Applied Project Submission Form

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Financial Control of Dental Clinics

Supervisor: Declan Faughey

2025

Abstract

This study aims to establish methods through which dental clinics can realize effective finance management practices to support internal process control and enhancement, secure future viability, and realize profitability. The most necessary research questions included identifying methods through which finance training and finance education influence decision-making, budget tools used in clinics, practices in cost management, management of off-season cash flow, and practices in revenue generation.

To answer these questions in this study, mixed methods have been employed by combining surveying with interviewing that is semi-structured. Quantitative data was gathered by surveying 56 dental clinic professionals, also three staff from dental clinics provided qualitative responses by interviewing. Financial practices covering budgeting, cost management, and diversifying revenues constituted the content of gathered data.

The outcomes revealed finance knowledge and training gaps where most dental managers lacked confidence in making finance decisions. Budgeting was not always conducted in an efficient way with advanced methods of rolling budgeting employed by some practices while conventional budgeting was used in others. Planning to manage cost in aspects relating to staff and equipment was not uniform between practices with efficient cost-saving practices used by some practices. Cash flow management was problematic while forecast tools and reserve management were employed by some practices to mitigate threats. Revenue diversification using new technologies through cosmetic and orthodontic treatments had excellent potential but was not developed to full capacity. Major training in finance and active management in dental practices is stressed by this study. Advanced budgeting practices and diversification in revenues can translate to increased stability and sustainability in finance.

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Chapter 1: Introduction

1.1 Background

Dental clinics and small and medium-sized practices in general, have serious financial management issues. As someone who works in a dental clinic in Dublin, I have witnessed such problems, including poor financial control, few IT systems, poor planning, and poor control of cash flow. Despite their focus on treating patients, managers in dental clinics do unsatisfactory job in coordinating financial running in their daily operations. The driving point for this study is to overcome such weaknesses, improve financial practices, and improve running dental clinics (Vujicic, Buchmueller, and Klein, 2016).

1.2 Rationale for the Study

The financial health of dental practices is crucial but oftentimes overlooked. Smaller and medium-sized practices, in general, have cost control, equipment, and unpredictable patient flows to deal with. Without good financial control, practices have the potential to fall into financial instability, affecting the quality of treatment and business sustainability (Farooq and Ali, 2020). The current study tries to identify how dental practices might better their financial control mechanisms, such as budgeting, cost control, cash flow, and generation of income. The guiding research question is:

How can dental clinics implement effective financial control strategies to improve control of the internal process, adapt, ensure long-term sustainability operations, and generate profitability?

The guiding research is taking forward through sub-research questions developed through literature-recognized themes.

1.3 Statement of Research Objectives

The main objective of this research is to identify the financial control mechanisms in dental clinics and suggest improvements for greater economic stability and operating effectiveness. The following sub-research questions will be included in the study:

- How does financial education and training influence dental clinic decision-making?
- What budgeting tools and planning strategies do dental clinics use?
- How do dental clinics manage their cost, including staff wages, equipment, and supplies?
- What strategies do health clinics use to handle uneven cash flow, especially in low seasons or crises?
- How do dental clinics generate income, and what alternative income models are explored?
- These objectives will inform the creation of the survey and interview questions and ensure that they fit in line with the topics examined in the literature review.

1.4 Information and data collection technique employed.

This research is conducted using a mixed methodology. Qualitative data is collected through in-depth interviews with owners of dental clinics, financial managers, and accountants to offer insights into their daily financial management issues. The in-depth interviews offer chances to better understand how practices in financial control in dental clinics are established. The quantitative data is gathered through surveys, and they offer an assessment of financial control tools and strategies utilized, such as practices in budgeting, practices in cash flow, and strategies in income generation. The two data collection types offer an integrated understanding of practices in financial management in dental clinics (Taherdoost, 2022).

1.5 Expected Findings of the Study

The expected outcome of this study is to offer efficient financial control practices to be adopted in dental clinics to improve operating efficiency, reduce cost, and increase profitability. The study is supposed to identify financial management problems in clinics and offer concrete recommendations, such as better financial education, improved tools for budgeting, and better cost-control practices. The study is supposed to offer holistic recommendations, but in a few places, partially due to heterogeneity in practices in different clinics.

1.6 Chapter by Chapter Summary

Chapter 1 gives an overview of the research, including rationale, background, objectives, and methodology. Chapter 2 gives literature on dental practices' financial management and extracts primary themes and current areas of understanding. Chapter 3 gives methodology, including data collection and analysis. Chapter 4 gives data and analysis of surveys and interviews. Chapter 5 concludes the research, giving an overview of data, discussing implications, and indicating future areas for future studies.

