical care to the consumer.

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INTRODUCTION

1.1 INTRODUCTION

The Family Practitioners Association has become aware recently of severe cash flow problems experienced by at least 60% of its membership (Bux 1997). Gordon (1996) has pointed out that many doctors and dentists have nearly R40 000 in debtors, outstanding for a period in excess of 180 days, with the result that approximately 20% of the potential annual income of practitioners is in danger of being lost.

The Association was formed in 1993 and registered as a non-profit organization under section 21 of the Companies Act No. 61 of 1973 (as amended). It comprises mainly of general medical practitioners in private practice and its purpose is to lend support to its members with research, continuing education, medical aid problems and other related aspects of the general medical practitioner business. It presently has approximately 850 members countrywide and all are registered with the Representative Association of Medical Aid Societies.

Interviews with a few members of the Family Practitioners Association revealed the following:

(a) Many doctors and dentists are forced to call on their

medical aid patients for payments whenever the member-patient's benefits have been exhausted. In the case of dentists, the problem of these unpaid accounts is compounded because dentists have to pay laboratory fees to dental technicians prior to receiving monies from medical aid societies or patients themselves.

(b) Financial institutions who supply the necessary finance do not provide any advice to the practitioner on managing the practice.

(c) Financial institutions do not possess the infrastructure or mechanisms to be involved in the day-to-day activities of the medical practice (Gove 1998).

(d) In an established sole medical or dental practice, doctors and dentists have very little time to attend to the administration of the practice. Most of their time is used to attend to their patients.

(e) Medical aid societies take up to five months to honour the account of a patient. This delay has serious implications on the cash flow of the practice.

(f) It is time consuming to identify and collect overdue accounts from patients.

Attempts by sole medical practitioners at solving the problem of errant debtors seem to have been largely ineffective. With regard to errant debtors, Aboobaker (1997) is of the opinion that attorneys' costs are inordinately high in relation to the amounts outstanding and debt-collection agencies are too heavy-handed and have thus also been equally ineffective.

This cash flow problem seems to have its roots in the manner in which accounts receivable is managed: a factor too often ignored by practitioners. Furthermore, if the cash flow is controlled, it would in turn increase the profitability of the medical practice. The effect of this would, even if it is to a limited extent, affect the cost of private medical care in South Africa. This is the rationale behind the present research.

In order to understand the factors that give rise to such cash flow problems, it is necessary to look at the circumstances surrounding the history of the problem.

1.2 HISTORICAL OUTLINE OF THE PROBLEM

During 1967, the Medical Schemes Act number 72 was promulgated in South Africa. Among other provisions, the Act allowed for the establishment of a representative organization of medical aid societies. Hence in 1968 the Representative Association of Medical Aid Societies (RAMS) was established. Its membership

comprised of existing and new medical aid societies. RAMS function, among others, was to represent its members in dealing with the health authorities and the Medical Association of South Africa (MASA). MASA, on the other hand, is an association of all medical practitioners. As representative of the medical aid societies, RAMS sets out its own suggested fee structure, called the "scale of benefits", payable to medical practitioners for services.

Co-operation between the two associations on medical issues was cordial, except in respect of determining the fee structures for medical services (Tuft 1997:1). Attempts at establishing a commonly accepted fee structure between the two associations failed. In comparison to RAMS, the MASA fee structure is considerably higher. Table 1.1 illustrates the vast differences in recommended fees for 1998, in respect of some services provided by general practitioners in private practice.

The MASA fee structure took the following into consideration: lost time, reasonable fees for services performed, annual increases in the consumer price index and losses due to bad debts. According to Coetzee (1998) the bad debt component has a considerable impact on the fee structure determined by MASA.

Table 1-1: RECOMMENDED FEES FOR GENERAL MEDICAL PRACTITIONERS

CONSULTATIVE SERVICE BY GENERAL PRACTITIONER	MASA TARIFF	RAMS TARIFF	PERCENTAGE DIFFERENCE
1st consultation normal hours at doctor's rooms	R138,10	R 65,60	110%
1st consultation normal hours away from doctor's rooms	R207,20	R 98,50	110%
1st consultation after hours, doctor travels to venue	R299,30	R104,00	188%
Exclusive attendance to baby at Caesarian section, normal delivery or visit in the ward after hours	R345,30	R120,00	188%

Source: Medical Association of South Africa tariff book for 1998.

Although based on similar criteria, RAMS on the other hand, determined a different fee structure. Each category of medical service has a specific fee attached to it and was defined as the "scale of benefits" fee. RAMS advises private medical practitioners, who want to accept the "scale of benefits" fee structure, to "contract into" medical aid societies by registering with RAMS. On "contracting in", the medical practitioner consents to accepting the conditions attached to the RAMS structure. In order to make this type of deal acceptable to the private medical practitioner, "contracted in"

practitioners were guaranteed direct payments, if medical benefits were available to the member of the medical aid society. Within a few years of implementing this policy, many medical practitioners became "contracted in". Medical services are thus granted automatically on a temporary credit basis by "contracted in" practitioners to medical aid patients, until payment is received from the respective medical aid.

Patients receiving medical services from practitioners, hospitals and other sectors within the industry, pay for the service or product by producing proof of their medical aid fund membership (usually a medical aid card). The patient expects that the medical aid society will pay for the respective service or product and believes the transactions are concluded between the medical aid society and the provider of the service (Joubert 1997:20). In reality, however, the respective transactions are between the patient and the service provider. The "contracted in" practitioner merely obtains a guarantee of direct payments from the society. In this way, patients who are members of medical aid societies obtain services, without realising that the basis of the transaction is indeed, credit.

With the proliferation of medical aid societies, the membership of such societies has grown since 1994. According to RAMS' senior researcher, Cherisse Bauer (1998), membership of medical aid societies has grown to approximately seven million, with

this number increasing daily. Danchin (1998:24) predicts that the National Health Bill will treble the people currently covered by medical aid to twenty-four million. With this large increase in membership, the number of "contracted in" sole medical practitioners will also increase.

A consequence of the number of individuals covered by medical aid, is the sharp rise in the level of unpaid accounts in sole medical practices. The costs associated with the management of these accounts therefore assume absolute importance. They have become the determinant factor in the profitability, as well as the cash flow experiences, of the private sole medical practitioner (MLS Bank 1995). However, many sole medical practitioners do not have a sound accounts receivable management system (Bux 1997).

The presence of such an accounts receivable management system can mean the difference between success or failure for the sole medical practitioner. The dilemma for these business persons is, however, always the same: How does a growing sole medical practitioner develop an accounts receivable system that uses the least amount of resources but also functions effectively? Research indicates that one answer seems to lie in the use of a pro-active credit management system, which may assist in solving the problem.

1.3 PURPOSE OF THE STUDY

The purpose of this study is to determine and analyse the factors that increase the chance of incurring bad debts in sole medical practices in the greater Durban area, in terms of the financial expertise of staff and the collection procedures applied to overdue accounts. The objective is to establish a system that will assist staff in sole practitioners in the timely and efficient collection of debts from patients.

In order to establish such a system it will be necessary to:

(a) interview members of the Family Practitioners Association
(b) draw up a questionnaire based on the available literature
(c) distribute the questionnaire among members of the Family Practitioners Association in the Durban functional area
(d) establish the extent to which valid information regarding debtors in respect of sole practitioners is compiled in sole practices
(e) determine the collection policies, if any, that exist in sole practices
(f) ascertain the financial training, expertise and or experience of staff, and to
(g) verify the extent of bad debts incurred by sole practitioners.

1.4 SIGNIFICANCE OF THE STUDY

The difference in the "scale of benefits" fee and those recommended by MASA, is based on the fact that MASA's fee structure takes the bad debt component inherent in all medical

practices into consideration. This component significantly increases the cost of medical care to all patients. If the bad debt component is reduced significantly and the rate of conversion of debtors to cash is shortened, the effect on the cost of medical care would be appropriately reduced.

The study further highlights the factors that lead to bad debts in sole medical practices and presents solutions. At least one solution would be to encourage an introductory course in business management within the curriculum of the Bachelor of Medicine.

1.5 HYPOTHESES

The hypotheses developed, based on the literature reviewed, are as follows:

(i) An inverse relationship exists between the financial qualification, training and or experience of administrative staff in sole medical practices and the successful recoveries of overdue accounts receivable.

(ii) There is a significant correlation between the methods of collecting accounts receivable and the accumulation of bad debts.

(iii) There is a significant correlation between bad debts and lengthy debt collection periods.

1.6 DELIMITATIONS OF THE STUDY

This study is restricted to the members of the Family Practitioners Association in the Durban functional area. As such the study will not cover the following:

- Solo specialist medical practices
- Group medical practices
- Hospital medical practices.

1.7 ASSUMPTIONS

At the start of this investigation the research was approved by the management of the Family Practitioners Association. It was assumed that the necessary co-operation would be received from members of the Association and that a majority would return the questionnaire (appendix A) in the pre-paid envelopes supplied.

1.8 STRUCTURE OF THE DISSERTATION

In this chapter the topic is introduced by way of an historical outline of the topic, followed by the purpose and significance of the study. This discussion leads into the hypotheses, where the scope of the research is defined.

In the second chapter the related literature is reviewed, with the research methodology explained in the third chapter. This involved field studies, developing and posting questionnaires and interviews.

Chapter four deals with the findings of the questionnaire, while chapter five analyses the data obtained through the questionnaire. Chapter six is the final chapter, in which recommendations are made on how to improve accounts receivable management in solo medical practices.

1.9 SUMMARY

Since the advent of the Medical Schemes Act number 72 of 1967 (as amended), there has been an increase in the number of patients that have been granted credit for medical services rendered. This, in turn, has led to an increase in the level of accounts receivable. However, when accounts receivable increases and most of the debtors are below R200, there is an increase in the chance of incurring bad debts. A cost is always incurred in the recovery of bad debts and it should be included in the overheads of a medical practice. Ultimately this leads to an increase in the costs of medical care.

The circumstances surrounding cash flows and the collection of debts makes it necessary to review the literature on current practices in account receivable management. This is discussed in chapter two.

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CHAPTER TWO

REVIEW OF RELATED LITERATURE

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REVIEW OF RELATED LITERATURE

2.1 INTRODUCTION

The collection of debts and its resultant effects on the cash flow of sole medical practitioners necessitates an investigation of current practices, in respect of accounts receivable management. However, no specific research exists on this topic and its related costs in relation to sole medical practices. Nevertheless, research material is available on the general management and control of accounts receivable.

In a study of the available literature, few differing views have been noted. Kritzinger (1997), Cole *et al* (1998), Mills (1986), among others, are of the opinion that the control of debtors and the management of accounts receivable in small businesses, should be identical to those practised by large enterprises. They hold the view that, while these management techniques may be cumbersome and bureaucratic in some respects, they may be used effectively in any small business, provided that trained and suitably qualified persons are employed.

The general principles that Cole *et al* (1997) and others refer to are:

- the qualification of staff
- application for credit

- credit terms
- collection policies
- analysis of debtors and the
- costs of financing debtors.

A lack of attention to any of these factors will have harsh implications on the decision to grant credit (MLS Bank 1995).

It follows therefore, that decisions to grant credit must be supported by sound reasons as well as clear objectives with regard to the management of accounts receivable.

2.2 OBJECTIVES OF ACCOUNTS RECEIVABLE MANAGEMENT

In the management of accounts receivable Kritzinger (1997:71) believes that the objectives of the credit department should be to:

- keep up to date with the influences in the environment, both internal as well as external
- ensure that the cost of extending credit is as low as possible
- reduce the risks involved in the granting of credit
- improve cash flow within the business and
- keep losses due to bad debts at a minimum.

In the case of the sole medical practitioner the environment suggested would include fee structures as set out by the Medical Association of South Africa (MASA) and the Representative Association of Medical Aid Societies (RAMS) and the automatic extension of credit to medical aid patients by practitioners who are "contracted in".

However, Correia *et al* (1993:497) indicate inherent risks in the automatic extension of credit. In their opinion, these risks may be caused by several factors:

- debtors take a considerable time to pay their accounts
- a large possibility exists that a handful of debtors may not pay their accounts at all, thereby increasing costs to the business
- the financing of debtors is a cost that is often omitted and may result in declining cash flow
- the management of debtors has certain administrative cost implications.

These factors emphasise the need to adequately monitor accounts receivable in order to minimise the risk. This is especially pertinent in sole medical practices, where the amount of credit granted to each debtor is relatively small and the number of debtors accounts is very high. (Gordon 1966:113)

2.3 PREREQUISITES FOR THE MANAGEMENT OF DEBTORS

A decision to grant credit means that debtors will arise. However, the sellers of products or services can never be certain they will receive the payment as promised by the debtor (Kritzinger 1997:6). This means it is necessary to have an effective credit management system to ensure recovery of overdue accounts.

2.3.1 Separating the debtors department from other activities

In a one-man or relatively small business it may not be necessary to create a separate debtors department. However, as the level of credit sales increases it becomes necessary for such a business to appoint a specific person to deal with accounts receivable and its collection. Once specific persons have been appointed, a formal debtor's department would become necessary and easy to establish (Kritzinger 1998:114).

A separate debtor's department would be able to create policies in respect of terms of sale, collection policies and procedures, customer relations and credit assessment (Mills 1986:25). These policies could be evaluated, from time to time, in order to ascertain what system of collection would be most appropriate when collecting debt under certain circumstances. However, the creation of policies and the evaluation thereof need to be completed by experienced and qualified staff (Mills 1986:27).

2.3.2 Proficiency and qualification of staff

In employing staff to manage accounts receivable, it is necessary for the practitioner to employ persons who are qualified and able to perform the various functions required within a credit environment (Mills 1989:64). Selecting the wrong person for the job may cause excessive financial losses to the business. Bolinger (1997:45) agrees with this approach but further emphasises that qualified staff should have some knowledge of Mercantile Law, Accounting and Business Economics.

Staff entrusted with the management of accounts receivable perform the tasks of planning, organizing, leading and controlling the credit and collecting activities. In addition, these staff also need good communication skills, diplomacy, a knowledge of human nature, as well as being creative (Kritzinger 1997:94). With this increasing responsibility, and the fact that the business world is a changing environment, training of staff in new methods of credit control should be an on-going process (Baxter 1989:66).

It follows therefore, that it is imperative for the staff of the debtor's department to have some formal qualification or training, in order to successfully manage accounts receivable. These qualifications would give staff the necessary tools to, for example, assess a credit application form.

2.3.3 Application for credit

In an ideal credit world, all decisions to grant credit would be based on complete, audited financial statements from every customer. Nevertheless, the lack of these statements should not be seen as a hindrance. In a service business, it is an opportunity that has great advantages (Schmidt 1997:52).

In the absence of financial statements, the first step is the application for credit. Thus, the accounts receivable departments of most businesses generally require a formal application before any credit can be considered. The application forms are legal documents which bear the signature of the applicant, thereby authenticating the truthfulness of information contained in the application (Cole 1998:179).

Several others agree with Cole and are in favour of a formal credit application procedure. They have a number of reasons for their views. These are:

- Certain facts may only be known to the applicant.
- Verification becomes easier.
- Applicants become more serious toward credit applications.
- It is an opportunity for the creditor to educate the customer in the terms of credit. This is especially important in the service sector where no tangible asset is offered for sale.

Other authors argue in favour of an informal application. However, there is general consensus that an application form for credit has to be fully completed and processed before any credit is granted and any credit terms agreed to.

2.3.4 Credit terms and periods

"Credit terms" refer to the conditions of the credit sale. These conditions include payment arrangements, discounts available, delivery of goods and service, and other similar conditions (Weston *et al* 1996:404). The "credit period" on the other hand, refers to the length of time taken to pay an account and is commonly referred to as the "collection period" (Kritzinger 1997:183). It reflects the average period an enterprise would have to wait before receiving payment of credit sales. The shorter the collection period, the more the enterprise benefits. Should a normal collection period of approximately 30 days deteriorate to 50 days, it could have a negative effect on the business (Koen *et al* 1994:48). The collection period accordingly seems to have a profound effect on the cash available in an enterprise.

When attempting to recoup overdue monies from small customers, postage, letters and telephone calls escalate the costs of collection and thus make them expensive to manage. Consequently, it is crucial that small accounts be collected as quickly as possible in order to avoid excessive administrative

expenditure (Hedges 1990:45). Hedges (1990) argues that accounts of small service providers, such as TV rental companies, should be collected within 30 days. However, debtors know they have the ability to stretch payments for the first 100 days and consequently extend payments without much effort (Mills 1986). Allowing small accounts to be outstanding for a longer period than anticipated would considerably reduce their worth (Mills 1986:57).

Kritzinger (1997:187) concludes that the profits from credit sales can easily be changed into a loss if the credit period changes for example from 30 to 60 days. The longer the enterprise has to wait for payments from debtors, the greater the risk that the debtor will not pay at all and the more difficult it could become to collect.

The "contracted in" sole medical practitioner, depends on the medical aid society for payment in respect of services rendered to medical aid members. The time taken to receive these payments often exceeds 180 days (Aboobaker 1998). Even after waiting for this time, there is the probability of a claim being rejected by the respective Society. In such cases the practitioner has to re-coup the monies due from the patient directly. This frequently compounds collection problems as the patient often loses track of the respective service provided in the first place.

2.3.5 Identification of overdue debtors

One of the most critical aspects in the management of accounts receivable is the early identification of delinquent accounts (Weston 1996:407). An attempt to collect an overdue account can only be made once an overdue debt has been identified. The most commonly used and simplest system of identifying such overdue accounts is the age analysis (Block *et al* 1992:185).

Aged analysis is a classification of accounts according to the period of time they are outstanding (Cole *et al* 1998:443). It is a process by which the enterprise obtains a general overview of all accounts, particularly overdue accounts. The process can be more extensive by including an analysis of the history of payments, indicating among other things the last date of payment. The accounts included in the aged analysis will immediately show overdue amounts and delinquent accounts. A 30 day account, for example, is delinquent if payment has not been received for at least 30 days. The status of a particular account can thus be determined quickly by means of this analysis (Kritzinger 1998:235).

The information in the aged analysis can be broken down by grouping together all the accounts according to the number of days that they are outstanding (30 days, 60 days, 90 days etc). For example, all accounts more than 90 days overdue are placed in one group to receive special attention. The reason for this

is that the collection procedure should change as the age of the overdue account increases. The aged analysis is thus used as a tool in the identification of overdue accounts. Tables 2.1 and 2.2 respectively show examples of an age analysis of total debtors and an age analysis of individual outstanding debtors.

Table 2-1: AGED ANALYSIS OF DEBTORS

% OUTSTANDING DEBTORS	VOLUME OF OUTSTANDING DEBTORS	PERIOD OVERDUE IN DAYS
45%	R255 000	less than 30 days
34%	R170 000	30 - 60 days
15%	R 75 000	60 - 90 days
6%	R 30 000	more than 90 days
Total 100%	R500 000	-

Source - author devised analysis

Table 2-2: AGED ANALYSIS OF INDIVIDUAL OUTSTANDING ACCOUNTS

ACCOUNT NUMBER	TOTAL OVERDUE	AMOUNT OVERDUE		
		30-60 days	60-90 days	90 + days
945678	R1 000		R1 000	
941234	R1 857	R1 857		
914877	R 400			R 400
894562	R2 000	R2 000		

Source - Author devised analysis

2.3.6 Use of computer applications

Prior to the 1980's the use of computerised accounting systems for recording debtors was limited and most businesses relied on a cumbersome manual system (Mills 1989:175). In a manual system it is difficult to obtain all the relevant information needed about a customer in order to made an intelligent credit decision. It is also time consuming to obtain even an elementary aged analysis within a contemporary time framework (Mills 1989:175). The aged analysis depends on the accuracy and ability of the person recording accounts receivable, to reflect the correct ages of the accounts. The collection procedures are accordingly, also dependent on these manual records which in itself maybe inaccurate.

Since the 1980's, however, the computerised accounting and debtors system has become the norm in the control of accounts receivable (Cole *et al* 1998:418). Weston *et al* (1996:409) maintain that nowhere in a typical business have computers had more of an impact, than in the field of accounts receivable management. The computerised system can provide more information accessible on a daily basis, thus making frequent aged analysis readily available. The activity of obtaining frequent aged analysis is indispensable in the management of accounts receivable, as there is a direct relationship between the length of time that an account is outstanding, its rate of collection and the probable financial loss as a result of bad debts (Cole *et al* 1998:443).

MLS Bank (1995:2) recommend that accounts receivable in a medical practice should preferably be computerised so that statements can be sent out as quickly as possible and identification of overdue debts can occur in a shorter space of time.