Chapter 2: Literature Review

2.1 Introduction

This chapter gives an extensive literature review on financial practices in dental clinics. The focus of the literature review is on analysing prominent areas concerning small to medium-sized dental clinics' financial control systems, including financial education, budgeting, cost control, cash flow, and generation of income. Each theme in this chapter is critically examined through current studies, understanding both problems and potential solutions for dental clinics. The literature is

compared and contrasted to identify any gaps in current understanding. These insights will provide the foundation for primary research, helping to guide questions for surveys and interviews. The study, by addressing such themes, is to provide insights into how dental clinics might improve their systems for financial control and improve general operating efficiency.

2.2 Theme 1: Financial Education and Training for Dental Clinic Managers

One of the major problems for dental clinic managers is a poor financial education and training, directly impacting clinical performance and decision-making. Dentists might have good clinical understanding but small skills to manage their practices' finances. As Assery (2016) affirms, managers who have an understanding of financial statements, budgets, and cost control have a better ability to manage their clinic's finances. Managers in dental clinics, nonetheless, lack the ability to analyse financial data and make good financial decisions, and hence, result in inefficiency and poor resource planning. The challenge highlights the importance for specialized financial education programs to address the unique needs of dental practices.

According to Kavita & Chouhan (2023), financial literacy equips managers to recognize potential dangers and allocate better. Managers' ability to interpret financial statements makes them capable of detecting wastages and instituting corrective steps in time. Nonetheless, the literature recognizes a lack of access to sufficient training materials. Bierman (2020) recognizes financial training and recommends workshops and seminars on cost control and budgeting to enhance managers' decisions. Still, while financial training programs do take place, there is a challenge of whether such programs cover sufficient and whether such programs take place regularly, given that financial education is never an individual activity.

Stetsunich (2022) goes on to observe that ongoing professional development (CPD) is vital to keeping managers up to speed on new financial regulations, including tax regulations. The literature

also highlights experiential tools' significance. Jin (2016) describes managers' ability to maintain accurate banking statements and receipts as influenced by financial literacy, and hence their ability to properly handle cash flow and make good financial decisions. This is consistent with the theory that aside from theoretical financial education, experiential exposure to financial tools, such as financial applications and webinars, is capable of enhancing managers' numeracy. Despite evidence for effective training programs, literature on whether such programs in dental clinics are rare. In terms of solutions, they advise dental clinic managers to have access to ongoing, timely financial education. The use of realistic financial tools and materials, such as financial forecasting and budgeting tools and packages, may assist in connect in the financial education lack.

2.3 Theme 2: Financial Planning and Budgeting in Dental Clinics

Effective financial planning and budgeting are vital to dental clinic sustainability and expansion. However, dental managers have limitations in applying advanced budgeting tools to optimize clinical practices. The application of advanced budgeting tools such as zero-based budgeting, rolling forecasts, and variance analysis is indispensable. Zero-based budgeting requires managers to justify every expenditure every time to ensure alignment towards clinical objectives and elimination of wasteful spending. The application of rolling forecasts, on their behalf, allows managers to constantly reassess financial estimates using up-to-date data and modify strategies in response to changes in financial conditions. Finally, variance analysis reveals inconsistencies between planned and actual budgets, and managers utilize them to take corrective action where necessary. These tools allow dental managers to optimize their command of clinical practices and make evidence-based decisions to ensure financial sustainability (Powell, 2023).

However, despite their clear benefits, their adoption in dental clinics is inconsistent. While some dental managers have successfully integrated such advanced cost-control practices, their

counterparts continue to adopt conventional, less effective cost-control practices. Bierman (2020) states that the adoption of strong cost-control practices is crucial for better cost control and profitability in dental clinics. Through successful cost control, clinics can better allocate their resources, enhance services, and maintain their market advantage. The adoption of such cost-control practices, however, is not free of challenge. Most dental managers' adoption is time-consuming and labour-intensive, particularly if they lack the necessary financial education and tools. Digital technologies also help in enhanced financial planning and budgeting if well applied.

Samuel (2024) illustrates how digital tools have the ability to reduce financial distortions and enhance decisions by enabling access to current financial data. Finance software is capable of simplifying financial reporting, month-end or year-end forecasting, and forecasting the impact of various financial decisions. The quality and efficiency of financial management in dental clinics may improve significantly through such practices. The literature does not capture to what extent dental clinics have integrated such digital tools, and therefore, there is a lack of understanding of how technology is integrated into financial planning practices. In terms of solution, it recommends that advanced budgeting tools, in combination with digital financial tools, have the ability to improve dental clinics' financial management capabilities to a considerable extent.

The questions for primary research may include whether and how dental managers make use of current tools for budgeting, and whether they use zero-based budgeting, rolling forecasts, or digital financial tools.