In the contemporary business environment small businesses may obtain a computer at reasonable cost (Mills 1989:176). Software systems for use in computers have been specifically designed to meet the needs of individual business environments. These software systems may either be a general accounting package or an accounts receivable management package or a combination of

both these and other packages. A specially designed debtors package has the ability to rapidly identify overdue accounts through the aged analysis and consequently provides the practitioner with tools for collection.

A recent development in the computer field is the "electronic data interchange" (EDI) system. This is the transfer of accounts receivable to medical aid societies through the electronic medium at a low cost, both in terms of capital outlay and transmission (Moynihan 1997:90). Once debtors accounts have been updated, information is transmitted via a modem and telephone lines to the respective medical aid society. The society's computers then download the information received within a few seconds of its transmission. This eliminates the time delays due to postage and results in the early processing of accounts.

The use of the EDI system leads to greater accuracy, saves time and is cost-effective. Moynihan (1997:90) suggests that changes in the United States federal system of reimbursement to home care agencies, will force them to abandon their paper-based statement of accounts in favour of EDI. This, Moynihan (1997) argues, will in the long term reduce the overhead and administrative costs of home care agencies.

The EDI system suggested by Moynihan (1997) is inexpensive, available and well developed in South Africa. It is not, however, understood by all practitioners nor is it widely used (Maharaj 1998).

2.4 COLLECTION POLICIES

In any enterprise the success of credit sales is determined by how effectively debtors are managed and overdue amounts collected (Kritzinger 1997:218). The enterprise can only truly experience the advantages of credit when the debtor has paid the account in full. However, debt collecting is not always a problem-free process. The reality is that some debtors will probably not pay their accounts on time or will not pay their accounts at all. Collection problems are particularly prevalent where a business does not sell a tangible product. This is the position in medical practices, where a service that is supplied, cannot be repossessed (Kritzinger 1997:230). Suppliers selling tangible products generally have fewer problems in collecting accounts receivable. Suppliers of credit, particularly in the medical field, consequently always bear the risk of late payments and bad debts. As a result an enterprise should attempt to collect its debts promptly and in doing so, convert debtors into cash as quickly as possible. Thus an effective collection policy in respect of debtors has a positive influence on the debt collection period, as well as on the enterprise's cash flow position.

An effective collection policy will establish clear-cut guidelines for the sequence of collection activities (Jones 1992:277). Cole *et al* (1998:25) contend that a collection policy should contain:

- the collection process
- the collection devices used
- the time line for implementing specific collection activities
- the procedures and practices which should be followed to collect credit accounts.

The collection policy should act as a guideline to assist staff in deciding which collection procedures to employ and how to proceed when attempting to collect amounts owed to the business. The business needs to determine when, and how, notification of the credit sale will be conveyed to the buyer. The quicker the customer receives an invoice, the sooner the account can be paid (Weston *et al* 1996:405).

The objective of a collection policy is thus to speed up collections from tardy payers and to limit bad debt losses to a minimum (Jones 1992:277).

2.4.1 Advantages of early collection of debtors

The effective collection of debts has several advantages for the business. Kritzinger (1997:221) advances the following reasons for having an early collection of accounts receivable in a credit policy:

- The collection of debts is made easier. The longer a business waits before starting with the collection of debts, the more difficult it becomes to do the collection. The business should start the collection procedure as soon as a credit sale has been made.
- The cost of collecting debts will be minimised and legal action against the debtor will be less likely.
- There is a reduced risk of bad debts.
- The rate of working capital turn-over is increased. This means that the capital tied up in debtors can be used sooner for other purposes. Furthermore, less capital will be required for the financing of debtors.
- The cash flow position of the business improves. This has a positive influence on the levels of cash available and improves liquidity.
- The business is in a better position to pay its creditors, leading to a strengthening of its image of creditworthiness.
- There is a reduced need for external short-term

financing in the form of bank overdrafts.

- It establishes good paying habits amongst debtors.
- If a business has a reputation for effective collection, it will encourage prompt payment.

2.4.2 Collection procedures for overdue accounts

Fritz (1997:19) advocates that once a delinquent account has been identified, a strict collection procedure should be followed. He further recommends that a record of collection procedures that have already been followed be maintained, in order to avoid any misunderstandings with the debtor.

Cole *et al* (1998:408) suggests that there are six important components in any collection system. These are:

- Co-ordination of credit and collection policies
- Flexibility
- Prompt response to missed payments
- Persistence
- Cost effectiveness
- Legal considerations

Cole *et al* (1998) favours a general collection system progressing through four stages:

- The impersonal routine stage
- The impersonal appeals stage

- The personalised appeals stage
- The drastic or legal action stage.

Kritzinger (1997:258) groups the impersonal routine and impersonal appeal stage into one and refers to it as the reminder phase. These are accepted procedures in general use. Table 2.3 reflects Cole *et al's* (1998) refined stages of the collection devices to be used when an account is overdue and the type of debtor involved. The general rules recommended are similar to the principles of effective collection provided by other authors. The system ensures that lower cost and routine methods (impersonal routine and appeals stages) are used for the majority of delinquent accounts who have the desire and means to pay. The higher cost methods are then applied selectively to the remaining small number of accounts.

Hedges (1989:47) recommends the following steps, in strict order, for the retrieval of delinquent accounts in smaller businesses:

- First repeat statement
- Second repeat statement
- Telephone call
- Letter reminding patient that account is overdue
- Letter of demand
- Collection agency or use of attorney.

These steps, he suggests, will keep costs down. In addition, the progression from one step to the next will apply incremental pressure on the debtor to pay the account.

Table 2-3: STAGES IN THE COLLECTION OF DEBT

STAGE OF SYSTEM	COLLECTION DEVICES AVAILABLE	TYPE OF DEBTORS INVOLVED
Impersonal stage	Statement - 1st, 2nd, 3rd . Statement inserts and stickers. Form letters of the reminder type.	Those awaiting notice. Honestly over-looked. Temporarily financially embarrassed. Careless or procrastinating.
Impersonal appeals	Formal letters appealing to: "Anything wrong" tone. "Tell us your story" tone. Sense of fair play. Seeking reply from debtors to: Telephone calls, registered letters and special delivery letters.	Honestly overlooked. Careless or procrastinating. Temporarily embarrassed. Accident or misfortune. Disputed account.
Personalised appeals	Telephone call. Personal interview. Personal letter to debtor and employer.	Eventual insolvents. Frauds - no intent to pay. Disputed accounts.
Drastic or legal action	Extension agreement. Collection agency. Garnishment or wage assignment. Attorney.	Eventual insolvents. Frauds - no intent to pay. Disputed accounts.

Source: Cole *et al* (1998:409)

In other circumstances, the supply of goods and services is withheld. However in the medical profession withholding of medical services may create moral and ethical issues.

2.5. ANALYSIS OF DEBTORS

In analysing debtors, an attempt is made to compare the actual time taken by the debtor to pay an account against the theoretical period allowed by the credit policy (Kritzinger *et al* 1996:46). The difference in the periods has a direct influence on the cash flow of the business. As a result, an analysis of debtors also requires a measurement of the liquidity of the business. Liquidity refers to the ability of the business to meet its day-to-day and current obligations (Cole *et al* 1998:348). To complete such a measurement, a ratio analysis of the debtors needs to be conducted.

There are a number of quantitative measures that could be used to conduct the ratio analysis. Block *et al* (1992:185) suggest the use of the average collection period and the ratio of bad debts to credit sales. Mills (1986:266), however, believes that an analysis of debtors needs to include, in addition to the above, credit sales indexes (2.5.3), collection percentage indexes (2.5.4) and delinquency indexes (2.5.5). These indexes, in his opinion, will additionally assist the business to measure the effectiveness of its collection procedures and ultimately that of the credit department.

2.5.1 Debtors collection period

A debtors collection ratio of NIL is regarded as highly desirable, that is, a pure cash turnover (University of Natal 1998:8). The extension of credit, however, may allow a company to increase turnover, provided the cost of financing such debtors does not exceed the increase in profit. Severely over-extended debtors may indicate that the enterprise is experiencing a collection problem.

A useful method to determine whether debtors are indeed exceeding credit terms, is to calculate the debtors collection period (Weston et al 1996:407). Two steps are required in its calculation:

(a) Compute the average daily credit sales (ADS):

$$ADS = \frac{\text{Annual credit sales}}{360 \text{ days}}$$

(b) Compute the average collection period (ACP):

$$ACP = \frac{\text{Accounts receivable}}{ADS}$$

The average collection period is expressed in days, and will provide the average number of days debtors take to pay their accounts. This figure is then compared with the credit period granted by the business. The comparison will then determine whether debtors are exceeding the credit period allowed them.

Assume a business has credit sales of R1,188 million per annum and has accounts receivable of R250 000. The average collection period would be calculated as follows:

$$ADS = \frac{R1\ 188\ 000}{360}$$

$$= R3\ 300 \text{ per day}$$

$$ACP = \frac{R250\ 000}{R3\ 300}$$

$$= 75,76 \text{ days.}$$

The result of the ACP shows that, on average, debtors are taking 75,76 days to pay their account. If the credit period allowed by the business is 30 days, then debtors are exceeding their credit terms by 45,76 days. This is an indication that there are delinquent accounts present in accounts receivable (Weston 1996:407). In order to ascertain whether this is in fact the case, the results should be compared with the aged analysis described in 2.6 (Correia *et al* 1993:503).

2.5.2 Ratio of bad debts to credit sales

When all efforts to obtain payment from a debtor have been exhausted and the debt remains unpaid, it is a prudent practice to write off the debt. However, bad debts decrease the profits of a business. It is a write-off of income that may result in large losses. To measure the strength of accounts receivable, a ratio of bad debts to credit sales is completed. (Ratio of bad debts to credit sales = bad debts / credit sales).

An increasing ratio indicates that there are too many weak accounts or that credit is granted too easily (Block *et al* 1992:185).

2.5.3 Credit sales index

In every business it is important to determine what percentage of the total sales is represented by credit sales. This percentage or index is secured by dividing credit sales by total sales:

$$\% \text{ credit sales index} = \frac{\text{Credit sales}}{\text{Total sales}}$$

Mills (1986:266) recommends that this index should be measured monthly so that it may be kept to planned levels. This has an important bearing on cash flow projections and the return on investment.

2.5.4 Collection percentage index

The collection index is one of the most commonly used control indices (Mills 1986:267). It is determined by dividing the total amounts collected during a month by the total accounts outstanding at the beginning of the month:

$$\frac{\text{Collections made during the month}}{\text{Debtors balances at beginning of period}}$$

If successive collection percentages are plotted on a chart, the general trend in collection will be indicated by the

resulting curve. When collections are unfavourable, improvements in the handling of accounts receivable must be inaugurated. Other steps should be taken to enquire into external causes that may be responsible for the condition (Mills 1986:267).

2.5.5 Delinquency index

This measure of credit management involves a determination of the proportion of all accounts, in amount and number, that are overdue. Mills (1986:269) suggests that it is derived by dividing the total overdue amount by the outstanding debtors as follows:

$$\text{Delinquency amount} = \frac{\text{Total overdue}}{\text{Total delinquency}}$$

When this index is computed for several successive periods, it serves as a barometer indicating whether the general trend of delinquency is upward or downward. If this percentage increases faster than it should at any given time, proper steps can usually be taken to curb the trend.

2.6 THE CASH FLOW CYCLE

Cash is the lifeblood of any business. In the absence of a steady cash flow, it will be difficult for any business to continue its operations (Gardener 1997). Cash and access to cash is therefore the single most important resource in determining financial success, and ultimately the viability of

an undertaking (MLS Bank 1995:6). Credit purchases and credit sales have a cycle of cash flow.

MLS Bank (1995) briefly describe a cash flow cycle as follows:

- Providers and suppliers deliver goods and/or services on credit. The transaction leads to an increase in creditors. The result, however, is a decrease in cash on hand when creditors are paid

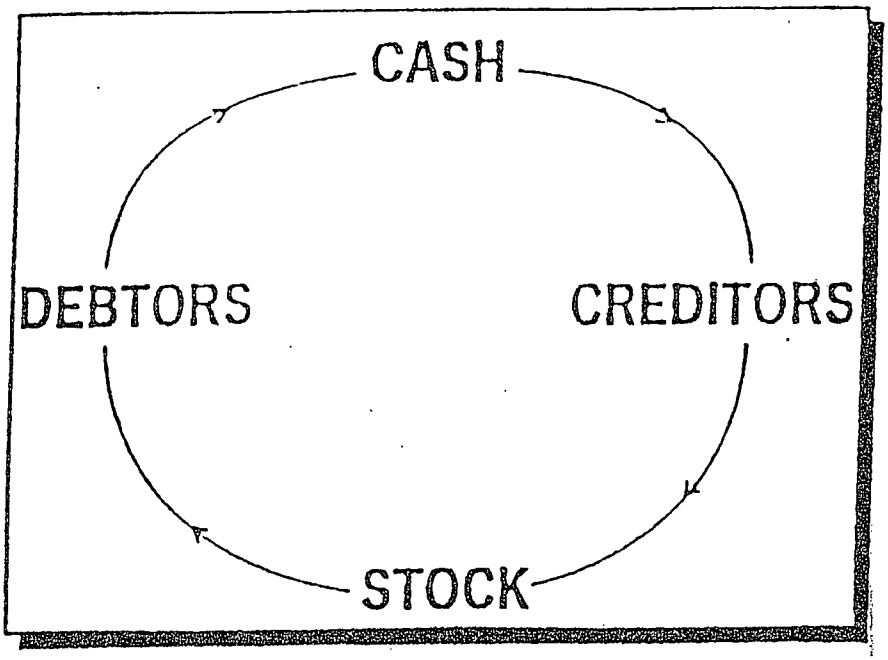
- holding stock, particularly medical products in the case of many practitioners, implies that cash and/or reserves have been spent on resources needed for the generation of income. The cash output reduces cash reserves and the stock represents a liquid asset until it changes hands and is converted into debtors

- after delivery of a service and/or medical products, debtors arise, which represent a claim to cash. Cash on hand will increase as debt is collected

- the cycle is completed when debtors pay their accounts and cash is deposited into the business.

This cycle is graphically illustrated in table 2-4.

Table 2-4: THE CASH FLOW CYCLE



Source: MLS Bank (1995:6)

MLS Bank (1995:7) contend that cash management, with reference to the cash flow cycle, focuses on the short term source and application of funds and its effects on operating or working capital. They further state that for purposes of medical practitioners in private practice, operating or working capital includes the following variables: debtors, stock, cash on hand, cash at bank, creditors and bank overdraft.

Koen *et al* (1994:47) agree with the above contention and advise that the elements of the investment in working capital should also reflect the following:

- the time debtors take to pay their accounts (commonly referred to as the debtors collection period)
- the time taken to convert stock into cash or debtors (commonly referred to as stock turnover)
- the time taken to pay creditors (commonly referred to as the creditors payment period)

A slowing down or acceleration of any one of these elements may have a direct effect on the time duration of the cycle as well as the costs involved in financing debtors. The time duration of the cycle therefore, determines the extent to which cash on hand will be available, or the extent to which bridging finance is required. Bridging finance is the money actually required to finance the retention of debtors. However, bridging finance has a cost factor attached to it which affects the cash flow and overhead cost structure of the medical practice.

2.7 FINANCING COSTS

The granting of credit has the same effect as giving the customer an interest free loan (Vigario 1997:269). The cost to the lending firm will be equal to the cost of borrowing such funds when extending credit facilities to customers. This has an impact on the profitability of the business.

2.7.1 Costs of financing overheads

Businesses require cash for payments of salaries and wages, electricity and water, telephone expenses, rent and hire-purchase agreements. MLS Bank (1995:6) also includes petty cash payments for teas and coffee and provisions for income tax payments. These items are collectively referred to as overhead expenses. In order to break-even in the solo medical practice, that is, without making any profit or loss, fees collected from patients (both cash and credit) need to cover these overhead expenses. The overhead expenses may be calculated proportionately to the number of patients seen by the practitioner.

A medical practitioner's month consists of 22 working days on average(MLS Bank 1995:6). If the total overhead costs were to be divided by the 22 working days per month, the result would indicate the minimum income required by the medical practitioner to break-even. When this income per day is further divided by the average fees charged, the number of patients the medical practitioner needs to see per day may be ascertained.

Example:

Total overhead costs per month = R17 000 (MLS Bank 1995:6)

Average fee per patient = R65 (MLS Bank 1995:6)

Therefore:

$$\text{Number of patients to be seen per day} = \frac{(\text{Total overhead expenses}/22 \text{ days})}{\text{fees charged}}$$

$$= (R17\ 000 / 22) / R65$$

$$= 12 \text{ patients per day}$$

This means that 12 patients per day would result in a turnover of R17 000 per month, which would make the practice break-even.

MLS Bank (1995) further recommends that the ratio of cash and credit in the turnover of a practice should be as follows:

Cash	5%
30 days	10%
60 days	55%
90 days	30%

If the medical practitioner is to wait 90 days in total for his patients to pay their accounts, then he has to finance the overheads from his own resources or attempt to obtain an overdraft facility from the bank. According to Gove (1998) most banks charge medical practitioners two percent above prime. This means, for example, that at an overdraft rate of 26,5 percent (24,5 percent plus two percent), the cost of financing the overheads of R17 000 would amount to :

30 days: {(R17 000 X 10%) X 0,265/12} = R 38

60 days: {(R17 000 X 55%) X 0,265/12} X 2 = R413

90 days: {(R17 000 X 30%) X 0,265/12} X 3 = R338

Total interest payable on overdraft R789

The interest payable would amount to R789 per month, resulting in an annualised interest expense of R9 468. These costs have not been included in the calculation of the overheads proposed by MLS Bank (1995) and are consequently referred to as hidden costs. In order to recover this hidden cost element, a further 12 patients per month would need to be seen by the medical practitioner. It is quite clear from the above that extending credit to patients has an additional cost element, which affects the cash flow of the practitioner.

2.7.2 Costs of financing debtors

Hidden costs are impossible to eliminate completely, unless the business operates on a cash only basis. It is therefore imperative that these cost components are kept as low as possible (Kritzinger 1997:73).

Cole *et al* (1998:22) argue that a considerable amount of working capital is invested in debtors. When debtors pay their accounts, there is a drop in the level of accounts receivable and an increase in the level of cash available to the business. Two factors that have a severe negative impact on the levels of

cash are the interest expense involved in the financing of debtors and bad debts. The financing of debtors creates no additional income, while at the same time capital invested in debtors is at risk when bad debts arise (Koen *et al* 1994:59). MLS Bank (1995:6) illustrates the need for bridging finance and its effect on the interest component as a result of extending the cash flow cycle by 15 days in table 2.5. The extension of the cash flow cycle, based on the variables in table 2.5, causes a cost implication of R31 589 per annum (R157 947 - R126 358). This illustrates the importance of the cost containment in the financing of debtors.

The need for bridging finance as illustrated in table 2.5 is further strengthened by increasing turnovers in medical practices (MLS Bank 1995:8). The consequent increases in cash requirements for interest payments place a greater stress on the cash resources of the practice.

Mills (1986:15), however, takes the view that there is no need to include the conversion of stock into cash in a smaller business, nor is there any need to take the time allowed by creditors for payments into account. He believes that trade credit involves an expense from the day credit is allowed to a buyer. Accordingly, he predicts that credit sales of R100 000 would result in an expense of R72,60 per day, at an interest rate of 26,5%, resulting in an annualised cost of R26 500.

However, in many cases of consumer credit, and especially in the case of the sole medical practice, no interest is charged during the time period the debtor owes money to the supplier of a service (Cole et al 1998: 22). In spite of this, the medical practitioner is still required to continue to pay his own creditors. Consequently, a need exists for either bridging finance or finance from the capital of the business, in order to continue operations. Both bridging finance and personal capital have a cost element not often reflected in the overheads of the business.

The financing costs as a consequence of the level of debtors, have not been taken into consideration by MLS Bank (1995) in the calculation of overheads for a medical practice. These costs thus represent a hidden element in the overall overhead costing of private solo medical practices.

If the sole medical practitioner is unable to see more patients per day, he would only be able to recover these additional hidden costs by increasing the professional fees and ultimately this increases the cost of health care. Effectively, this spiral of hidden costs will eventually affect the rate of return medical doctors expect on their investment in private medical practice.

Table 2-5: COST IMPLICATIONS OF INCREASING DEBT COLLECTION PERIODS

	Scenario 1	Scenario 2
Time taken by debtors to pay accounts	60 days	70 days
Time taken to sell stock of medicines	30 days	35 days
Time taken to pay creditors	30 days	30 days
Period of cycle	120 days	135 days
From the above it can be deduced:		
Period for which funding is required:		
- Debtors	60 days	70 days
- Time taken to sell stock of medicines	30 days	35 days
Total	90 days	105 days
Period for which funding is obtained:		
- Creditors	30 days	30 days
Therefore period for which bridging finance is required:	90-30 = 60 days	105-30 = 75 days
Effect on need for bridging finance:		
- Annual turnover	2 400 000	2 400 000
- Working days per year	302	302
- Turnover per day	7 947	7 947
Need for bridging finance:		
- Scenario 1 (60 X 7 947)	476 821	-
- Scenario 2 (75 X 7 947)	-	596 025
- Annual interest @ 26,5%	126 358	157 947

Source - MLS Bank (1995)

2.7.3 Required rate of return on self financing

Investments in accounts receivable have an opportunity cost or required rate of return (Jones 1992:269). The opportunity cost is the rate of return one could earn on investments of similar risks (Weston *et al* 1996:236) in a manner that does not cause the investment to lose its value.

In order to establish the present value (rand value in today's terms) of an investment, Jones (1992:269) suggests that the required rate of return k, is applied to the relevant cash flows in the following manner:

(a) Daily required rate of return:

$$k = \frac{k \text{ annual}}{365}$$

If the required rate of return is 20 percent, the daily required rate of return is

$$0{,}20 / 365 = 0{,}00055 \text{ per day}$$

This daily required rate of return is used to determine discount factors applied to the cash flows associated with credit policy decisions. These discount factors depend on how many days from time zero (t_0) (time of initial investment in the receivable) the relevant cash flow occurs.

(b) Discount factor

$$\text{Discount factor} = \frac{1}{(1+ \text{daily required rate of return from } t_0)^{\text{number of days X}}}$$

This may be written as:

$$\text{Discount factor} = \frac{1}{(1 + kt)}$$

where:

k = daily required rate of return

t = number of days from t0

If it is assumed that the cash flow occurs 30 days from t_0 then the discount factor would be:

$$\text{Discount factor} = \frac{1}{[1 + (0,00055)(30)]}$$

$$= \frac{1}{1,0165}$$

$$= 0,984$$

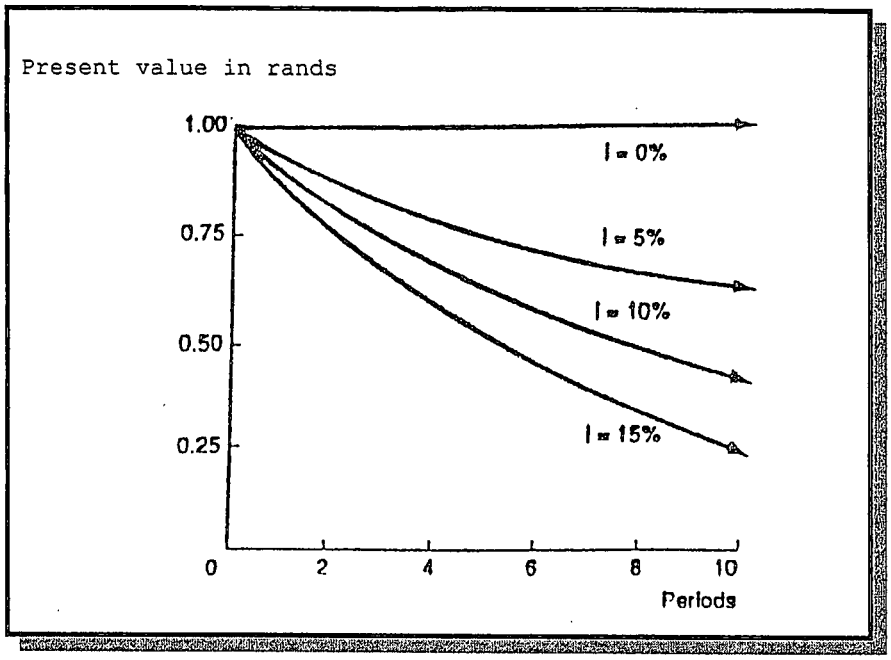
This means that if debtors are converted into cash in 30 days, they would be worth 0,016 (1 - 0,984) less than the actual investment.

A hypothetical investment of R20 000 in debtors and received in 30 days would mean that its actual worth at a 20% required rate of return would be:

R20 000 X 0,984 = R19 860

At relatively high interest rates, funds due in the future are worth very little today, and even at a relatively low discount rate, the present value of a sum due in the distant future is quite small. This may be illustrated as follows:

Figure 2-1: RELATIONSHIP AMONG PRESENT VALUE, INTEREST RATE AND TIME



Source - Jones (1992)

The reduction in the value of the investment in accounts receivable has a negative effect on the cash flow of the medical practice. It could be argued that interest charged on accounts receivable would negate this effect. However, as pointed out in paragraph 2.7.2, no interest is charged on these types of accounts.

2.7.4 Costs of collection

The costs linked to collection of debt relate to bad debts, administrative and recovery costs. These costs can be sizable in relation to the bad debts outstanding thus making collection procedures cumbersome (Mills 1986:21). All these costs tend to increase as the total amount of outstanding debt increases (Koen *et al* 1994:59).

Mills (1986:67) suggests that the cost of collection has to take into consideration the time staff devote to the collection of overdue debts. The cost allocated to "staff time" must be done on a pro-rata basis. Based on a working month of 22 days, with one working day equal to seven hours, the staff cost per hour in a typical small business could be as high as R21,36. The calculation of "staff time" costs is shown in table 2.6.

If a staff member spends half his/her working time collecting debt, the staff cost involved would amount to R1 408 per month {[(1 582 hours / 2) X R21,36] / 12}. Added to this cost would be costs such as telephone calls, postage, cost of letters and follow up procedures.

Table 2-6: ANALYSIS OF "STAFF TIME" COSTS

Hours worked per day	7 hours
Week days per annum	261 days
Less vacation, public holidays & sick leave	35 days
Real working days (226 X 7 hours)	1 582 hours
Nominal salary per annum	R 24 000
Medical aid	4 800
Pension	1 800
13th cheque	2 000
Sundry employee expenses @ R100 per month	1 200
Real cost of employee	33 800
Real cost per hour R33 800 / 1582	R21,36 per hour

Source - MLS Bank (1995)

2.8 SUMMARY

There are a number of factors that need to be considered when granting credit. These include the qualification and experience of staff, collection procedures and financing and collection costs. The granting of credit increases the need for bridging finance in the form of personal capital resources or bank overdrafts. Such bridging finance impacts substantially on the overhead costs of the business. There is also the inherent risk of incurring bad debts as a result of granting credit. The longer an account is outstanding the more difficult it will become to collect, with the likelihood that it may not be paid at all. All these factors affect the profitability of the business. In the case of the sole medical practitioner, it will eventually impact on the cost of health care.

In an environment of credit and more so where credit is granted automatically, proper management of accounts receivable assumes supreme importance. It is necessary to have a system that covers applications for credit, credit terms, collection procedures, reduction of bad debts and the reduction of costs. These procedures will ensure that the business will have sufficient cash available to it to make its payments to its creditors, thereby ensuring its stability, profitability and success.

In order to establish the extent to which adequate systems for the collection of accounts receivable are applied, a survey of the existing methods is required.

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CHAPTER THREE

RESEARCH METHODOLOGY

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3.1 INTRODUCTION

In chapter one the problems experienced by members of the Family Practitioners Association in respect of high levels of bank overdrafts were explored. Chapter two related the findings of an in depth literature review. However, no research specifically pertaining to accounts receivable management in sole medical practices was found. Instead, the literature almost exclusively covered accounts receivable management in large businesses. It was, therefore, necessary to direct the focus of the enquiry to an empirical research.

This chapter describes the empirical methods used to establish the current methods and practices of accounts receivable management in sole medical practices, in the greater Durban Area, during the period 1997 and 1998. The research was executed in seven stages.

(i) The population was defined.

(ii) A questionnaire for sole medical practices was developed.

(iii) A pilot study of the questionnaire was

conducted among members of the Family Practitioners Association in the greater Durban area.

(iv) Suggestions arising from the pilot study phase were incorporated into the final questionnaire before it was distributed to the sample population.

(v) This questionnaire was distributed to the respective target population for the collection of data.

(vi) Ad-hoc studies were undertaken.

(vii) A proposed method of analysis was chosen for the data received from the questionnaire. (See chapter four for a detailed discussion of the results).

These steps are explained in the rest of the chapter.

3.2 IDENTIFICATION OF THE TARGET POPULATION

The target population is defined as the set of persons that the research focuses upon (Bless et al 1995:87). The persons or population focused upon in this study are general medical practitioners in solo private practice in the greater Durban area. As the research focuses on losses due to bad debts, it was necessary for practitioners participating in the study to offer medical services on credit through medical aid societies.

Although several doctor's guilds exist that represent general practitioners in suburbs and towns in Kwa-Zulu Natal, it was decided to select the sample from the Family Practitioner Association. This association is the only provincial association representing the interests of general medical and dental practitioners who are in sole private practice. All its members are thus general medical and dental practitioners in sole private practice and are also "contracted" to medical aid societies. Furthermore, it is the members of this association who expressed concern about the rising cash flow problems they are experiencing (Bux 1997).

A complete list of sole medical practitioners in private practice was obtained from the Kwa-Zulu Natal branch of the Association. The 1997 list reflected a total membership of 850. The scope of the study was to be in the Durban Functional Region and therefore, only those members practicing in this region were chosen in the sample. The boundaries for this region were demarcated by the following areas:

North Durban: Verulam

South Durban: Amanzimtoti

West Durban : Kloof

Two hundred and sixty-three (263) members were identified as private sole medical and dental practitioners in this region.

Groebner *et al* (1985:583) recommend that the sample size be at least one greater than the number of independent variables (X1 to X24). In this study there are 24 other factors that affect bad debt losses. Therefore, the minimum number of respondents in the sample would have to exceed 25, that is, 9,5 percent of the population, would be required for the study to be valid. Thus, in order to ensure that the minimum number of respondents was received, the entire membership in the region was chosen as the sample size.

With the sample chosen it was then necessary to develop the questionnaire for this group.

3.3 DEVELOPMENT OF THE QUESTIONNAIRE

In the development of a questionnaire it is necessary to find some reference point to existing instances or previous research. The questions should be based on aspects of normal procedures and processes found in similar environments. In this case it is solo medical practices.

For this purpose a study of the literature on the management of accounts receivable in solo medical practices was made in the libraries of Technikon Natal and University of Natal. The

computer data base and CD-ROMS of both libraries were also searched for information. No research could be found covering this topic. A search of the Human Sciences Research Council also showed that no study had been conducted on this topic.

To further broaden the scope of the research, a request was posted on the Internet for information on accounts receivable management in solo medical practices, debt collection in the health care industry, collection policies and the control of bad debts in sole practices. Information received from the Internet confirmed the non-existence of any research on accounts receivable management in sole medical practices.

As a last resort, books and journals on the general management of accounts receivable in *consumer credit* were found and used as a basis in the development of the questionnaire (appendix A).

The content of the questionnaire was divided into seven separate sections, namely:

- determination of the average loss
- determination of the percentage of credit granted
- establishment of the credit terms
- identification of overdue debtors
- separation of the debtors department

- establishment of the procedures for collecting debts
- the use of computer applications

These sections are discussed in detail in the following paragraphs.

3.3.1 Determination of the average loss

Where bad debt losses arise, a relatively large or small bad debt loss in one particular year would create a biased picture of bad debts losses in that year. In order to avoid this, the bad debt losses were averaged over the two most recent years (question Y refers).

In order to establish what the loss was as a percentage of turnover, the average monthly turnover was required (question X24 refers). Furthermore, it was necessary to determine where the practitioner conducted his business in order to ascertain whether a particular area had any effect on the losses due to bad debts.

3.3.2 Determination of the percentage of credit granted

The number of patients seen per day, as well as the percentage of these patients on medical aid, was used to determine the relationship between the percentage of medical aid patients seen and the level of bad debts (question X1 and X2 refers).

3.3.3 Establishment of credit terms

The length of time taken to settle debts has a direct influence on bad debt losses (Kritzinger 1998:183). How long debtors take to pay their accounts and the expectations of practitioners in regards to acceptable credit terms, have an impact on the credit terms. The issue of credit terms is therefore addressed in questions X4 and X6.

3.3.4 Identification of overdue debtors

It was necessary to establish the methods employed by practitioners in identifying delinquent accounts receivable. However, before ascertaining the methods employed, it was essential to confirm whether attempts are in fact made to identify overdue debtors. By determining this fact, respondents' answers on the methods used to identify overdue debtors would be more credible. Questions X5, X6, X7, X11, X12, X13 and X18 refer.

3.3.5 Separation of the department for debtors

As the level of credit granted increases, a separate department should be created to handle collections. The staff in this department need to be persons who have the necessary experience, qualifications and training in the management of accounts receivable. These issues were addressed in questions X8, X9, X10, X16, X20 and X22.

3.3.6 Establishment of procedures for collecting debtors

A business must have a clear collection policy so that collections can be done according to a plan. This provides a framework for administrative staff, within which collections may be executed in a logical, systematic and consistent manner. If collections are unplanned it will ultimately lead to higher collection costs (Kritzinger 1998:237). It was thus necessary to establish whether a plan of action exists for the collections of overdue debts. Furthermore, it needed to be established whether information regarding debtors is collected when credit is initially granted. Questions X14, X15, X17 and X19 refer.

3.3.7 The use of computer applications

Research has indicated that computerized accounting and debtors systems are the norm in the control of accounts receivable. Furthermore, development in this technology has led to a situation where, statements of account and receipts from debtors can be effected electronically. The extent to which computerized systems are used in the identification of overdue accounts, as well as the use of electronic transfer methods for accounts receivable, was therefore established. Questions X3, X12 and X21 refer.

3.4 PILOT STUDY AND AMENDMENTS TO THE QUESTIONNAIRE

The questionnaire thus developed was tested among five members of the Family Practitioners Association (FPA). The completed questionnaire was returned with the following recommendations:

- That a letter should accompany the questionnaire pointing out the anonymity of the respondents.
- That questions on administrative staff doubling as receptionist should be included.
- That requests for the average monthly turnover be based on a range of categories, as opposed to the actual figures requested.

It was the opinion of FPA members in the pilot study that sole medical practitioners might not be willing to supply an absolute figure in respect of average monthly turnover. They felt that practitioners would be more amenable to supplying information on a range of categories basis, beginning with a turnover range below R20 000 and ending with a turnover range above R100 000. However, this was a crucial question and it was necessary to ascertain whether the question could be categorised. Worku (1998) was of the opinion that it was feasible for the turnover to be placed in categories as it would not affect the results significantly.

The question on receptionists doubling as administrative staff was included as question X10, while question X24 on the average monthly turnover was changed to a categorical variable.

The final questionnaire thus contained 25 questions. The questions were made up of 24 factual questions and one question on the perception of the practitioner in regards to overdue accounts. These questions were placed randomly in the questionnaire and no particular order was followed. Bless and Higson-Smith (1995:118) recommend this method to check the veracity of answers to questions of a financial nature.

The average annual loss incurred as a result of bad debts (Y) was the dependent variable and questions X1 to X24 were identified as the independent variables (Worku 1998).

The questionnaire was then ready for distribution to the 263 members of the Family Practitioners Association in the Durban Functional Region.

3.5 DATA COLLECTION PROCEDURE

It was necessary to ensure a high rate of response. Therefore, the Chairpersons' of the different sub-regions were approached telephonically and their support canvassed. All Chairpersons' gave their support for the research.

Each sole practitioner in the sample was requested to complete the questionnaire. A covering letter (annexure B) was attached to the questionnaire, informing the practitioner of the following:

(a) an overview of the study

(b) that permission for the study had been granted by the Family Practitioners Association

(c) a guarantee that the anonymity of the respondents would be upheld and

(d) a request to return the questionnaire in the self-addressed pre-paid envelope supplied.

From the address list supplied by the FPA, each member identified in the target population of 263 was posted the questionnaire with the covering letter and the self-addressed stamped envelope.

Seventy questionnaires were returned which accounted for 26,6% of the sample. The data subsequently obtained from the questionnaire needed to be statistically analysed.

3.6 METHOD OF ANALYSIS

When changes in a factor appear to be related in some way to movements in another factor, a causal relationship is said to exist between the factors (Lucey 1993:99). In such a case, regression analysis is the most suitable method of analyzing data which is obtained from these factors. However, in this study, 24 questions have been identified that affect bad debt losses in medical practices. As a result, it is necessary to test whether a causal relationship does indeed exist between the bad debts losses (Y) and the other factors in the questionnaire. Since there is more than one factor that affects Y, multiple regression was used as the method of analysis.

3.6.1 Multiple linear regression analysis

Multiple linear regression is performed using a continuous dependent variable (average annual loss Y) and a combination of continuous and categorical independent variables (questions X1, X2, ..., X24). The regression will result in a quantitative relationship between the average annual loss (Y) and the other 24 questions. The equation for regression analysis is:

$$Y = bo + b1*x1 + ... + b24*x24$$

Using this equation the amount of the bad debt losses incurred (Y) may be predicted for any possible values in respect of questions X1 to X24. Consequently, if a solo medical

practitioner knew the value of any of the questions (X1 to X24), the estimated bad debt loss incurred may be calculated by plugging in those values into the above equation.

The reliability of this estimated line of regression may be determined by using diagnostic procedures.

3.6.2 Diagnostic procedure

This procedure is used to determine how reliable the estimated line of regression is for statistical inference. The most important diagnostic procedure is the R-square.

R-square is a measure of the total explained variation by the estimated line of regression. For a very good estimated regression model, the value of R-square should be at least 75% or 0.75 (Worku 1998).

If the R-square is less than 0.75, the histogram plot, the P-plot, Cook's distance and the Durbin-Watson statistic may be used to determine the validity and reliability of the regression analysis.

3.6.3 Frequencies and percentages

Frequencies present unprocessed (raw) data in a more readily usable form, which may then be used to draw conclusions (Drapper *et al* 1998). A summary of the statistics, consequently presents frequencies of responses for each categorical variable: that is, the average number of patients seen per day (X1), the use of electronic transfer systems (X3),....., the average turnover per month (X24). It is, however, not possible to present frequencies for the continuous variables bad debt losses incurred (Y) and the percentage of patients on medical aid (X2). For these continuous variables, averages and standard deviations from the median are calculated and presented (Drapper *et al* 1998).

Frequencies and percentages could give rise to other ad-hoc studies that need to be undertaken, in order to verify certain information obtained from the questionnaire.

3.6.4 Ad-hoc studies

The questionnaire requested an answer on whether patients completed an application form when requesting credit. However, no question was posed on the updating of information once it was in fact collected. In order to established whether information on debtors was updated on a regular basis, a random survey was conducted among ten members of the Family Practitioners Association (October 1999).

A random telephonic survey was also conducted among universities in South Africa offering medical degrees. The objective of this survey was to establish whether South African Universities included a formal business course or commercial training in their curriculum.

Where complementary answers were given in respect of the use of electronic data interchange and the debtors collection period, a discussion was held with the members of the FPA to determine the reasons for such answers.

The ad-hoc studies became necessary when certain information was highlighted in the correlation matrix.

3.6.5 Correlation matrix

The computation of a correlation matrix establishes the strength of the relationship between bad debt losses and the other factors (X1 to X24), as well as the relationship between each of the independent factors themselves; for example, the strength of the relationship between the percentage of patients on medical aid and the average number of patients seen per day. Those correlations closer to zero show insignificant relationships, while those closer to one show stronger relationships (Redelinghuis *et al* 1985)

3.6.6 The analysis of variance tables

The analysis of variance tables serve to test whether the regression of Y on X1 to X24 is significantly explained. This means that tests have to performed, in order to ascertain whether the reliability and validity of the statistical method used for the analysis of the data, obtained through the questionnaire, is good.

The decision rule to be followed in these circumstances is as follows:

(a) The regression of Y on X1 to X24 is accepted with a 95 percent confidence level if the observed F-value is less than or equal to the tabulated F-value at the $\alpha = 0,05$ level of significance.

(b) If the observed value exceeds the tabulated value then the impression that the regression of bad debt losses (Y) on X1 to X24 is not significantly explained, is rejected.

If it is found that (a) is true then the reliability of the regression analysis is confirmed and the hypothesis (paragraph 1.1.5) is proved correct.