2.4 Theme 3: Cost Management in Dental Practices

Cost management is an important priority for dental practices, given their regular pressure to maintain financial stability while incurring significant operating expenditures. Wages for staff is the largest cost drivers in dental clinics, given that wages' tendency to account for a significant

amount of expenditure for any given dental clinic. Nagarale et al. (2022) observe that staff cost control needs to be met through smart measures, such as optimizing staff rosters, staff cross-training, and rewarding employees on their individual performance rather than on their increase in their numbers. The rationale is to ensure labour cost is kept to the simple minimum while maintaining the quality of services. Furthermore, regular assessment of staffing needs avoids staff loading, leading to excessive expenditure or understaffing, whose result may include forgoing opportunities and compromised client satisfaction.

In addition to labour, dental practices have significant expenditures on equipment purchases. High-end equipment, while necessary for smooth operation, is costly. Whiteman (2020) and Shim and Siegel (2012) suggest investing in strong equipment to save in the future by minimizing maintenance and replacement needs. Equipment leasing instead of purchasing might alleviate cash flows. Further, negotiating good deals in contracts and purchasing in volume might save on equipment and material purchase costs. These practices are vital for clinics to optimize their financial means while upholding quality services.

The literature identifies cost-saving strategies in dental practices, where wasteful expenditure is kept to a minimum while maintaining efficient operation. Nagarale et al. (2022) propose efficient cost management to reallocate finances to directly impact patient satisfaction and clinic operation, such as staff development or increased services. In a similar way, Kortekamp (2024) compare cost-benefit analysis in technology companies, where cost-benefit analysis is directly applicable to dental clinics to analyse financial feasibility in various operating decisions, such as equipment acquisitions or implementation of new procedures.

Moreover, Harnby (2016) underscores cost control's significance in solving cash flow issues. Poor cost control might lead to operating financial issues, undermining the sustainability of the clinic. Cost-saving strategies, including equipment maintenance and staff efficiency, lead to better financial

performance for dental practices. The capability to balance equipment capital expenditure and operating cost savings is vital in ensuring financial sustainability in the future (Wood, 2024).

For the primary research, questions might include cost-control strategies of staffing cost under control and understaffing and overstaffing. These questions will ensure an assessment of whether current cost-control strategies in place are effective and where cost savings might be made. The insights derived through the findings will ensure dental clinics adopt effective cost-control strategies to ensure their financial sustainability.

2.5 Theme 4: Cash Flow Management in Dental Clinics

Effective cash flow is crucial for dental clinics, given their volatility in patient volumes and unexpected surprises. Bright & Li (2017) identify the fact that dental clinics normally have serious cash flow problems in light of the volatility inpatient visits, most critically in low-season months. Efficient cash flow allows dental clinics to cover their operating expenses even in low-visitor months. Cash flow problems, if left to their natural course, lead to liquidity crises, and therefore, dental clinics cannot pay their employees, purchase supplies, or invest in equipment. Having a liquid asset cushion is crucial to maintain stability in lean months, in light of low-visitor months.

Harnby (2016) identifies various strategies for keeping up cash flow, including reserves and financial forecasting tools. These tools provide for forecasting future deficits in cash and for corrective action to be taken before such is serious. For example, adjustment in expenditure patterns by the clinic or re-arrangement of timetables for payment may facilitate the effect on finances for low visitation by patients. Similarly, provision for low-demand months, including vacations or holidays, is required. Clinics may offer incentives, price cuts, or flexible timetables to entice patients for such months. In addition, an adjustment in the range of services to include services having consistent incomes may stabilize cash flow in the future.

The literature highlights frequent reviewing and revising of financial plans to ensure effective cash flow management. Bright & Li (2017) suggest revising financial plans regularly to incorporate consideration of cash flow issues. Schleyer (2002) highlights dental informatics' capability to enhance financial planning through better visibility of cash flow and forecasting. Such technology is able to help in planning strategies to overcome cash flow issues and make sound decisions on operating the clinic. Terms they advise dental clinics to have more innovative strategies for cash flow management, including using forecasting tools, maintaining reserves, and revising services or timetables for payments in low-demand months.

For primary data, questions may inquire whether managers in dental clinics deal with current cash flow and what tools or strategies they use to predict and deal with cash flow problems. An understanding of using financial forecasting tools, reserves, and alterations made in case of fluctuating patient figures may bring insights into optimal practices in dental clinics' cash flow management.

2.6 Theme 5: Income Generation for Dental Clinics

Generating sufficient revenues is crucial to ensure financial viability in dental clinics. The fee-for-service and reimbursement by insurance have historically remained pillars of revenues for clinics. The benefits and drawbacks of such models have been elaborated by Tsuneishi et al. (2013) in their study, where, while reimbursement by insurance might stimulate increased activity by patients, reimbursement values might be difficult to manage and might lead to bureaucratic inconveniences. Membership plans, on the other hand, provide stability in revenues by giving access to services to patients for a predetermined price. These plans might provide stability in cash flows by receiving periodic payments from members. The question, however, is whether membership models have been maximally put in use or whether clinics still rely on traditional modes of reimbursement.