3.7 SUMMARY

This chapter covered the methods adopted for the study. The target population was identified and the questionnaire developed. The procedure for the collection of the data was also detailed. The method of analysing the data for this study was the multiple linear regression model.

The results of the these procedures are discussed in Chapter four.

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CHAPTER FOUR

EMPIRICAL FINDINGS OF THE STUDY

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EMPIRICAL FINDINGS OF THE STUDY

4.1 INTRODUCTION

Following from the research methods identified in chapter three, seventy (70) questionnaires were received by return of post from sole medical practitioners in the target area. Of these, sixty-nine (69) questionnaires were properly completed while one (1) blank questionnaire was returned.

Each of the sixty-nine fully completed questionnaires was considered in the analysis, while the blank questionnaire was rejected. The responses were captured on computer using the statistical package SPSS / PC+ version 9.0. The results of the data captured, reflects the responses for the various categories in each question posed.

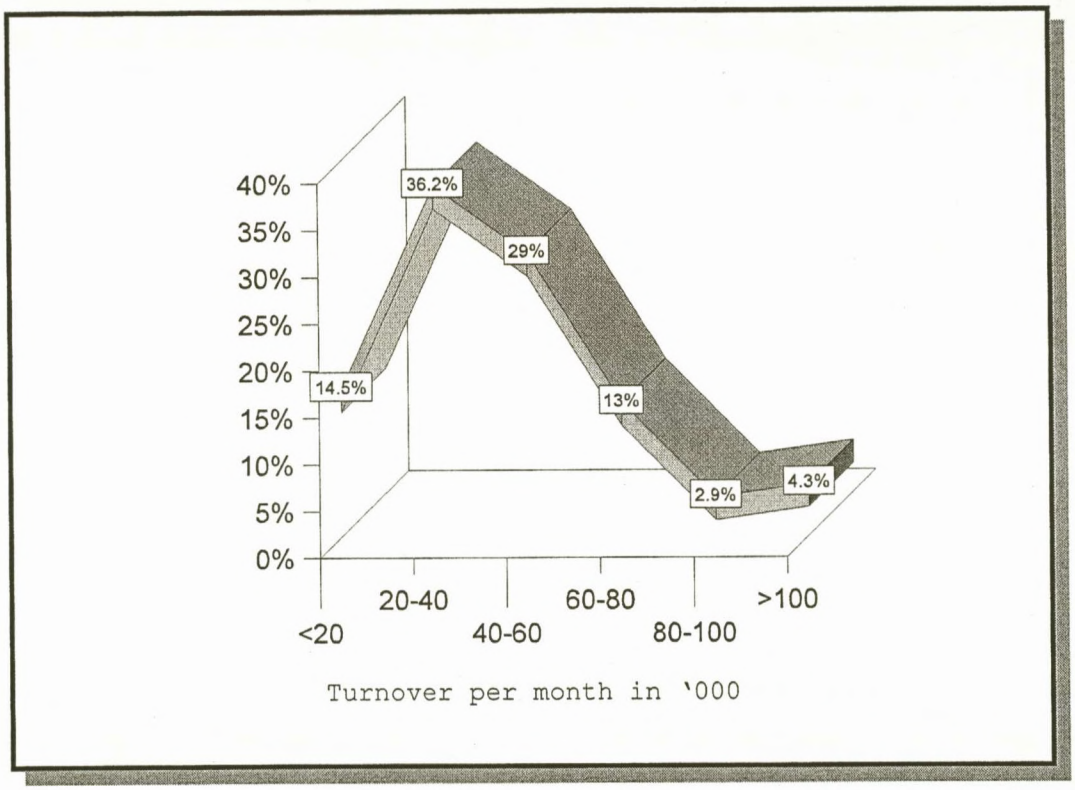
4.2 FREQUENCIES AND PERCENTAGES

4.2.1 Average loss (Y)

The average annual loss amounts to R42 934. Turnover per month (X24) ranges from below R20 000 to over R100 000. The majority of the respondents (36 percent) indicated that their turnover is in the range R20 000 to R40 000. Figure 4-1 surprisingly indicates that 15 percent of respondents have turnovers below R20 000, while four percent indicate that their turnover exceeds R100 000. Those practitioners who have turnovers

between R40 000 and R60 000 make up 29 percent, while 13 percent indicate their turnover to be between R60 000 and R80 000. Only three percent indicate a turnover of between R80 000 and R100 000.

Figure 4-1: TURNOVER PER MONTH IN RANDS



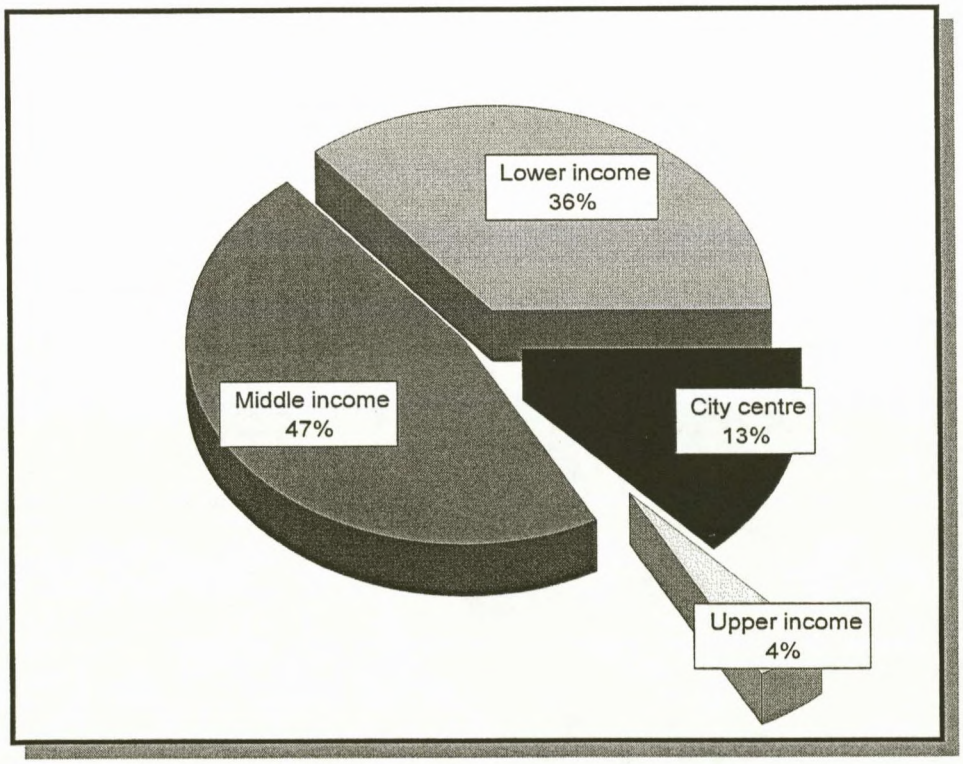
Source: Compiled by author from research output.

Four service areas were identified in the questionnaire. These are:

- lower income suburb
- middle income suburb
- city centre
- upper income suburb

Figure 4-2 indicates that the lower income areas comprise 36 percent of the sample, 47 percent service middle income suburbs, 13 percent service the city centre and 4 percent service upper income suburbs.

Figure 4-2: AREAS SERVICES



Source: Compiled by author from research output.

4.2.2 Number of patients seen (X1)

Table 4-1 reflects that the number of patients seen on a daily basis range from five to 80. Practitioners who see five patients per day constitute 2,9 percent of the sample, while 4,3 percent see eighty patients. The highest frequency of patients seen is 20 and this constitutes 15,9 percent of the respondents. Those practitioners seeing 25 patients constitute 10,1 percent, while 11,6 percent see 30 patients.

4.2.3 Patients on medical aid (X2)

The average number of patients on medical aid seen by the medical practitioner is approximately 63 percent of all patients seen.

4.2.4 Credit terms (X4,X6)

Table 4-2 reflects the perceptions of practitioners with regards to overdue accounts. Those practitioners who consider debtors overdue when a patients's account is 30 days old comprise 2,9 percent of the sample. However, 15,9 percent also think an account is overdue when it is already outstanding for 210 days. The majority of respondents (36,2 percent) seemed to think that a debt is only overdue when it remains unpaid for 90 days. A large percentage (23,2 percent) indicate that they only consider a debt overdue when it had been outstanding for 180 days.

Table 4-1: NUMBER OF PATIENTS SEEN

NUMBER OF PATIENTS	NUMBER OF DOCTORS	PERCENTAGE
5	2	2,9
6	1	1,4
9	1	1,4
10	3	4,3
15	8	11,6
16	1	1,4
17	1	1,4
20	11	15,9
24	1	1,4
25	7	10,1
28	2	2,9
30	8	11,6
32	1	1,4
35	6	8,7
40	6	8,7
45	2	2,9
50	1	1,4
55	2	2,9
70	2	2,9
80	3	4,3
TOTAL	69	100

Source: Compiled by author from research output.

Table 4-2: PRACTITIONERS PERCEPTIONS OF WHEN AN ACCOUNT IS OVERDUE

NUMBER OF DAYS OUTSTANDING	PERCENTAGE
30	2,9
60	11,6
90	37,7
120	36,2
180	8,7
210	2,9

Source: Compiled by author from research output.

Table 4-3 shows that all respondents indicate that no accounts are settled within 30 days while, 15,9 percent claim that accounts are only settled after 210 days. Those practitioners that claim that debtors settle their accounts within 90 days, account for 26 percent of the sample.

Table 4-3: DAYS TAKEN TO SETTLE ACCOUNTS

NUMBER OF DAYS TAKEN BEFORE ACCOUNTS SETTLED	PERCENTAGE
30	0
60	14,5
90	26,1
120	20,3
180	23,2
210	15,9

Source: Compiled by author from research output.

4.2.5 Methods used in the identification of overdue accounts

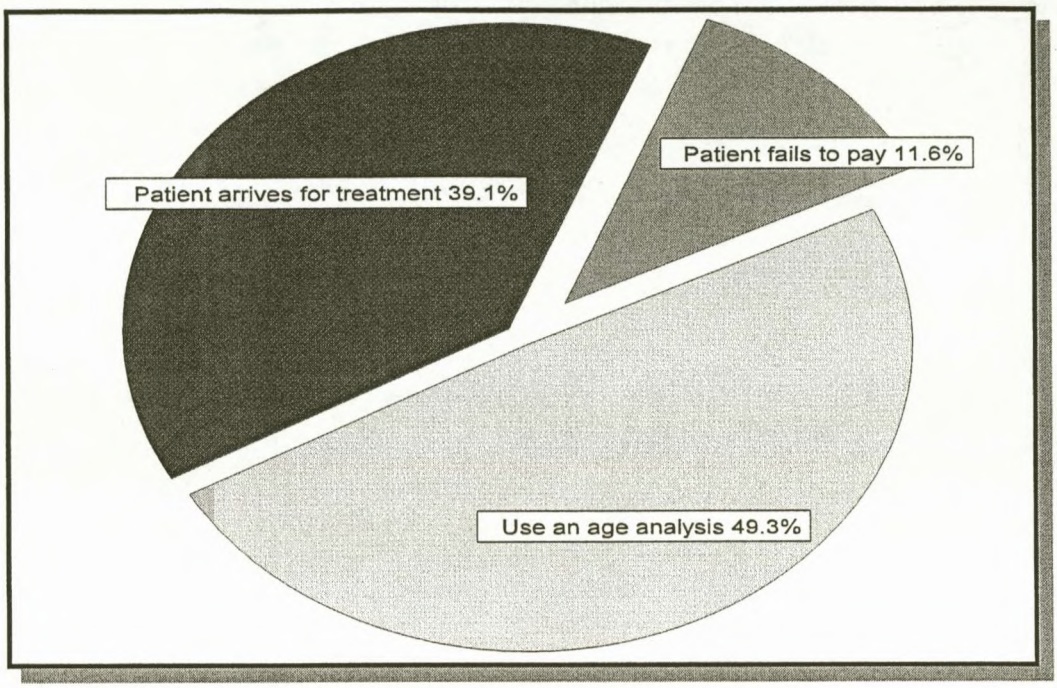
The data shows that 85 percent of respondents do indeed attempt to recover outstanding professional fees from patients (X5) when medical aid societies fail to settle the patient's account.

Respondents claiming that they have mechanisms to identify overdue debt (X7) constitute 90 percent of the sample, while 10 percent indicate that they do not.

Figure 4-3 shows that a significantly high percentage (39,1 percent) of respondents only identify an overdue account when a patient comes in for treatment. An age analysis is used for this by 49,3 percent of respondents, while 11,6 percent identify an overdue account as soon as the patient fails to pay an account.

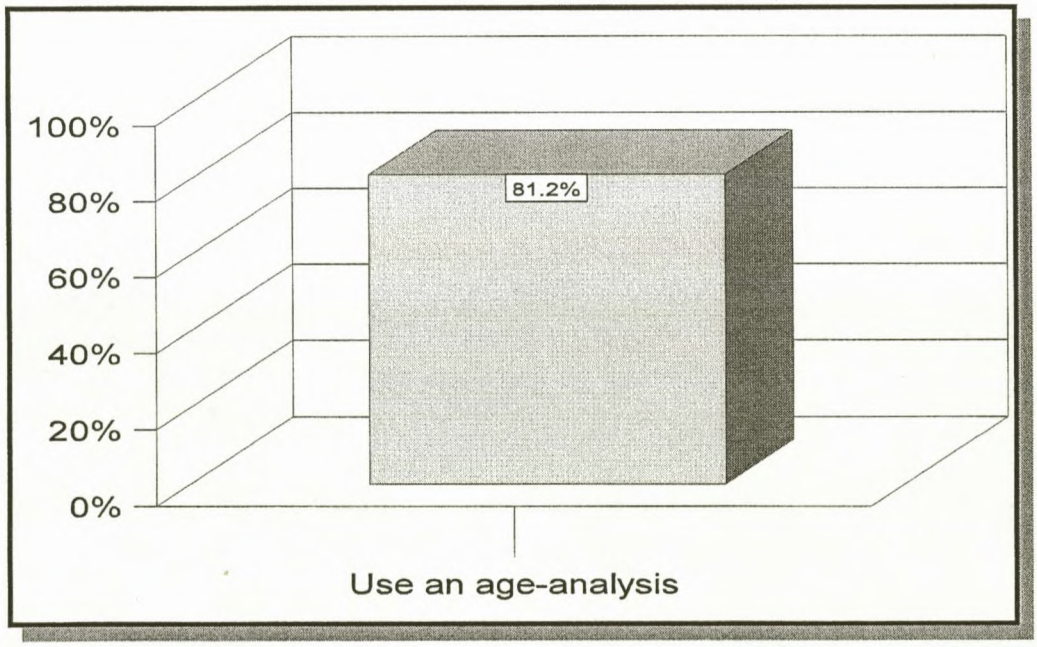
Figure 4-4 shows that an encouragingly high percentage (81,2%) of administrative staff in solo medical practices use an aged analysis to determine the accounts of those patients' which are overdue (X12).

Figure 4-3: IDENTIFICATION OF AN OVERDUE ACCOUNT



Source: Compiled by author from research output.

Figure 4-4: USAGE OF AGED ANALYSIS IN ACCOUNT RETRIEVALS



Source: Compiled by author from research output.

Respondents claiming that reconciliations are completed between accounts submitted to a medical aid society and the remittance advice subsequently received from them (X13), comprised 84 percent of the sample. This means that a relatively small percentage (16 percent) failed to complete such reconciliations.

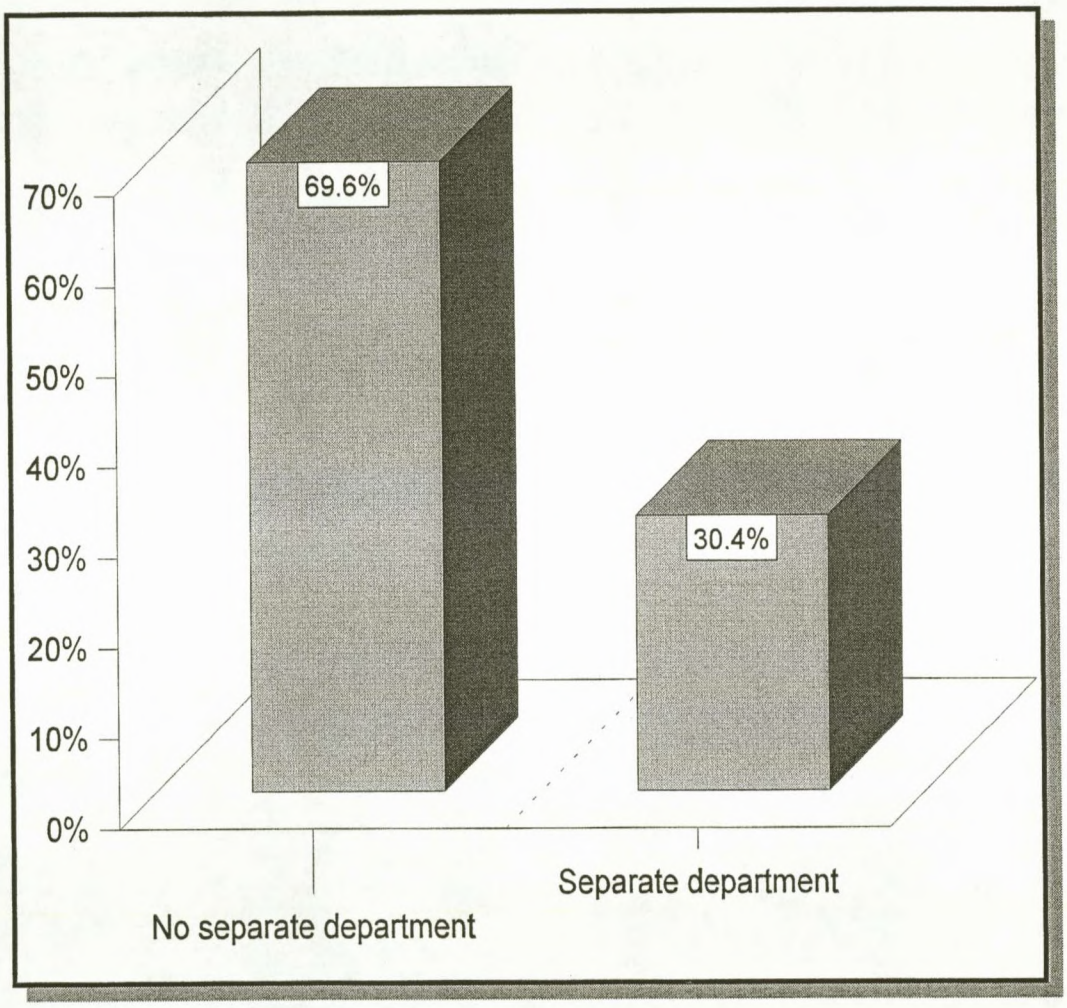
Patients cards are marked by 61 percent of respondents to indicate that the account is overdue (X18). The procedure is not followed in 39 percent of the cases.

4.2.6 Separate department for debtors

A relatively large percentage (69,6 percent) of sole medical practices do not have a separate department handling debtors (X8). Figure 4-5 shows that only 30,4 percent treat the debtor's department as a separate function within the administration of the practice.

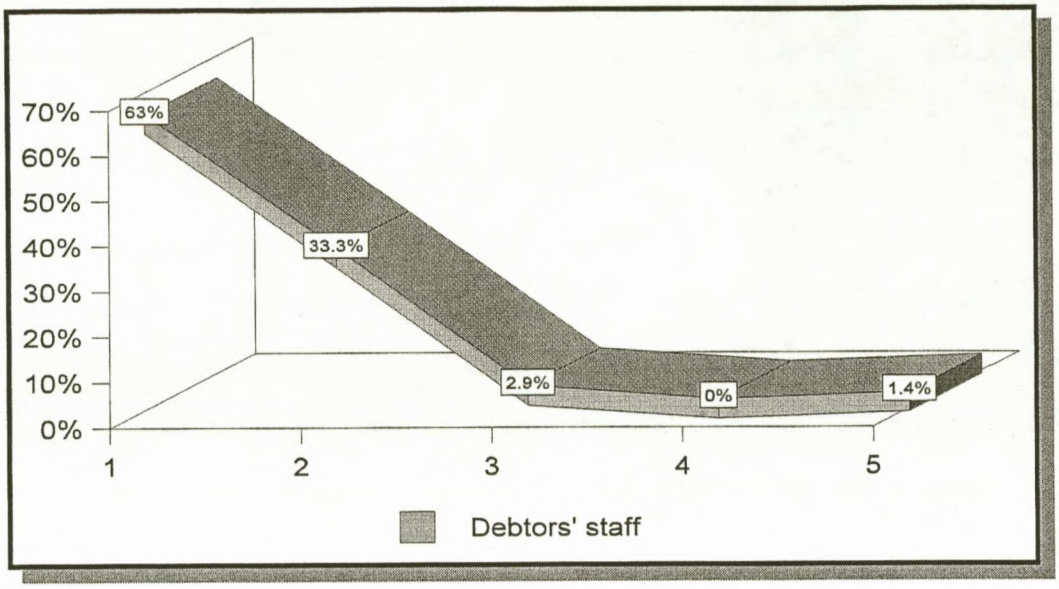
The number of administrative staff employed in managing debtors ranges from one to five. Most respondents (63 percent) have one administrative staff member involved in managing debtors, while figure 4-6 shows that only 1,4 percent have five staff members performing such duties. In addition, a significant percentage (71 percent) of respondents' staff perform both the duties of receptionist and administrative clerk (X10).