In addition to such conventional models of income, multiple income-generating sources have increasing significance. Powell (2023) identifies that expanding services, such as cosmetic treatments such as whitening, braces, and Invisalign, has significant potential to contribute to revenues in clinics. Services to cater to patients' needs for cosmetic enhancements have increasing popularity, where patients want to have enduring dental benefits. Furthermore, wellness programs integrated into dental practices have the potential to attract health-oriented consumers and diversify income. Powell (2023) also identifies that having multiple services makes clinics available to a larger pool of patients, ultimately improving profitability and ensuring long-run sustainability.

Samuel (2024) highlights the growing role of digital marketing in driving dental clinic revenues. By promoting new patients and marketing additional services through digital tools, clinics have better access and visibility to larger audiences. The approach is timely in light of greater patients' use of digital means to access dental services. This is in line with Cohen (2009), who advises collaboration between dental and nonspecialist professionals, such as fitness or wellness professionals, to expand services by dental clinics and forge supplementary revenues through interdisciplinary partnerships.

Whiteman (2020) and Shim and Siegel (2012) also discuss supplementary income strategies, such as operation commission models and innovative pricing strategies for services. Such models allow such clinics to earn supplementary income on ongoing and fresh services. The approach is in accordance with the fact that multiple income streams and upgraded services are necessary to ensure good financial health in the future.

The literature identifies expanding incomes through various services and digital marketing. The primary data will examine how dental clinics receive their current incomes and whether they have the capability to embrace such innovative models of income generation. The primary questions focus on how clinics employ membership plans, additional services, and digital strategies to advance

their models for income generation. The outcome will identify successful models for income generation and insights on how to expand their incomes to ensure their financial sustainability.

2.7 Conclusion

In conclusion, the research highlights key financial management strategies for dental clinics. Financial education and training for managers are essential to improving decision-making and clinic performance. Sophisticated budgeting techniques, such as zero-based budgeting and rolling forecasts, can enhance financial control and resource allocation. Effective cost management, including staff and equipment expenses, plays a significant role in maintaining financial health. Cash flow management, supported by forecasting tools and reserves, ensures resilience during fluctuating patient numbers. Lastly, diversifying income streams through additional services and digital marketing can significantly increase profitability and long-term sustainability for dental clinics.

Chapter 3: Methodology

3.1 Research Philosophy

The ontology used in this research is constructivist in orientation with an inductive epistemological perspective. Constructivist theory assumes that reality is not only produced by individuals through life experience, making this an ideal study to be used in this context to discuss dental clinic managers' money management practices. This work is aware that financial decisions are influenced by each participant's distinctive experience, training, and context. This is an attempt to get to know dental clinic managers' multiple realities and to gain an understanding of how lived experience shapes money practices (MacLeod, Burm, and Mann, 2022).

The inductive epistemology is employed because the study aims to determine dental managers' perceptions and experiences instead of testing preconceived hypotheses. This allows

participants to respond spontaneously to obtain in-depth knowledge regarding dental finance management intricacies. This is carried out to follow themes arising in the data to support developing emerging theory or theory-building instead of hypothesis testing (Azungah, 2018).

3.2 Rationale Behind the Choice of Method

The mixed methods design is adopted where both qualitative and quantitative methods are used to obtain an in-depth perspective regarding dental clinic finance practices. Utilizing both survey methods and semi-structured interviewing allows both an overall outlook and detailed views to be achieved about dental clinic managers' finance management practices (Dewasiri, Weerakoon, and Azeez, 2018).

The survey serves to act as the quantitative component and is used to get responses with respect to prevalence rates of various finance management practices such as budgeting, cost management, management of cash flow, and sources of generation of income. It applies Likert scale questions and closed-ended items to measure beliefs, attitudes and opinions, also to gauge to what degree various tools and methods of finance are employed. Trends and practices in dental clinics can be established through this tool to allow generalizations with respect to finance practices in this field (Baburajan, Silva, and Pereira, 2021).

The qualitative phase is done by means of semi-structured interviewing to have an opportunity to discuss in-depth the lived experiences of the participants. Through open-ended answers to the interview questions, participants can express their problems, achievements, and coping methods in exercising financial control in dental clinics. This process offers an opportunity to report on dental managers lived experience in ways in which only undertaking qualitative survey work is not feasible. This qualitative information is used to elicit contextual factors influencing

finance decisions to have in-depth knowledge about dental clinics' financial problems (Mahat-Shamir, Neimeyer and Pitcho-Prelorentzos, 2019).