Figure 4-5: SEPARATE DEBTOR'S DEPARTMENT IN SOLE MEDICAL PRACTICES



Source: Compiled by author from research output.

Figure 4-6: ADMINISTRATIVE STAFF INVOLVED IN DEBTOR'S COLLECTION DUTIES

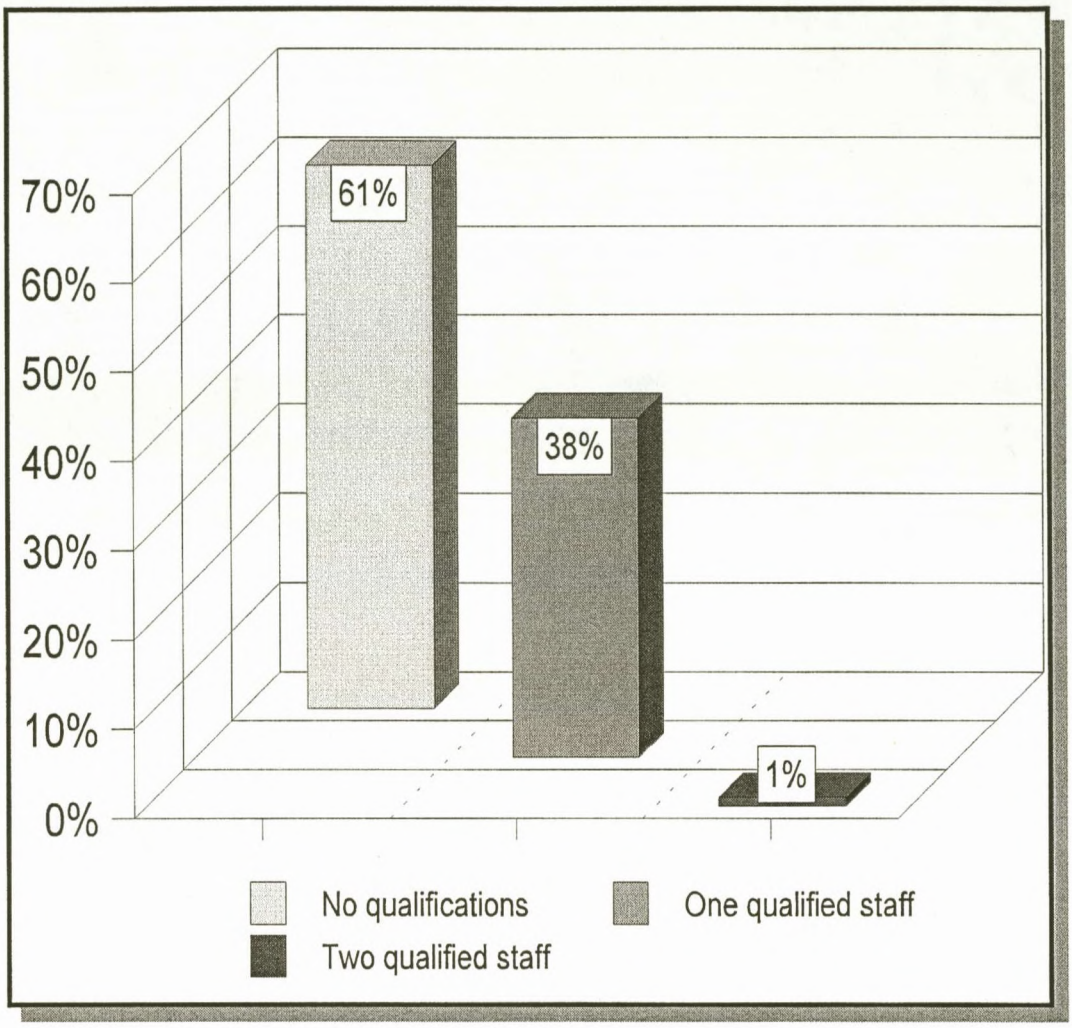


Source: Compiled by author from research output.

Practitioners claiming that they have completed at least one appraisal of the debtor's department within their practice, constitute 49 percent of respondents (X16).

An alarming number (61 percent) of sole medical practitioners do not have any formally qualified administrative staff managing the collection of debts (X20). Figure 4-7 shows that a relatively small percentage (38 percent) claim to have one staff member with some qualifications, while only one percent have two staff members with the requisite qualifications. None of the sole medical practices have more than two commercially qualified members of staff.

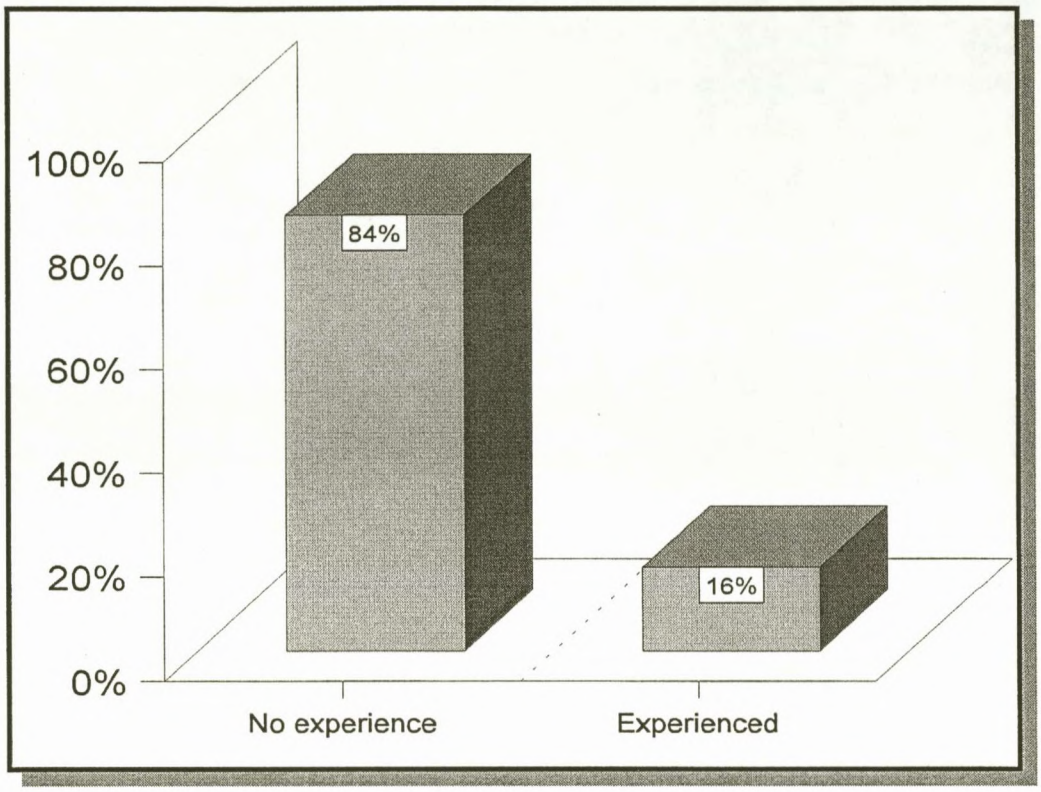
Figure: 4-7: STAFF WITH FORMAL QUALIFICATIONS



Source: Compiled by author from research output.

Figure 4-8 reveals that the majority (84 percent) of respondents indicated that their debtors' collection clerks do not have any experience in financial management (X22).

Figure 4-8: EXPERIENCE OF STAFF IN FINANCIAL MANAGEMENT



Source: Compiled by author from research output.

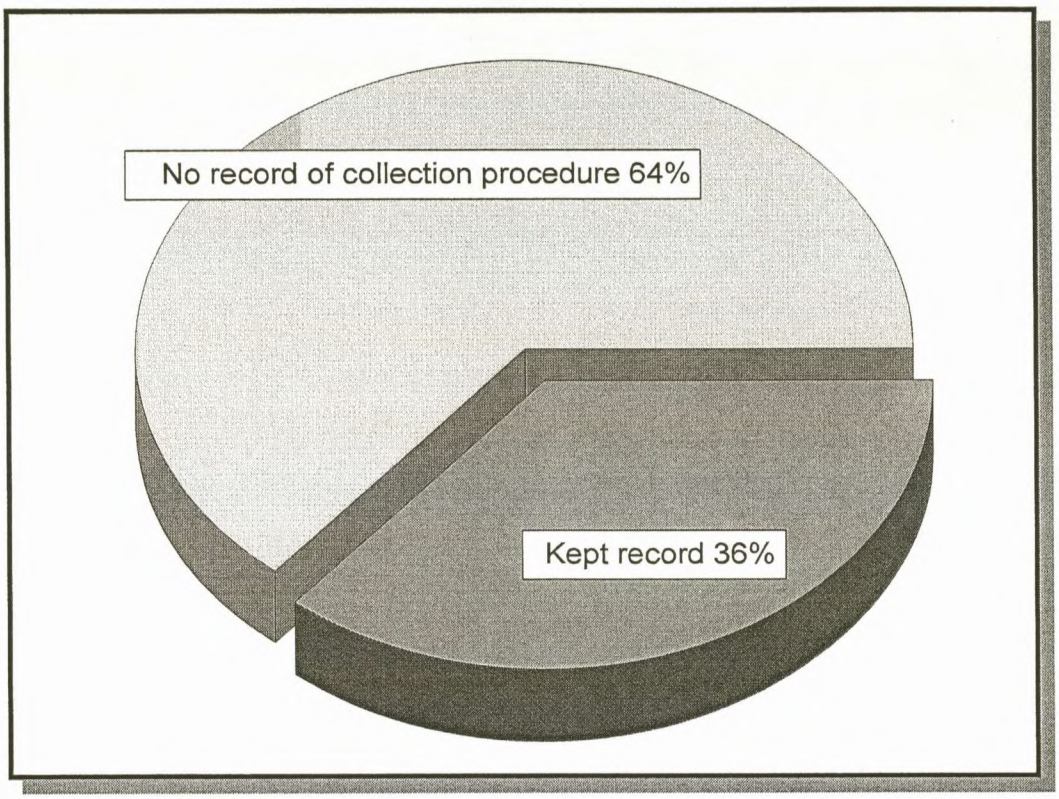
4.2.7 Procedures for collecting debts

Prior planning for the collection of overdue debtors is done by only 49 percent of practitioners (X14) leaving the majority with no planning at all.

A sequential procedure for the collection of debts is followed correctly by 17,4 percent of respondents (X15). The majority of respondents (51 percent) do not follow any procedure in the collection process.

A record is kept for each step of the collection procedure followed (X19) in 36 percent of the cases, while, figure 4-9 reflects that the majority of respondents (64 percent) indicate that no such records are kept.

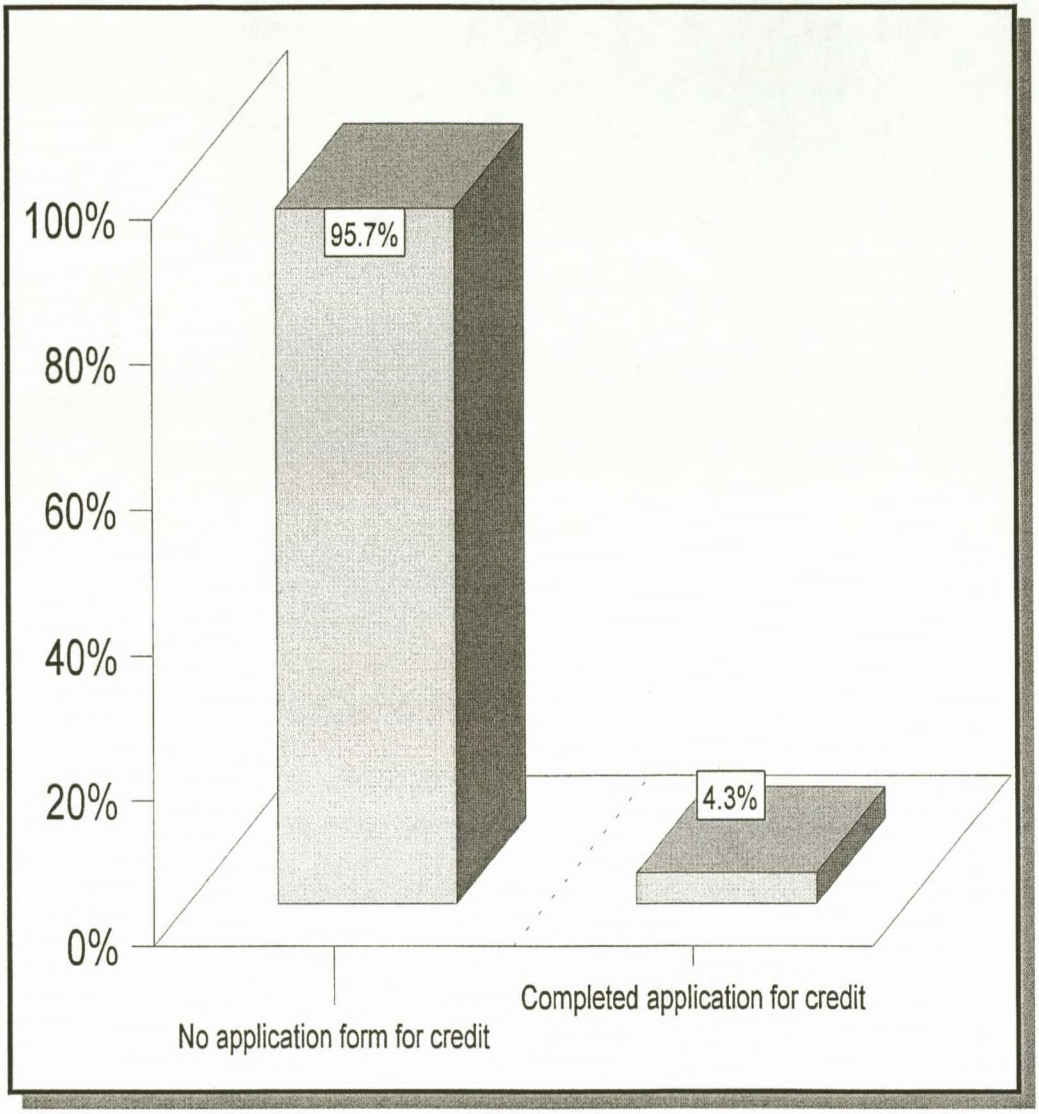
Figure 4-9: RECORD OF COLLECTION PROCEDURES FOLLOWED



Source: compiled by author from research output.

As indicated in figure 4-10, a surprisingly high percentage (95,7 percent) of respondents do not request patients on medical aid to complete an application form for credit, leaving only 4,3 percent who request that such forms be completed.

Figure 4-10: APPLICATION FOR CREDIT

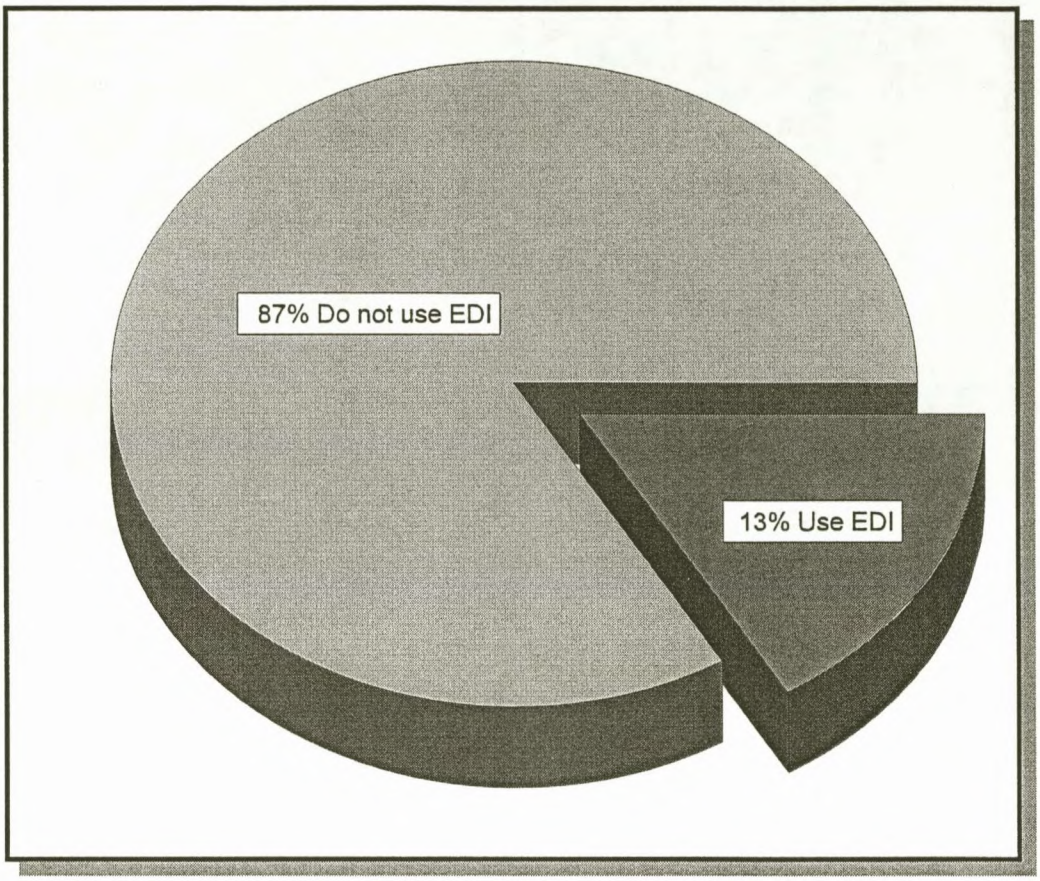


Source: Compiled by author from research output.

4.2.8 The use of computer applications

The use of electronic data interchange (EDI) for the transmission of accounts receivable to medical aid societies is very low (X3). Figure 4-11 indicates that only 13 percent of respondents use EDI, while 87 percent do not use this facility, supplied by medical aid societies.

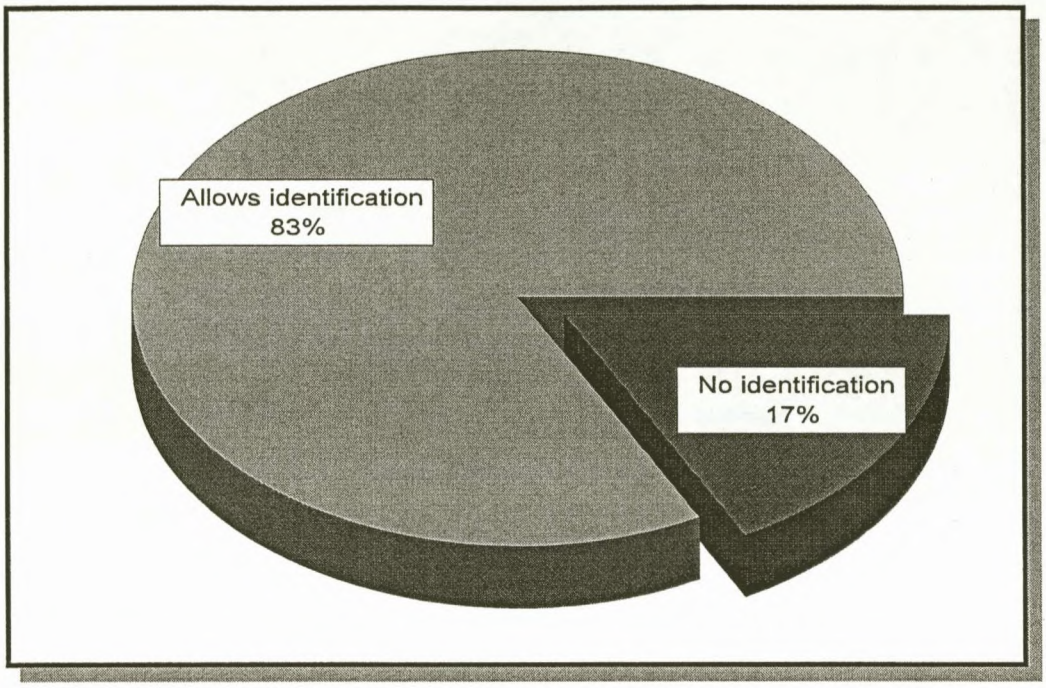
Figure 4-11: USE OF ELECTRONIC DATA INTERCHANGE



Source: Compiled by author from research output.