The mixed methods design is appropriate since both qualitative and quantitative benefits in data collection can be derived through this design by both giving breadth and depth. The survey provides an overall description of finance practices, while the interviews provide rich, detailed descriptions regarding why these practices have been adopted in order to ensure an in-depth understanding of the topic (Dewasiri, Weerakoon, and Azeez, 2018).

3.3 Sampling Technique Outline and Sample Size

The convenience sampling technique, which is not a probability sampling technique, is employed in this research. Convenience sampling is used owing to time limitations and accessibility to populations. Sampling is carried out by selecting individuals who can be accessed and who have shown a willingness to participate in this research by targeting dental clinics in Ireland. Convenience sampling does not promise representativeness, yet this is the most appropriate way to get data from an identifiable profession (Stratton, 2021).

For this survey, the sample quantity is at least 56 dental clinic owners, finance managers, accountants, and others. This quantity is sufficient to analyse overall trends in finance practices and to ensure that an extensive range of responses is achieved. This survey would be administered online to dental professionals through networks, dental associations, and online portals such as LinkedIn and Instagram. For semi-structured interviewing, 3 individuals are targeted. This is an appropriate number to acquire in-depth information regarding the experience and perceptions of an accessible number of ideal qualitative research participants. Interviewees are dental clinic owners, finance managers, and accountants who have direct responsibility for finance handling in their clinics. Their

participation is selected taking into consideration experience and capacity to provide meaningful perceptions regarding studied finance practices.

Convenience sampling is justifiable in this situation in light of the aims of the research and time factors. Although the sample is not generalizable to dental clinics in general, it would provide meaningful results about finance handling practices between the targeted sample of dental professionals (Stratton, 2021).

3.4 Explanation of Method Used in Analysis

The research applies descriptive statistics to analyse quantitative data while making use of thematic content analysis to examine qualitative data. For numerical data, survey answers are analysed by descriptive statistics to obtain percentages to study patterns in dental clinic financial practices. Descriptive statistics yield an explicit description of prevalence in some financial practices, e.g., budget tools employed, methods used to manage cost, and models employed to gain revenues (Mishra et al., 2019)

For qualitative data, thematic analysis will be used to establish and understand patterns in answers to an interview. Thematic analysis is an inductive process that enables the researcher to ask about participants' experiences and perspectives in-depth. The process involves coming to know the data, analysing the data by identifying segments related to the topic, grouping these segments by themes, and making inferences regarding these themes with respect to the research questions. The thematic analysis offers an in-depth interpretation of factors affecting dental clinic finance decisions in order to gain an understanding of the exact problems and ways dental managers embrace (Castleberry and Nolen, 2018). Below is the thematic analysis table based on the interviews.

Theme	Keywords (Codes) in Interview	Interviewee
Financial Education and Training	Lack of financial education, low confidence in financial decision-making, need for formal finance education	Interviewee 1, 2, 3
Budgeting Practices	Use of traditional budgeting, lack of dynamic forecasting, reliance on historical data, difficulty predicting seasonal changes	Interviewee 1, 2
Cost Management	High staff wages, equipment costs, staffing optimization, equipment leasing, cross-training staff	Interviewee 1, 3
Cash Flow Management	Cash flow issues, maintaining reserves, forecasting tools, patient incentives during slow months	Interviewee 2, 3
Income Diversification	Cosmetic treatments, membership programs, expanding services, digital marketing, new revenue streams	Interviewee 1, 2

3.5 Ethical Section

Ethical considerations constitute an integral part of this study to ensure respect towards privacy and participant rights in this research. This work is carried out in accordance with institutional standards with respect to ethics and commonly used standards in social research. For purposes of validation, member checking is used where participants are afforded the opportunity to check results obtained through interviewing them. This allows participants to confirm that perceptions have been captured appropriately and adds credibility to qualitative data. Additionally,

participants have been provided an accessible language statement elaborating on the purpose of the research to be conducted, steps to be used in executing the research, and participant rights. This offers an assurance that participants have an understanding of the study to be carried out and can make informed decisions about participation (Petrova, Dewing, and Camilleri, 2016).

Reliability is maintained by consistency in methodology in collecting and analysing data. Tools in interviewing and surveying shall be developed in alignment with the literature review to ensure relevancy and coherence. The survey is pre-tested to ensure that survey items can be interpreted by respondents, and that the data is reliable. A standardized interview guide is employed to ensure consistency in interviewing while allowing an element of flexibility to follow emerging themes (Cohen, Manion, and Morrison, 2017).

Reflexivity is exercised by reflection and making notes about thought patterns and decisions in the process. This is to ensure that the researcher is always aware of potential prejudices and attempts to objectively interpret results. Informed consent is obtained from every participant to ensure that every participant is informed about his or her confidentiality rights and his or her free will to withdraw himself or herself from this study. All are assured that confidentiality regarding his or her participation in this study shall be maintained and his or her data shall be safely archived and used only in relation to this research (Jamieson, Govaart and Pownall, 2023).