It is interesting to note that 83 percent of solo medical practices have computer software systems that allow for the automatic identification of overdue accounts receivable (X21). Figure 4-12 indicates that only 17 percent claim that their software systems do not allow for the identification of overdue debtors.

Figure 4-12: COMPUTER SOFTWARE'S ABILITY TO IDENTIFY OVERDUE DEBTORS



Source: Compiled by author from research output.

4.3 CORRELATION MATRIX

The results of the correlation matrix applied are shown in table 4-4. Only those questions that have relationships stronger than 0,40 = 40 percent have been shown in the table.

4.4 RESULTS FROM BEST ESTIMATED ANALYSIS OF VARIANCE (ANOVA)

The calculated ANOVA table (4-5) shows that the p-values range from 0.933 to 0.010. However, two factors, namely, the number of days patients take to settle their accounts (X6) and the qualifications and experience of staff, have p-values lower than 0.05. This shows that these two factors are more important than the remaining 23 questions, with respect to the loss

incurred by the practitioner. It also proves that the hypothesis initially developed in paragraph 1.1.5 is correct.

4.5 DIAGNOSTICS

In this study, the value of R-square is only 54 percent or 0.54. The low value of R-square may be attributed to the small sample size of the study and the fact that 23 of the 24 explanatory variables are categorical. Despite this, however, the following diagnostic procedures show that the estimated model is still valid and reliable.

(i) Histogram plots

The histogram plot (figure 4-13) reflects that the plot is fairly "bell-shaped", resulting in the estimated model being accepted as valid.

(ii) P-plot

Figure 4-14 shows that the P-plot is fairly "S"-shaped. This further proves that the estimated model is valid.

Table 4-4: RELATIONSHIPS BETWEEN QUESTIONS GREATER THAN 0.40

	y	x1	x7	x8	x9	x12	x14	x16	x19	x20	x22	x24
y	1.000	0.498										
x1	0.498	1.000			0.488							0.678
x5			0.407									
x7			1.000			0.452			0.446			
x8				1.000			0.400			(0.431)	0.400	
x11								0.417				
x12			0.452			1.000		0.489	0.408			
x14				0.400			1.000	0.536				
x16						0.489	0.536	1.000	0.524			
x19			0.446			0.408		0.524	1.000			
x20										1.000	(0.533)	
x22				0.400						(0.533)	1.000	
x24		0.678										1.000

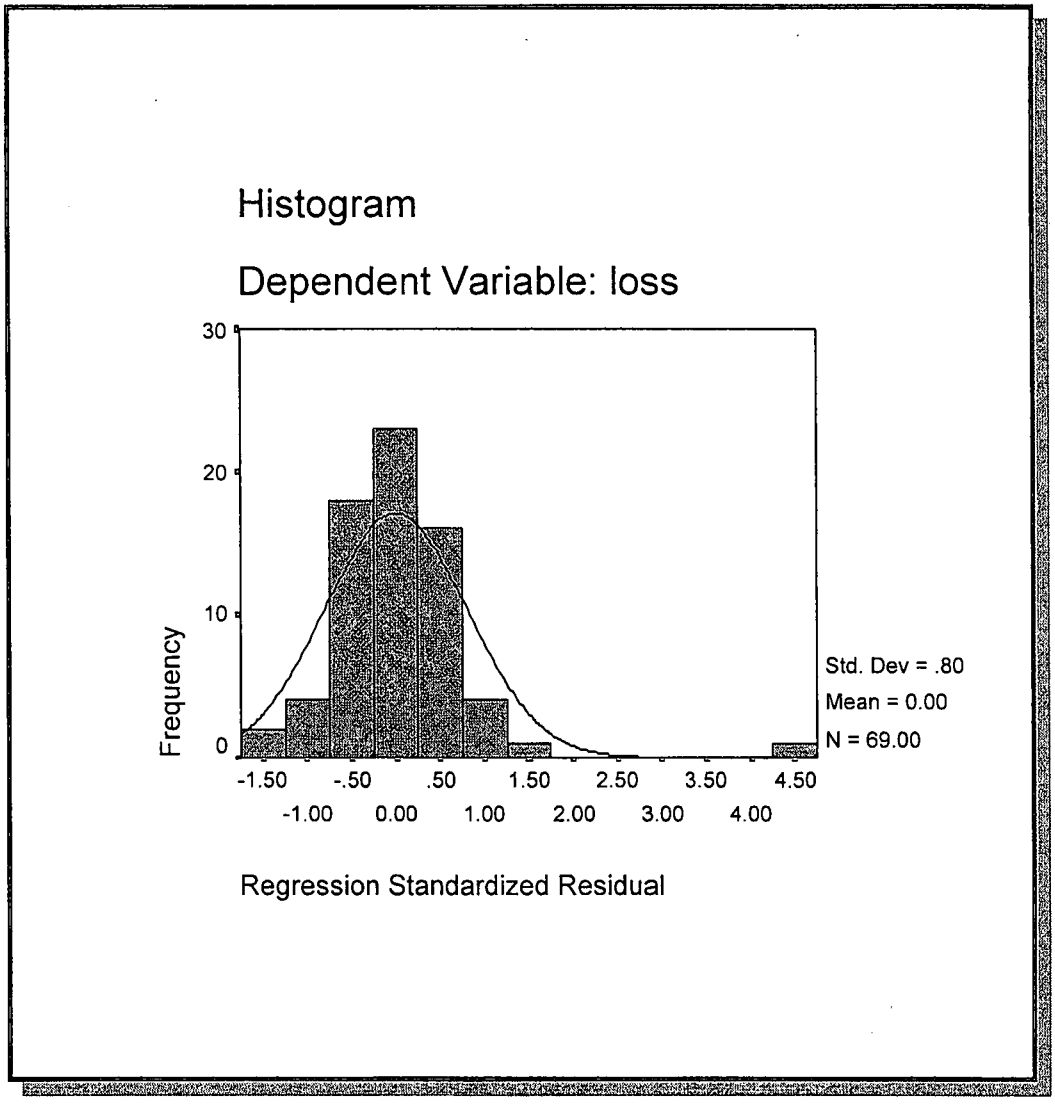
Source: Compiled by author from research output.

Table 4-5: BEST ESTIMATED ANOVA TABLE

VARIABLE	P - value
Constant	0.139
x1	0.274
x2	0.933
x3	0.905
x4	0.545
x5	0.074
x6	0.010
x7	0.792
x8	0.260
x9	0.655
x10	0.672
x11	0.894
x12	0.894
x13	0.814
x14	0.950
x15	0.115
x16	0.308
x17	0.397
x18	0.263
x19	0.107
x20	0.045
x21	0.310
x22	0.078
x23	0.456
x24	0.070

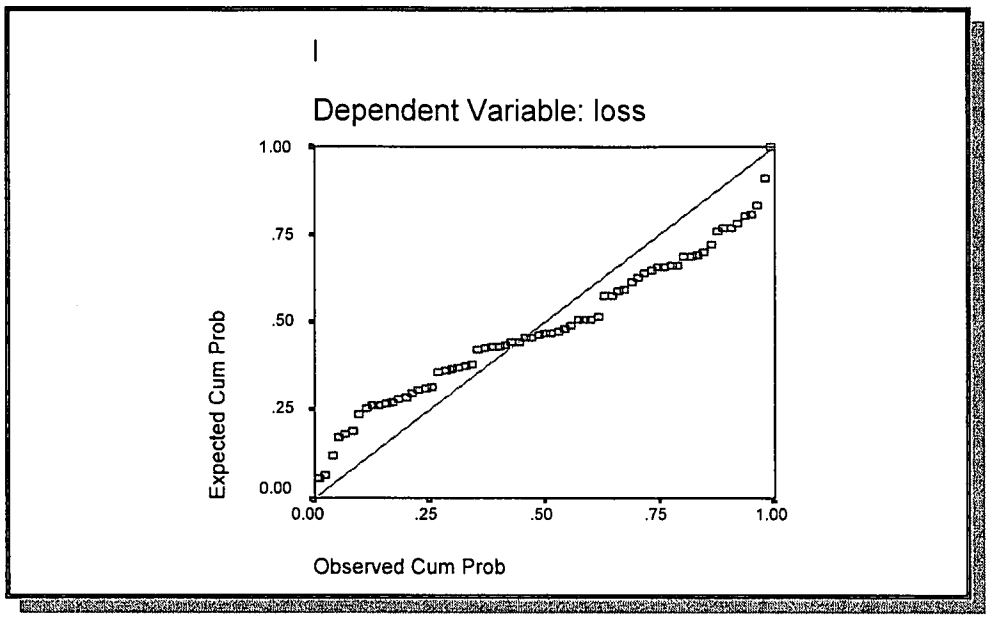
Source: Compiled by author from research output.

Figure 4-13: HISTOGRAM PLOT



Source: compiled by author from research output.

Figure 4-14: P-PLOT REGRESSION



Source: Compiled by author from research output.

(iii) **Cook's distance**

Table 4-6 shows that the average Cook's distance is only 0.03. Cook's distance is a measure of the deviation from the centre of distribution. The average centred leverage value is only 0.130. This indicates that all respondents in the study have similar characteristics and therefore makes the study valid.

(iv) **The Durbin-Watson Statistic**

The Durbin-Watson statistic is a measure of serial correlation. The Durbin-Watson statistic in this study is 1.937, which is not large. This shows that there is no serial correlation between the variables X1 to X24 (Drapper *et al* 1998), thus making the regression analysis valid.

Table 4-6: Cook's Distances

	Minimum	Maximum	Mean	Std. Deviation	N
Cook's Distance	.000	.921	.030	.114	69
Centered Leverage Value	.160	.614	.348	.103	69

Source: Compiled by author from research output.

4.6 SUMMARY

The frequencies and percentages display interesting results. There is strong correlation between the losses incurred as a result of bad debts and the various questions. The validity and reliability of the questionnaire has been confirmed by the regression analysis model used in the study.

The research has indicated that the single most dominant factor in the cause of bad debts is the number of days that a debtor takes to settle his account. The ANOVA table referred to in 4.4 proves this argument in the case of sole medical practitioners. These results are analysed in chapter five.

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CHAPTER FIVE

INTERPRETATION OF THE EMPIRICAL FINDINGS

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5.1 INTRODUCTION

An analysis of the data obtained through the survey showed surprising results. It was found that the results of the data are contrary to the established principles needed in the management of debtors identified in chapter two. It was revealed that effective management of accounts receivable is almost non-existent in medical practices in the survey area. The study also showed that there is inadequate and poorly applied collection procedures for retrieving outstanding accounts.

The reasons for this inadequate application of debt collection techniques seem to emanate from a lack of understanding on the part of practitioners, of the impact it has on cash flows. These poor collection techniques lead to lengthy debt collection periods, which in turn create the need for raising bridging finance.

The poor collection strategies is one of the main reasons for increasing overdraft facilities on current accounts. Other reasons revealed by the study are the following:

- credit terms are increasing

- under-qualified staff are employed in collection activities
- collection procedures are poorly planned
- no collection procedures are executed when accounts are identified as overdue and
- in some cases no attempt at all, is made to recover outstanding accounts.

It thus seems clear that the elements of risk, time and cost of finance have been disregarded by practitioners when granting credit to patients.

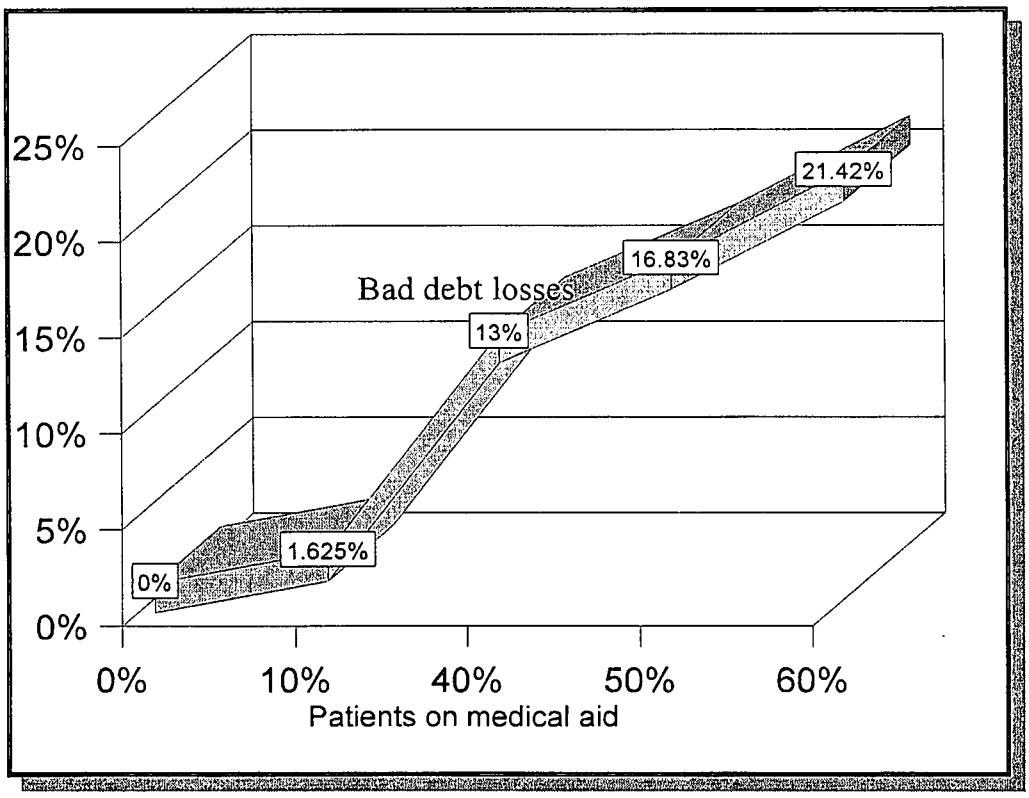
This chapter illustrates that general management of accounts receivable in sole private medical practices in the survey area is on an ad-hoc basis. The detrimental effect of employing under-qualified staff and the consequences this has on collections and cash flows is highlighted. The hidden cost of financing debtors is calculated and the impact this has on the cost of medical care established.

5.2 REASONS FOR POOR COLLECTIONS OF OUTSTANDING ACCOUNTS

The research reveals that the average annual loss (Y) incurred as a consequence of bad debts amounts to R42 934. As the majority (65 percent) of practitioners show turnovers between R20 000 and R60 000, this loss represents at least one month's turnover.

By using the data obtained from the average loss (Y) and the percentage of patients on medical aid (X2), it was found that the increase in medical aid patients results in an increase in bad debt losses. Where a greater number of patients are not on medical aid but debtors of the sole medical practitioner, the bad debt losses are less than one percent of annual turnover (figure 5-1). There is therefore a convincing correlation between the level of bad debts and the number of registered medical aid patients seen.

Figure 5-1: MEDICAL AID PATIENTS AND BAD DEBT LOSSES



Source: Compiled by author from research output.

However, medical aid societies guarantee payment to a "contracted in" medical practitioner, on condition that the member has sufficient benefits available and that claims for payment are correctly completed (Bauer 1998). It follows therefore that such high levels of bad debts must have additional causes. The analysed data confirms this conclusion. In addition, serious deficiencies in the management of accounts receivable are also revealed by the study. Further analysis reveals that basic accounts receivable management is seriously lacking and in particular with respect to the following:

- absence of credit application procedures (X17)
- unacceptable extensions of debtors collection periods (X4 and X6)
- inadequate use of information once overdue accounts are identified
- absence of a strategic plan for the collection of overdue accounts
- use of inexperienced and under-qualified staff
- non-existence of a separate debt collection department
- inadequate use of electronic data interchange (EDI)

5.2.1 The non-existence of credit application forms (X17)

In any request for credit, a formal application should be compulsory (Cole 1998). This is so because the information required on the application form enables the practitioner or

administrative clerk to pursue a debtor when it is deemed necessary. It is for instance, a common practice among grantors of short term credit, to obtain a contactable telephone number of the prospective debtor and to verify the place of residence of such a person (Mills 1986).

In the absence of an appropriate and formal application for credit, it is impossible to implement collection procedures. Nonetheless, the data shows that an extraordinarily large percentage (95,7 percent) of respondents do not require their patients to complete an application for credit.

The ad-hoc study conducted during October 1999, found that information regarding patients' personal particulars have not been updated for a period of five years in nine of the ten members surveyed. It may thus be concluded that patient information for the purposes of credit approval is not accorded any priority. Consequently, poor credit decisions are often made on outdated information.

5.2.2 Unacceptable debtor's collection periods

The level of bad debts has a direct relationship to the length of time taken to collect a given debt (Kritzinger 1997). It is also true that the longer a debt is outstanding, the more difficult it becomes to collect (Koen *et al* 1994). However,

responses to the questionnaire reveal that sole medical practitioners do not take cognisance of this fact.

A large proportion of respondents (37,7 percent) believe that a debt would only be overdue if it is outstanding for 120 days. This is indeed contrary to the views held by several researchers about when accounts become overdue in service industries (chapter 2).

According to Mills (1986:57) consumers have the remarkable ability to delay payment by a further 100 days after the debt becomes overdue. This means that patients take approximately 220 days to settle their accounts, that is, 120 days offered by the practitioner and a further 100 days taken by the patient. This is confirmed by the research (X6) which shows that a large percentage of patients (39.1 percent) take more than 180 days to settle their accounts. The implications, therefore, is that if debtors only pay their accounts after 180 days, the practitioner needs to find cash in order to finance the day-to-day operations of the practice.

Having such long debtors collection periods has negative effects on the cash flow and profitability of the business (Koen *et al* 1994). In fact, profits from credit sales may easily be changed into a loss if the credit period is extended by as little as 30 days (Kritzinger 1998). The delay in

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collecting accounts receivable by increasing debt collection periods, has a negative effect on profitability in the majority of solo medical practices.

5.2.3 The inadequate use of information on overdue accounts

Mills (1986:175) believes that several different inefficient manual methods were used for the identification of delinquent debtors prior to the advent of computers. In the present computerised environment there are software systems which are specifically designed for the management of debtors in medical practices. These software systems provide a wide range of facilities. One of the most important of these, is the feature that provides an analysis of accounts receivable according to the number of days that the accounts are outstanding. The feature is commonly referred to as the aged analysis.

The computerised software systems for the management of accounts receivable used by most members of the Family Practitioners Association is "Multi-doc" (Bux 1998), which has an aged analysis feature. The study shows that 82 percent of respondents do indeed have the "aged analysis" feature, while 81 percent claimed to use it regularly in their practices. In addition 91 percent of respondents claim that they do identify the delinquent accounts. Armed with this information it would be expected therefore, that some form of collection procedures be instituted against debtors who have been identified as

overdue. Outstanding debts can be collected within the first 30 days after identification, that is, collections should be completed within 60 days from the time of service. However, the research shows that a significant percentage of patients' accounts are only settled after 210 days. This leads to the conclusion that accounts receivable staff, perhaps, do not know the purpose of an aged analysis, have no knowledge of how it may be used to improve collections or they do not have any procedures required to be followed, once delinquents account are identified.

5.2.4 Inadequate use of reconciliations for follow-up (X13)

Patients accounts are submitted by medical practitioners to a medical aid society in a batch (Maharaj 1998). The number of claims for each batch varies between 80 and 200. Each account is scrutinised by the society concerned for correctness and then paid in a lump sum to the practitioner. A reconciliation statement is supplied by the society reflecting the patient's name, medical aid number, the fee claimed, the amount of the payment and reasons, if any, for non-payment.

The normal business procedure to be applied once this statement is received, is to complete a reconciliation between the accounts submitted by the practitioner and payments received from the medical aid society. The purpose of this comparison is to pick-out those accounts which have not been paid as well as

accounts which have been paid in full. If such a comparison is not completed, debtors records indicating unpaid accounts are incomplete. If there is no follow-up from this point onwards, it is likely that unpaid accounts will remain concealed, with the risk of being written-off as bad debts later.