In conclusion, this chapter addresses the theoretical framework, data collecting methods, sampling design, methods to analyse data, and ethical considerations. Utilizing mixed methods design, this study is supposed to acquire an in-depth aspect on finance management in dental clinics while ensuring an ethical perspective to support valid results that can be relied upon.

Chapter 4: Findings and Discussion

Interest in participating in the Survey

Firstly, the participants were questioned if they accept to participate in the survey. After accepting the questions were displayed to answers. In case of no acceptance, the participation was declined.

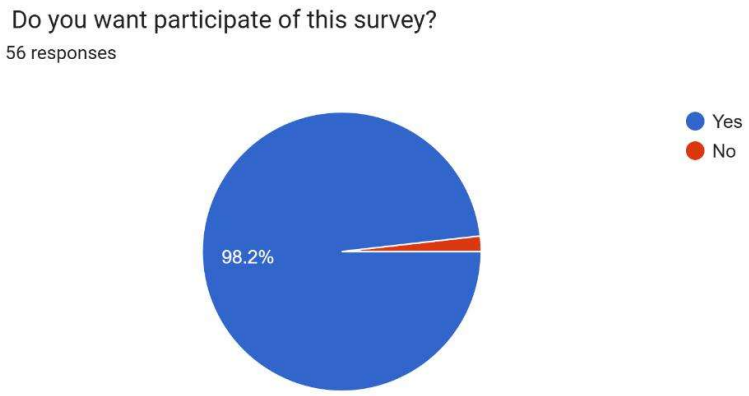


Chart 1 - Consent for participate of the survey

Role in Dental Clinic

The professionals were asked to answer the role in the dental clinic, to understand the kind of relationship they have with the clinics. The owners represent 11.5% of respondents, 26.9% are financial managers, 21.2% are accounting professionals and 40.4% have other administrative responsibilities.

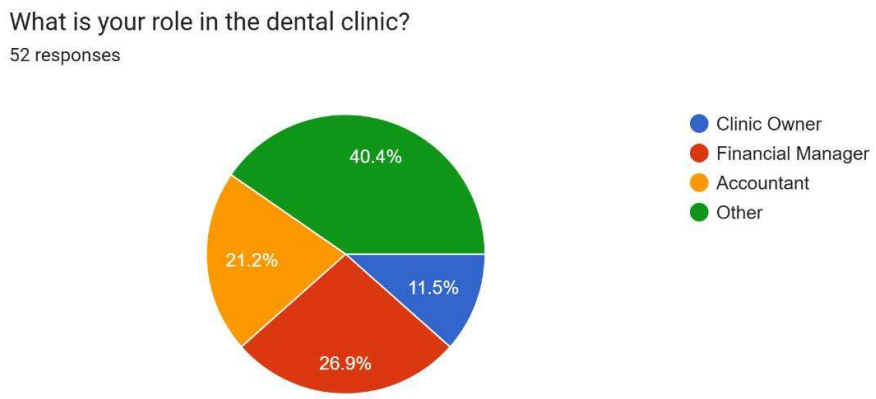


Chart 2 - Role of Dental Clinic

Years of professional experience in management of dental clinics

The last initial question to understand the experience they have in financial aspects of dental clinics, where 15.4% respondents affirm to have less than 1 year, 23.1% 7 or more year, while 30.8% respondents informed that they have 1 to 3 years and also 30.8% affirm to have 4 to 6 years of experience.