The analysed data shows that a high percentage of respondents (84 percent) do indeed complete such a comparison. Despite this, earlier collections of outstanding accounts do not occur. There seems to be many reasons for such a failure. One of these could perhaps be inadequate planning when attempting to collect from delinquent accounts.

5.2.5 The absence of strategic plans for collections

Hedges (1989) identified the collection procedures required to be followed in strict sequence, when attempting to collect delinquent accounts receivable. Kritzinger (1998) also pointed out the necessity for a meticulous record of such collection procedures, applied when collecting delinquent accounts. However, the analysed data shows that almost 51 percent of practitioners do not follow any set procedure or sequence in the collection of overdue accounts (X14) nor do they plan for such collections. It is evident that most follow an ad-hoc system of collection procedures. Where correct sequences were applied, a large percentage (36,2 percent) fail to keep any record of the collection procedures applied. This lack of a

record, citing the progressive pressures applied for payment, could be one reason for the ad-hoc nature of collection procedures pursued by many practitioners.

It is evident from the data collected that many practitioners seem to use collection agencies and attorneys (X15) when an account becomes overdue, without having made a concerted effort in the first place to collect the debt themselves. This type of out-sourcing may not be beneficial to the medical practitioner. It shifts responsibility for pursuing delinquent accounts from the administration staff to the debt collecting agencies (Bux 1998). Furthermore, the cost of such out-sourcing may be extremely high.

In fact, Mackenjee (1999) found that an attorney's collection costs from overdue debtors of R54 000 was R15 000. It was found that the costs of letters, serving of summons and postage for small accounts could exceed R50 per debtor. A debtors book of R54 000, at an average of R145 per consultation with medicines, will contain 830 individual debtors. At a cost of R50 per debtor, this amounts to collection costs of R41 500. From this, it is obvious that the use of a collection agency for accounts below R150, would not be beneficial to the medical practitioner.

One of the first steps that should be applied to speed up collections, is to use the electronic media for the transmission of invoices to medical aid societies.

5.2.6 Inadequate use of electronic medium (X3)

The study shows that a vast majority of practitioners (87 percent) do not use the electronic data interchange (EDI) system. Nevertheless, research indicates that EDI leads to greater accuracy, saves time and is cost effective (chapter 2).

Aboobaker (1997) is of the opinion that the use of EDI is too burdensome, the system rejects too many claims and it therefore takes too long for payments to be received from medical aid societies.

Gaffoor (1997) on the other hand, found EDI highly successful in his practice. In fact, he claims that payments from medical aid societies were received within four working days of the accounts being transmitted on the EDI system. This provided his administrative staff with an opportunity to identify delinquent debtors quickly. Collection procedures, could thereafter, be implemented immediately.

These conflicting results seem to emanate from the fact that Aboobaker's (1997) staff were not trained on the EDI system,

while Gaffoor's (1997) staff did indeed have some training on the system.

The results of the questionnaire did indeed show that a majority of staff in medical practices are inexperienced or untrained.

5.2.7 The use of under-qualified staff (X20 and X22)

The study indicates that the number of administrative staff employed by practitioners in relation to turnover, seems reasonable. MLS Bank (1995) indicated that one qualified staff member dedicated to the debtors department is sufficient to manage a credit turnover of R31 000.

Bolinger (1997:45) has indicated that staff are expected to have some form of formal training or qualification. However, this study found that only 16 percent of medical practitioners have staff with experience in financial management. The administration of debtors in the case of the majority of practitioners is severely hampered by this, which is further compounded by the fact that almost 38 percent of practitioner's staff have no formal commercial qualification.

Many respondents indicated on the questionnaire that debtors clerks receive training in financial management from the practitioners themselves. However, the ad-hoc survey conducted

among South African Universities showed that no course in business management is included in the curriculum of medicine. The practitioner would, therefore, only be able to train his staff in the debtors department if he himself has completed an external course in business or financial management.

The lack of trained staff in most sole medical practices seems to have had an adverse effect on the collection policy and curbing of bad debts. For instance, inadequate business knowledge results in a lack of awareness of the need for a separate debtors department.

5.2.8 Absence of a separate debtor's department (X16)

Several authors, for example Mills (1986) and Kritzinger (1997), have emphasised the need for a separate debtors department with its own qualified staff members.

The research shows that most sole medical practitioners who are members of the Family Practitioners Association, have a large percentage (62 percent) of medical aid patients, to whom credit is automatically granted. For instance, if turnover is R50 000 per month and 62 percent of the patients are on medical aid, R31 000 in debtors would result for the month. At an average consultation fee of R65 (RAMS tariff), 476 accounts would thus need to be sent out every month. In such cases it becomes imperative that a separate department, with its own set of

rules, be established to handle debtors (MLS Bank 1995) and collection staff should thus be separated from those engaged in other administrative tasks. Furthermore, most authors recommend (Chapter 2) that an appraisal of the debtors' department be conducted regularly to identify shortcomings and to determine whether present collection practices are appropriate.

A significant percentage of respondents (71 percent) indicate that their administrative staff fulfill several roles within the practice (X10). In such instances, debtors clerks are expected to attend to patients, capture information on debtors, send out accounts to patients and ensure collection of debts. Since this the case in solo medical practices, it is not surprising that a relatively large percentage (70 percent) of respondents do not have a separate department for debtors. It stands to reason, therefore, that an appraisal of the debtors collection department will not be conducted in most medical practices. Indeed, the data shows that almost 50 percent do not conduct any appraisal of their debtors department.

5.3 IMPACT OF POOR COLLECTIONS ON FIXED COSTS

It is clear from collection methods practised that analysis of debtors, the ratio of bad debts to credit sales and the delinquency index are not being reviewed. Poor and outdated collection practices result in insufficient and incomplete information being collected on credit application forms. These

factors lead to increased costs, in the form of interest charges for financing of debtors and resultant increases in the costs of medical care.

5.3.1 The costs of financing debtors

Practitioners who open a new practice seldom have any surplus cash to invest in the business (Aboobaker 1998). Little or no attention is given to the fact that the new business also requires working capital. When financing arrangements are made for practices, consideration is usually only given to the costs of fixtures, fittings and equipment in a private practice (Gove 1998). Furthermore, the only way medical practitioners obtain finance to cover their working capital requirements, is through an overdraft facility. Banks are usually only too willing to supply practitioners with overdraft facilities in excess of R50 000, on condition that they seem to have collectible debtors. This view is confirmed by Bux (1998). However, the study has reveals that in the context of sole medical practitioners, this form of financing is usually quite expensive.

The research data shows that many respondents (29 percent) have turnovers in the range R40 000 to R60 000 per month and that 62 percent of the turnover is in respect of medical aid patients. Thus the average amount granted as credit by sole medical practitioners, amounts to approximately R31 000 per month. This amount then requires financing.

Average turnover = (R40 000 + R60 000) / 2

= R50 000

Average credit per month = R50 000 X 62%

= R31 000

The annualised interest cost implications of financing debtors, developed in paragraph 2.7.2 was applied in the calculation finance costs applicable to R31 000 over 180 days and is shown in table 5-1.

The cost to finance debtors using the overdraft facility, potentially has the ability to unobtrusively increase the overhead costs of a business. Medical practitioners were charged an average rate of 26,5 percent in interest on overdraft facilities during May 1998 (Gove 1998). The annualised interest cost on such an overdraft facility used, to finance this level of debtors for a period of 180 days at the average rate of 26,5 percent amounts to R58 718 (table 5-1 xx).

Table 5-1: COST IMPLICATIONS OF FINANCING DEBTORS

i	Time taken by debtors to pay accounts	180 days
ii	Time taken to sell stock of medicines	30 days
iii	Time taken to pay creditors	30 days
iv	Period of cycle	240 days
v	From the above it can be deduced:	
vi	Period for which funding is required:	
vii	- Debtors	180 days
viii	- Time taken to sell stock of medicines	30 days
ix	Total	210 days
x	Period for which funding is obtained:	
xi	- Creditors	30 days
xii	Therefore period for which bridging finance is required:	210-30 = 180 days
xiii	Effect on need for bridging finance:	
xiv	- Annual turnover	R600 000
xv	- Average debtors (62%)	R372 000
xvi	- Working days per year	302
xvii	- Debtors turnover per day	R1 231
xviii	Need for bridging finance:	
xix	(180 X R1 231)	R221 580
xx	- Annual interest @ 26,5%	R58 718

Source: Adapted from MLS Bank (1995).

5.3.2 Hidden costs of carrying debtors

The financing of debtors does not take the time value of money

(Chapter 2) into consideration. The cost of capital in medical practices could be related to the overdraft rate applied by banks to new business (Gove 1998). With an average rate of 26.5 percent, the value of R31 000 received after six months would thus be reduced by R3 627.

Present value = cash flow X {PVIF of 1/2(26,5%) for 1 period}
= R31 000 X 0,8830
= R27 373

∴ Loss in value of debtors = R31 000 - R27 373
= R3 627 every six months

Thus the total loss in the value of debtors and total interest costs would amount to R65 972 per annum.

Total Loss = annual interest cost + annual reduction in value
= R58 718 + (R3 627 X 2)
= R65 972

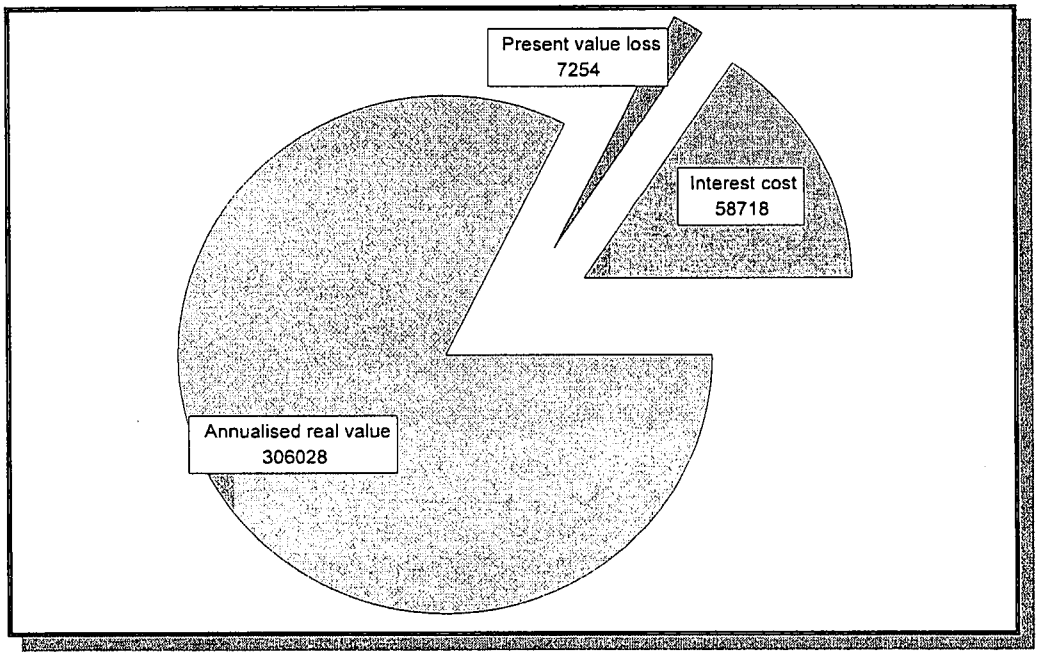
Table 5-1(xv) shows that annualised debtors amount to R372 000. Thus the actual value of payments received from debtors would

amount to:

Actual value = R372 000 - R65 972

= R306 028 (figure 5-2)

Figure 5-2: ANNUALISED REAL VALUE OF MONTHLY DEBTORS OF R31 000 FINANCED FOR 180 DAYS



Source: Compiled by author from research output.

5.3.3 Consequences of lengthy debtors terms

Higher costs, emanating from the financing of debtors, has a negative effect on the cost of medical care. Small medical practices may not be able to sustain these costs. The conclusions drawn by Bux (1998) in respect of overdraft facilities used by sole medical practices, is confirmed by the

calculations in 5.3.2.

The repercussions of hidden costs on sole medical practices translates into an ever increasing need for higher fees to cater for these hidden costs. Apart from hidden costs there is also the loss incurred as a result of bad debts.

It has been established (paragraph 5.2) that one month's turnover is lost to bad debts, annually. These losses to bad debts and the hidden cost elements, act together to increase medical costs.

A sole medical practitioner with a turnover of R600 000 per annum would see approximately 9 230 patients at the RAMS tariff rate of R65 per patient. Of these, 5 722 (62 percent) are medical aid patients who are granted credit. If these patients accounts are paid within 30 days and bad debts losses reduced to zero, the cost savings to medical aid patients amounts to R19,03 per visit to the practitioner. This is an effective reduction of 17,73 percent in the cost of medical care.

$$\text{Cost savings} = (R65\ 972) / 5\ 722$$
$$= R11,53$$

Additional interest costs and lengthy collection periods, therefore lead to a higher cost structure for medical practices

and ultimately to increases in the cost of medical care.

5.4 SUMMARY

It is clear from the observations and analysis that the granting of credit and its implications are not clearly understood by practitioners and their administrative staff. A series of problems exists, including the lack of control in identifying overdue debtors, the number of days that patients take to pay their accounts, the planning and collection of accounts receivable and the completion of credit application forms.

Furthermore, the use of modern technology in the collection of debts has been overlooked by many practitioners. In addition, there is lack of training of administrative staff in the use of computer based systems. Inadequate training and formal education in business management, both on the part of the practitioner and administrative staff pose major challenges to the collection of overdue debts. These factors can contribute to losses which can be excessive if unchecked and may create high levels of bad debts. Finance requirements for extended debtors' collection periods place a great deal of pressure on the cash flow of medical practices. The obvious result from the lack of these controls is the consequential increase in the cost of medical care.

The MASA rate includes these costs in the annual calculations

of tariff increases. The need to implement systems of credit control to control costs is obvious. The introduction of such systems will ultimately reduce the overhead costs to the practitioner, which in turn will reduce the cost of medical care.

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CHAPTER SIX

RECOMMENDATIONS

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RECOMMENDATIONS

6.1 INTRODUCTION

In the light of the results emanating from the research reflected in the preceding chapters, this chapter seeks to provide a paradigm shift from within which credit management should be administered by sole general practitioners in private medical practice.

The recommendations suggest major interventions in the credit management process, underpinned by the following premises:

- That the mind-set of practitioners needs to change. In particular their attitude should reflect a business-like approach to the services they provide.
- That the extension of credit has an element of risk. The task of the practitioner is to provide risk evaluations and confront the challenges provided therefrom.
- That access to credit transactions is an integral component in modern business practice and gaining acceptance by all persons across the economic strata.

Sole medical practitioners need to meet the challenges that these processes provide and create means of overcoming difficulties and problems that may be presented from time to

time. In this instance, therefore, credit control should be a service and not a weapon to be used against patients.

This chapter sets out recommendations for debtors' management, the use of medical debtor listings and the introduction of business management in curriculum for qualifying as a medical doctor.

6.2 RECOMMENDATIONS IN RESPECT OF DEBTOR MANAGEMENT

6.2.1 The creation of an independent debtor's department

The first step in the management of accounts receivable is the separation of the activities of the debtors' department from other administrative tasks in the practice. According to Cole *et al* (1998:19), whenever credit is granted it should automatically lead to the creation of a separate department to manage debtors.

The separation of the debtors department will ensure that staff concentrate on the integral part of improving cash flows through efficient collection methods. It will also eliminate the possibility of overdue accounts not being identified. Thus, staff would be able to identify and pursue delinquent accounts quickly and ensure that correct procedures are followed.

A credit department should, therefore, be highly organised. The staff of the credit department should be involved in:

- ensuring the correct completion of the application

form for credit

- verifying information contained in the application form
- customer relations, including information on credit policy and liaising with debtors
- updating computer records of debtors
- submitting statements to debtors and medical aid societies
- reconciling debtors accounts with payments received
- identifying overdue accounts
- collection of overdue accounts receivable
- determining the procedure to be followed when accounts receivable remain unpaid
- using new methods to encourage payments by debtors.

Implementation of these functions will create a need for the establishment of a well positioned credit policy.

The objective of the credit policy in the debtors' department must be to assist the practitioner in maximising turnover, minimising losses and protecting the investment in accounts receivable. It must provide a framework in which credit procedures can be developed and implemented.

A well written and defined credit policy is the most valuable training aid in the development of credit personnel. It should provide continuity regardless of uncertainties such as personnel changes and other factors.

A suggested credit policy in a sole medical practice may encompass the following:

- In all phases of its activities, the credit department must maintain a positive approach and constructive attitude to foster goodwill and help build customer relationships.
- The credit department will protect and conserve the practitioner's investment in accounts receivable, within the bounds of sound credit accommodation and collection practices.
- Under no circumstances will any patient be denied the right to medical attention until every means of extending credit on a safe, sound and profitable basis has been exhausted.
- The credit department is responsible for collection of all accounts receivable and for generating monthly reports.
- The credit department is responsible for maintaining the shortest possible collection period.
- It is the responsibility of the department to keep bad debt losses to a minimum.

- The credit department shall be responsible for keeping the practitioner fully informed of the investment in accounts receivable through measurements designed to evaluate credit and collection effectiveness.

In addition, the policy will contain information on when an account is considered overdue and the collection policies that need to be followed in such cases.

The credit policy is a broad guideline and is the link between the abstract goals of a practice and the specific directives designed to meet them. One method of ensuring that fixed objectives are met, is to ensure that the credit department is provided with suitably qualified staff.

6.2.2 Recommended criteria for staff selections

The selection of appropriate staff is of crucial importance in the establishment of a separate department for debtors and the establishment of a credit policy. Staff involved in credit control need a variety of skills and should therefore have some form of basic commercial qualification (paragraph 2.3.1).

In the South African Senior Certificate, the subjects Business Economics and Accounting are offered on the higher grade level. In the Accounting curriculum the reconciliations of debtors and

creditors, debtors ledger accounts, bad debts and provisions for bad debts are integrated within the syllabus, while the basic management of accounts receivable is included in the Business Economics curriculum. Staff with these qualifications at Matriculation level would be able to cope with the management of accounts receivable in sole medical practices. Thus the minimum qualification of staff in a debtors department should be a Matriculation certificate, with Accounting and Business Economics.

As the business environment in South Africa is ever-changing, one of the debtors' department staff should be encouraged to attend seminars and workshops. These workshops and seminars, advertised by the medical aid societies and others, offer updates on communication strategy, business practice and collection practices.

Employees should also be encouraged to upgrade their qualifications. There are several business schools that offer the Diploma in Credit Management. In addition, staff should be persuaded to become members of the Institute of Credit Management. This institute has a monthly journal, which assists credit personnel to keep abreast of recent developments. In fact, MASA and the FPA are advised to investigate the possibility of negotiating with the Institute of Credit Management to introduce a diploma specifically catering for

debtors staff in sole medical practices. Two of the major components of this course should be computer literacy and collection techniques in consumer credit.

The basic criteria in staff selection should therefore be:

- minimum qualification: Matric with Accounting and Business Economics
- computer literacy
- attitude and character
- general knowledge of business
- experience in the field of credit control and
- knowledge of the EDI system

These criteria will ensure that staff are adequately equipped to administer accounts receivable.

6.2.3 Suggested format for credit applications

6.2.3.1 Use of a credit application form

A credit application form is the primary source of information on a debtor. It should contain details that would equip the collection clerk with sufficient information to trace a debtor.

Thus details on aspects such as, personal, occupational, bank

accounts and trade references need to be collected. An example of an application form for credit is shown in appendix C.

(a) Personal information

It is essential that the practitioner know to whom the credit is granted. The patient and the member of the medical aid society may not be the same. As a result, it is mandatory that the membership of the debtor and the dependent be established. This could be achieved by obtaining a photocopy of the member's medical aid card. Furthermore, this procedure will also assist in preventing fraudulent use of medical aid cards by non-members. Other details in respect of personal information are reflected appendix B.

(b) Information concerning occupation

This information refers to the person's work history. It includes, among others, the name, address and telephone number of the applicant's present employer, how long the person has been employed in the post and the nature of the post (Kritzinger 1998:148).

Information about the person's salary is important. The income of the applicant is an indication of the maximum credit limit that could be allowed.

(c) Information relating to bank accounts

In addition to information about bank accounts, it is necessary to establish whether the debtor holds a valid credit card. Debtors who hold valid credit cards should be encouraged to settle their outstanding accounts by credit card.

(d) Trade reference information

Here information is collected about accounts that a person has with other enterprises, such as clothing or pharmacy accounts. The debtor's clerk may then contact these references for more information about the person and the way in which he or she manages the account.

6.2.3.2 Educating debtors on credit terms

The medical practitioner deals with consumer credit. However, the service that he provides is not a tangible item and is usually of relatively low monetary value. It is thus necessary for the application form to clearly indicate the terms of payment, i.e. that the account is payable within 30 days and that the patient remains responsible for payment if the medical aid society refuses payment for any reason whatsoever.

6.2.4 Maximising the use of EDI

Medical aid societies have recently introduced the "electronic data interchange" (EDI) system (Maharaj 1998). This system uses a computer modem and telephone lines that allow for the

electronic transfer of information from the medical practitioner's computer, to that of the medical aid society (paragraph 2.3.5). Practitioners' accounts are thus received by the medical aid society within an hour of its transmission. The society then processes the accounts submitted (Maharaj 1998). Once the accounts have been processed, the payment due is transmitted to the practitioner's bank account electronically. The system ensures that the time lag from the moment the patient is seen, to the date payment is received, is considerably reduced.

Medscheme, one of the largest medical aid scheme administrators, claim that accounts received by them through the EDI system take an average of five working days to complete and return to the medical practitioner (Maharaj 1998). They further point out that monies due to the practitioner are also transferred within the same time period. They argue that the EDI system has several advantages for medical practitioners:

- costs are reduced considerably
- medical aid patients accounts are received quickly and timeously
- payments are made much earlier
- accounts can be sent to the administrators every day and not only once a month
- reconciliations can be done quickly

- unpaid accounts are detected early and follow-up procedures can be implemented within two weeks
- the system is cost effective

Maharaj (1998) also indicated that free training in the EDI system was provided by medical aid societies to debt collection clerks in medical practices.

It is therefore imperative that the EDI system be used for the transmission of accounts receivable to medical aid societies. This will ensure that payments are received quickly and unpaid accounts are followed-up immediately.

6.2.5 Reconciliation of debtors' accounts

Payments received from medical aid societies should be reconciled with accounts that were submitted. Payments should be captured immediately on the computerised account of the relevant patient. The account should then be printed to ascertain whether the amount claimed from the medical aid society was in fact paid in full. If the account was unpaid or under-paid, the reasons thereof must be investigated by the debtors clerk.

If it is established that the medical aid society will not accept responsibility for the payment, immediate measures (reflected in paragraph 6.2) should be put into place to collect the debt from the patient.

6.2.6 COLLECTION PROCEDURES

A clear set of policies and guidelines must be available to debtors clerks. These policies and guideline should:

- be easy to understand
- be easy to apply
- be effective
- result in rapid action

6.2.6.1 Usage of an aged analysis

Any business enterprise must have an effective system of identifying overdue accounts (Kritzinger 1998 : 235). It is an established fact that the aged analysis is the most commonly used method to identify overdue accounts in business. It is indeed true that many practitioners do print or have at their disposal such an analysis. However, they do not understand its purpose.

The purpose of the aged analysis is to identify outstanding accounts both individually and collectively. It clearly indicates which debtors accounts are outstanding and also

reflects the period for which it is outstanding, for example 30, 60 or 90 days. This information is then used to determine what collection procedures need to be applied to each of the debtors identified as overdue. This is the first step in the collection procedure of accounts receivable.

6.2.6.2 Procedures to be followed in collection

Once an overdue account has been identified the following procedures are recommended:

- Repeat statement together with first letter requesting payment as reflected in appendix D.
- If the account has remained unpaid after 14 days, telephone the debtor and ascertain when payment will be made. This information must be noted on the patient card.
- If after another five days payment has not been received, a standard letter (appendix E) of demand on blue paper, should be sent.
- If the amount is still unpaid and if it exceeds R200 the debtor should be handed over to a debt collection agency.

It is imperative that the same letter, eg letter no. 1, is never sent to a debtor more than once. Therefore, it is essential that each procedure undertaken be recorded on a

collection record card (appendix F) as well as the patient's card. This procedure must be applied consistently to all debtors for it to be effective.

As the effectiveness of the collection procedure has a direct influence on the practitioner's cash flow position, it is necessary to evaluate the collection procedure. It is recommended that the collection procedure be evaluated in the following manner:

- Compare the actual amount collected with the objectives set at the beginning of the collection period (for example, that 60 percent of the accounts must be collected within 30 days)
- Analyse the age analysis of debtors. Ascertain whether the picture with regards to outstanding debtors has changed? Are there fewer debtors who have been in arrears for more than 60 days?
- Determine the turnover rate of debtors. Is there an improvement in the turnover rate. How do these figures compare with the previous year?
- Determine the collection costs for every R1 000 of outstanding debt collected.
- Determine the percentage of debtors in arrears who pay the outstanding amount after receiving the first collection letter.

- How good are the results of every particular means of collection, and which method produces the best results?
- What percentage of debtors in arrears are written off as bad?

The above investigations should be completed every two months. In doing so, the costs of collection may be determined and the most effective methods of collection identified.

6.3 OPTIMAL USE OF DELINQUENT MEDICAL DEBTOR LISTINGS

A recent development in the field of encouraging delinquent medical debtors to settle their overdue accounts is an organisation called Medical Credit Watch. This organisation provides a data base of delinquent accounts within the medical field only. Membership to the organisation costs from R40 per month (Gordon 1996).

Medical Credit Watch claims that it has achieved collections of more than R40 000 in a single practice, with no legal costs and no collection charges (Gordon 1996:113). The organisation provides the following services:

- countrywide computerised database which maintains a listing of credit risk patients
- delinquent accounts are listed on the database once a member informs Medical Credit Watch of such delinquency

- a personalised official letter is sent to each listed debtor, informing him/her that they have been listed as a credit risk. The letter contains the following details:
  - amount owed
  - relevant payment details
  - the fact that the listing is available to all Medical Credit Watch members countrywide and across the health care spectrum
  - delisting from the data will only occur once the account has been settled

Letters that are sent by an independent organisation create a powerful incentive for patients to pay their accounts promptly in order to maintain their creditworthiness.

It is therefore recommended that the FPA negotiate a special arrangement with Medical Credit Watch, possibly at a reduced rate, for membership of the organisation.

6.4 INTRODUCING FINANCIAL MANAGEMENT AS A COURSE IN MEDICINE

Research has found that in the curriculum of South African Medical degrees there does not exist a course in business management.

Practitioners who venture into private practice have no knowledge of the requirements for satisfactory business management. They also cannot, in the early stages, afford the salary expense that would be incurred if a qualified bookkeeper or accountant is employed. Poor financial management thus results. The cycle of poor management eventually leads to relatively large overheads in the form of interest costs. This has a negative effect on the eventual cost of medical care (paragraph 5.3)

Should practitioners choose to remain as employees in hospital practices, many would obviously aspire to higher positions. In these positions, practitioners would require some financial knowledge as they would be in control of relatively large budgets. Undertaking such a course would benefit the medical profession at large.

There is therefore a compelling argument in favour of including a semester course in business or financial management within the curriculum of medical degrees. It is recommended that such a course should include the following topics:

- Basic accounting and financial statements
- Analysis of financial statements
- Small business management practices
- Cash budgeting
- Capital requirements and sources of finance

- Credit extension and debt collection in small businesses
- Break-even analysis

These topics would give the prospective sole practitioners some insight into how a practice is to be managed, the implications of fixed and interest costs and the control of expenditure within the practice. It would also provide information on the sources of finance and the need to maintain an adequate cash flow.

6.5 SUMMARY

The extension of credit and its collection has always existed. However, the mechanisms of collection have changed considerably over time. Thus improvements in the cash flow of sole medical practices can only be achieved if collection techniques are changed as well. For this to happen, it is essential that the debtors' department be separated from other administrative duties in the practice. Furthermore, the debtors department should be staffed with employees who have at least a Matriculation certificate with credits in Accounting and Business Economics.

In order to keep abreast with the changing environment in credit management, it is necessary for staff to attend seminars and workshops and to upgrade their qualifications.

Practitioners should allow staff to attend training programs offered by medical aid societies and others. This will assist the staff in learning the use of modern EDI systems and thus improve collections. It is also imperative that basic financial management be offered as a semester course within the curriculum of medicine.

Adopting these measures should lead to an improvement in the collection of debtors in medical practices. The improvement in collections will, in turn improve the cash flow situation of practitioners, reducing the need for overdraft facilities required for financing debtors. If the reduction in the use of overdraft facilities is achieved, fixed and interest costs, which impact negatively on cash flows, will be reduced. These factors should then have a positive impact in the quest to reduce the costs of medical care.

It is expected that the costs associated with a visit to the sole medical practitioner will decline with the implementation of these recommendations.

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CHAPTER SEVEN

SUMMARY AND FUTURE RESEARCH

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SUMMARY AND FUTURE RESEARCH

7.1 INTRODUCTION

In this chapter the objectives of the research, the hypotheses and the literature guidelines, are reviewed in the light of the findings of the research. The achievements of each phase of the research process is described and recommendations made for future research.

7.2 OBJECTIVES AND HYPOTHESES OF THE RESEARCH

The objectives of this research are specified in paragraph 1.3 of the first chapter. It required the establishment of a collection system that will assist staff in sole medical practices to collect outstanding debts efficiently and timeously. Based on the literature reviewed, the hypotheses thus formulated reflects (paragraph 1.5) that:

- an inverse relationship exists between the financial qualification, training and or experience of administrative staff in sole medical practices and the successful recovery of overdue accounts receivable
- there is a significant correlation between the methods of collecting accounts receivable and the accumulation of bad debts

- a significant correlation exists between bad debts and lengthy debtors' collection periods.

7.3 ACHIEVEMENTS OF EACH PHASE OF THE RESEARCH PROCESS

7.3.1 Literature study

Most of the literature pertaining to the general management and control of accounts receivable in large businesses is dealt with thoroughly. However, no literature exists specifically on accounts receivable management and its effects on the fixed costs in sole medical practices.

Several authors (Mills 1986, Cole *et al* 1998) hold the view that accounts receivable management should be identical in all business environments. Thus, a review of this literature was conducted in order to establish the acceptable standards of the management of debtors in sole medical practices. The factors found in this review were used to develop the questionnaire.

7.3.2 Overview of the research methods

The target population was identified as members of the Family Practitioners Association in the Durban functional region. Twenty-seven percent of the members of this association returned completed questionnaires.

Multiple linear regression analysis was used to analyse the responses to the questions.

7.3.3 Findings of the study

The analysis of the data substantiated (paragraph 5.2) the hypotheses. It was found that the management of accounts receivable in sole medical practices is contrary to those principles expounded by the literature review.

The data shows that lengthy debt collection periods, inadequately trained staff, poor collection strategies and insufficient use of EDI, are the main reasons for increasing overdraft facilities in sole medical practices. These factors have a detrimental effect on the fixed overhead costs of a sole medical practice. Paragraph 5.3.2 shows that consultation fees of general medical practitioners could be reduced by 17.73 percent if the debt collection period could be decreased to 30 days.

7.4 FURTHER RESEARCH

As a result of the changes to the Medical Schemes Act and with the proliferation of medical aid societies, an overwhelming increase in the number of medical aid patients is expected. The number of administrators servicing such societies will consequently also increase. In an effort to reduce payment periods to medical practitioners, research should be conducted among the different medical scheme administrators to determine the most feasible methods to pay medical practitioners and others in the health care industry, in the shortest possible

time. It is also recommended that research be undertaken in the use of multi media to facilitate the "virtual" processing of transactions between the medical practitioner, medical aid societies and other health care service providers.

7.5 SUMMARY

The objectives of this research have been satisfied. It was possible to identify the factors which affect bad debts in sole medical practices. In the process of analysing the methods adopted by practitioners in the management of accounts receivable, it was found that the basic principles of accounting are often ignored. The consequence of this is increased fixed costs which eventually affect the cost of medical care. Further research on medical scheme administration and the use of multi-media is recommended.

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APPENDIX A : Questionnaire

FACTORS THAT AFFECT THE VULNERABILITY OF PRIVATE MEDICAL PRACTICES TO BAD DEBTS IN THE DURBAN FUNCTIONAL REGION

Page 1

Y What is the average annual loss incurred by your practice over the last two years due to bad debts? R_____ per annum [ ] 1

X1 What is the average number of patients seen per day? _____ per day [ ] 2

X2 What percentage of your patients are on medical aid? _____ % [ ] 3

X3 Do you send claims to medical aid by means of electronic transfer?

No	1
Yes	2

[ ] 4

X4 How old (in days) must a debt be before you consider it to be overdue?

210	1
180	2
120	3
90	4
60	5
30	6

[ ] 5

X5 Do you attempt to recover from patients the professional fees due when the medical aid fund fails to settle the patient's account?

No	1
Yes	2

[ ] 6

X6 What is the average number of days patients take to settle their accounts?

210	1
180	2
120	3
90	4
60	5
30	6

[ ] 7

X7 Do you identify overdue debtors?

No	1
Yes	2

[ ] 8

X8 Do you have a separate department within your practice that handles debtors?

No	1
Yes	2

[ ] 9

PTO page 2

X9 How many administrative staff do you have managing the debtors in your practice ?

1	
2	
3	
4	
5 or more	

10

X10 Do your administrative staff "double" as receptionists?

Yes	1
No	2

11

X11 How do you identify a patient whose account is long overdue ?

When the patient comes in for treatment	1
When the patient fails to pay	2
When the patient's name is identified by an age analysis	3

12

X12 Do you or your administrative staff regularly use an age analysis to identify patients whose accounts are overdue ?

No	1
Yes	2

13

X13 Do you or your staff compare the remittance advice sent by medical aids funds with the original statement sent by you to the medical aid funds?

No	1
Yes	2

14

X14 Do you have a planned procedure for the collection of overdue debts ?

No	1
Yes	2

15

X15 Rank the following procedure that your staff follow in the collection of overdue accounts from 1, with 1 being the first action taken, 2 the following action taken and so on. (If any action is NOT taken please leave blank)

Hand over to collection agency	16
Hand over to attorney	17
Letter of demand	18
Letter reminding patient that account is now overdue	19
Telephone call to patient to ask for reason for non-payment	20
Second repeat statement	21
First repeat statement	22

X16 Do you or any other person complete an appraisal of your debtor's department ?

No	1
Yes	2

23

PTO Page 3

X17 Does each patient fill out a credit appraisal form on his/her first visit ?

No	1
Yes	2

24

X18 Are patient's cards/files marked to indicate that the patient's account is overdue?

No	1
Yes	2

25

X19 Does your staff keep a record of each collection procedure followed ?

No	1
Yes	2

26

X20 How many of your administrative staff members have qualifications and or three years of outside experience in Accounting / Economics / Business Economics?

1	
2	
3	
4	
5 or more	

27

X21 Does your computer software system allow for the automatic identification of overdue debts?

No	1
Yes	2

28

X22 Does the person in-charge of accounts have any experience/training in financial management?

No	1
Yes	2

29

X23 What area do you service?

Lower income suburb	1
Middle income suburb	2
City centre	3
Upper income suburb	4

30

X24 What is your average turnover per month in Rands?

Below R20 000 per month	1
R20 000 to R40 000 per month	2
R40 000 to R60 000 per month	3
R60 000 to R80 000 per month	4
R80 000 to R100 000 per month	5
Above R100 000 per month	6

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APPENDIX B: Letter accompanying questionnaire

TECHNIKON NATAL
DEPARTMENT OF ACCOUNTING

P.O.Box 953, Durban, 4000. Tel: 204 2543

23 June 1997

Dear Doctor

Re: RESEARCH STUDY - "FACTORS AFFECTING THE POSSIBILITY OF INCURRING BAD DEBTS IN SOLE MEDICAL PRACTICES IN THE DURBAN FUNCTIONAL REGION"

It is common knowledge that private medical practices are prone to high levels of bad debts due to the unique service provided by them. A survey of investigations into this phenomena reveals that no research work has been undertaken to find solutions to this ever-increasing problem.

In order to investigate the bad debt problem that afflict medical practitioners information is required regarding the present situation in private medical practices. In this regard permission for the study has been obtained from the Chairperson of the Family Practitioners Association (FPA). A questionnaire covering the required information is attached. The questionnaire is designed to be totally **anonymous**. The respondent is therefore assured of anonymity as he/she cannot be identified by any person including the researcher.

It is well known that most medical practitioners are often too busy to attend to the necessary task of "chasing" overdue debts. The problem is further exacerbated by the fact that medical aid funds sometimes take a considerable length of time to pay claims. Even with the introduction of "electronic transfers" the constant problems of overdue debts is not being adequately addressed in private medical practices.

The cost of employing highly qualified persons to run an accounts department is prohibitive. It is therefore the

intention of this study to assist the solo medical practitioner by making available to him/her a manual consisting of a set of procedures which could be utilised by the staff to recover as much of the overdue debts as possible and at the same time prevent future overdue debts. Consequently, the study will be of benefit to all private medical practitioners.

I therefore appeal to you and would greatly appreciate it if you would kindly complete the attached questionnaire and return it in the pre-stamped envelope supplied.

As this is an anonymous questionnaire design please do not indicate your name, address or practice number on any page of the questionnaire as it would invalidate the questionnaire.

I thank you for your co-operation.

Yours faithfully

SALEEM KHARWA

APPENDIX C: Application form for credit

ACCOUNT NUMBER:	DATE

A. PATIENT

TITLE	FIRST NAME AND INITIALS	SURNAME	AGE

B. MEMBER OF MEDICAL AID OR PERSON ACCEPTING RESPONSIBILITY FOR PAYMENT OF ACCOUNT:	Date of Birth (Patient):
TITLE / INITIALS / SURNAME	Identity Number (B):
POSTAL ADDRESS:	Relationship to "B":
Post Code	
RESIDENTIAL ADDRESS - NOT BOX No:	☎ Code
Post Code	☎ Res. No.
C. PATIENT'S OR "B's" MEDICAL AID SOCIETY	MEMBERSHIP No.
D. EMPLOYER(of 'B' above)	☎ Code
Company Name:_____	Bus. No.
Address:_____	Extension
Post Code	
E. Name and address of nearest relative or friend not living at same address:	☎ Code(B) (R)
Name:_____	Bus. No. Res. No.
Address:_____	Extension (B) (R)
Post Code	

Method of payment ☐ cash ☐ cheque ☐ credit card ☐ Send statement

TERMS STRICTLY THIRTY (30) DAYS

I acknowledge that I remain responsible for the full payment of any amount incurred in relation to medical services rendered, irrespective of any claims made to medical aid societies or insurance companies. Such amounts are payable to Dr ..... within 30 days of any medical services rendered. Overdue accounts will be charged ..... % interest per month.

_____ Signature

_____ Witness

APPENDIX D: First letter of reminder

Date

CUSTOMER'S NAME AND ADDRESS

Dear

Re: ACCOUNT NO:
ACCOUNT BALANCE:

I have pleasure in enclosing a statement for the above account. Your medical aid has refused to settle this amount. I would ask that you carefully check this statement. If you disagree with any item on the statement, please let me know on the slip below within seven days.

If I do not receive any query from you within that time, I shall assume that you will be paying the full balance on the statement. I would remind you that under the terms and conditions of our credit agreement, you are liable for the full amount if you do not express written disagreement within seven days of this letter.

I thank you for your cooperation

Yours sincerely

CREDIT CONTROLLER

.....

ACCOUNT NO ..... R.....

CHEQUE ENCLOSED FOR R.....

PAYMENT IS BEING WITHHELD BECAUSE .....

.....

SIGNED..... DATE..... TEL NO.....

APPENDIX E: Blue letter of demand

FINAL NOTICE

OF INTENTION TO PROCEED IN THE COURT OF CIVIL JUSTICE FOR RECOVERY OF DEBT

Whereas you, ...

are truly and justly indebted to .....

in the sum of .....

For services rendered, the aforesaid amount being considerably

overdue of which fact you have been repeatedly notified.

Therefore you, ... are hereby given

final notice of ..... intention to take legal

proceedings for the recovery of the sum hereinbefore stated,

unless the said amount be

paid to .....

On or before .....

Signature .....

Date .....

APPENDIX F: Collection record card

COLLECTION RECORD CARD
Name & Address of debtor
Account number
Telephone number Contact person

DATE	AMOUNT OUTSTANDING	No. of DAYS	ACTION TAKEN	REACTION
18/06/99	R300	30	Sent letter to debtor	No reaction
30/06/99	R300	30-60	Telephone debtor at work	Promise to pay next day

ALTERNATIVE COLLECTION RECORD CARD

OUTSTANDING DEBTORS									
Account No	Debtor	Outstanding amount			Action taken				Reaction
		60	90	120	1	2	3	4	