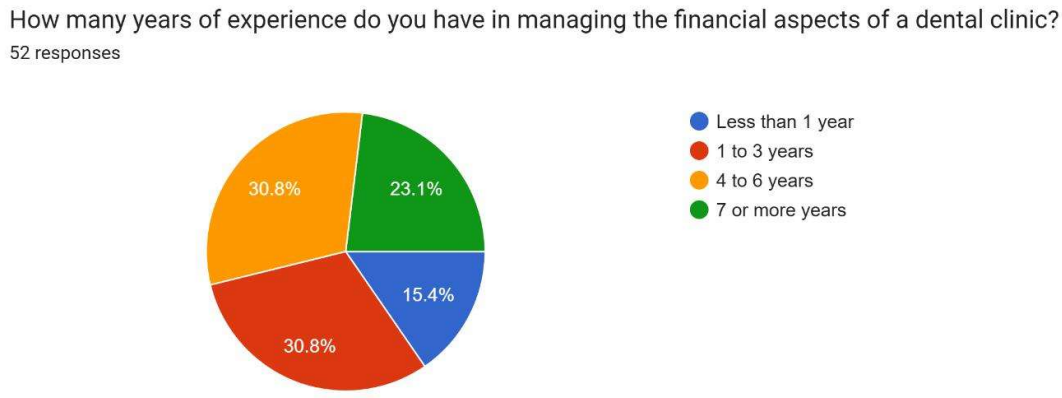


Chart 3 – Years of experience in the role

4.1 Financial Education and Training for Dental Clinic Managers

The outcomes of the primary research reflect extensive gaps in training in finance between dental clinic managers and finance education, mirroring exactly those gaps established in the literature review. From survey answers, an indication is that 21.2% reported that financial education is "never" provided in their clinic, while 19.2% reported "rarely", 11.5% reported "frequently" and 3.8% affirm "always." This suggests that finance training is not valued in dental clinics in most cases, corroborating fears established by Assery (2016) in the literature review emphasizing dental managers' significance in knowing finance statements, budgeting, and cost management to guide decisions.

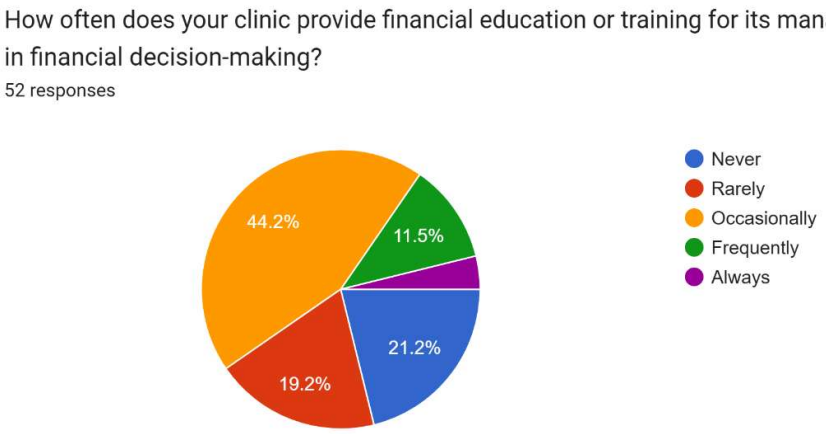


Chart 4 - Financial Education or Training

From the literature, dental clinic managers have been shown to have clinical knowledge but not have the necessary financial competencies, causing inefficiencies in the management of resources. This is reflected in survey answers to note that around 30.8% report that they are "not confident at all" or 26.9% "somewhat confident" in analysing finance statements, including balance sheets and an income statement. Additionally, 26.9% of respondents feel "confident" and only 15.4%

are “very confident” in interpreting the statements. This is in accordance with Kavita & Chouhan’s (2023) observation that finance literacy is necessary to empower managers to detect threats to resources, efficiently manage resources, and prevent wastage.

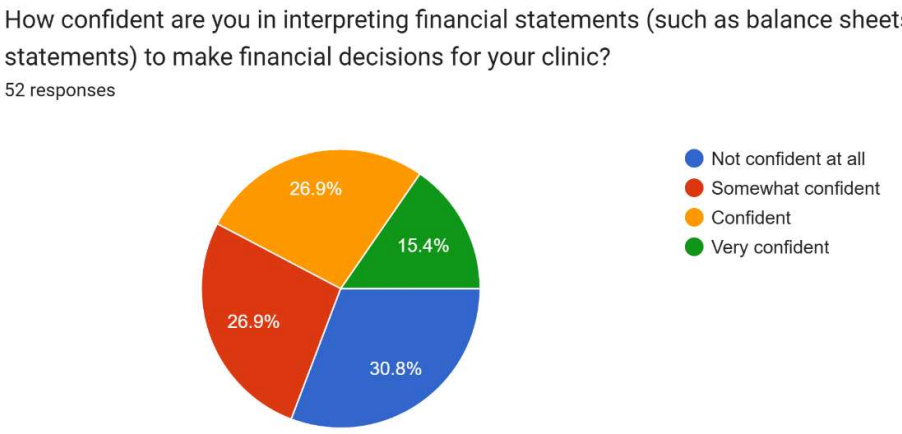


Chart 5 - Interpretation of Financial Statements

The outcomes in this area are corroborated by the interviews where managers described drawing upon independently developed finance competencies. Participant 1 described: “Financial training has been essential to me,” while Participant 2 described taking courses in finance management over time that were directed toward healthcare providers. This finding highlights the importance of formal training in finance, in alignment with Bierman (2020), who advises workshops and courses in cost management and budgeting to guide better management decisions.

Besides this, the survey asked about finance tools used to aid in making decisions in clinics. Whereas 44.2% reported regular use of these tools in making decisions, 44.2% reported making occasional decisions with finance tools, citing an area where improved finance management practices can be implemented. This is in support of Stetsunich’s (2022) argument regarding continuous professional development and finance tools in clinics to aid in efficient management.

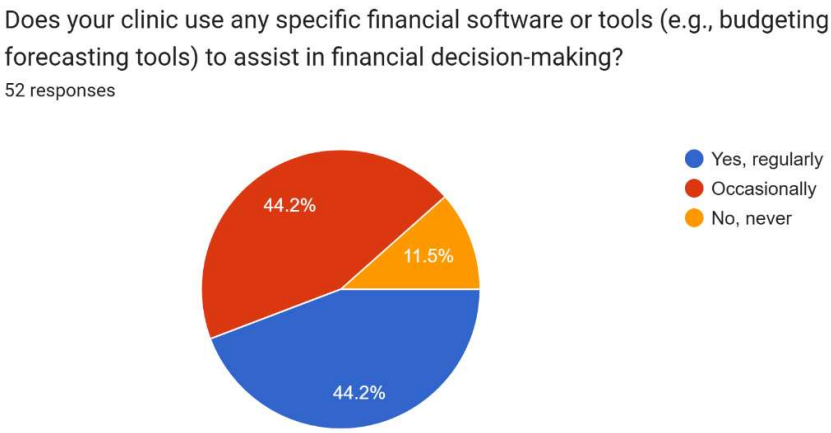


Chart 6 - Use of financial software's or tools

The overall outcomes of both the literature survey and primary survey firmly indicate that while development has been made, vast amounts remain to be done in furnishing detailed, standardized, and specialized finance training to dental clinic managers. This would prepare them better to scrutinize finance-related data, prepare better budgeting decisions, and utilize finance tools to accomplish efficient management of the clinics and viability in the long run.

4.2 Financial Planning and Budgeting in Dental Clinics

The findings from the primary research reveal insights into the financial planning and budgeting processes in dental clinics, aligning with the concerns raised in the literature review. The survey data shows that 19.2% of respondents never performed financial planning activities, such as budgeting or forecasting, while 23.1% do monthly, 25% do quarterly, and 32.7% do annual financial planning activities. This suggests that while some clinics practice frequent financial planning, a significant portion still does not do it infrequently or not at all, which aligns with Powell (2023), who emphasizes that effective financial planning is crucial for clinic sustainability.



Chart 7 - Financial Planning frequency activities

The survey also shows a mixed approach to budgeting methods. When asked about budgeting techniques, 40.4% of respondents reported using zero-based budgeting, and 38.5% used traditional budgeting. Rolling forecasts 28.8% and None of the above 17.3%. These results reflect the varied adoption of advanced budgeting methods, as discussed in the literature. While rolling forecasts and zero-based budgeting are acknowledged as valuable tools for financial sustainability (Powell, 2023), but as seen in the survey responses, their adoption is on average in dental clinics, points to the challenges in fully integrating these methods into practice.

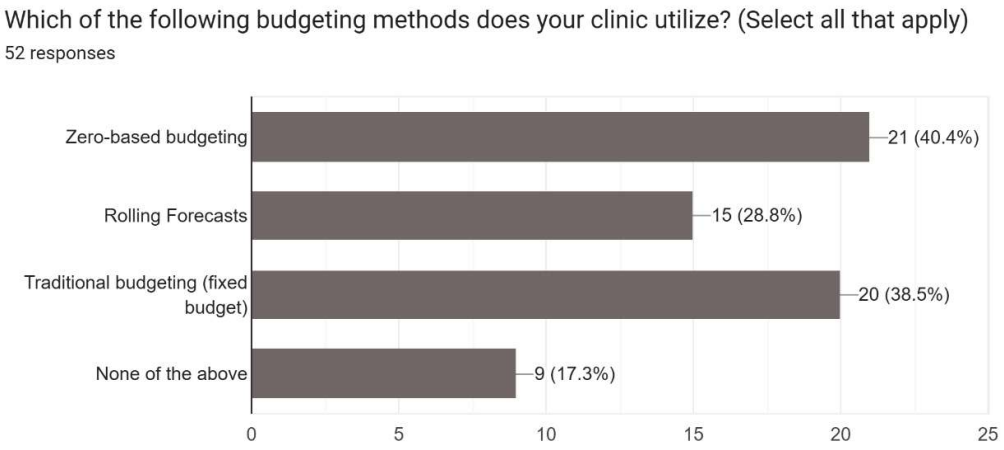


Chart 8 - Budgeting methods utilized

Interviews further support these findings. Participant 1 explained, "We use a combination of traditional budgeting and rolling forecasts to stay flexible," indicating that rolling forecasts are appreciated for their ability to provide real-time adjustments. However, Participant 2 noted the challenge of implementing these tools, stating, "Our biggest challenge has been predicting seasonal changes in patient flow," which is consistent with the literature's acknowledgment of the difficulty in applying advanced budgeting techniques, especially when faced with variable patient visits (Bierman, 2020). Participant 3 also mentioned, "We primarily use the past experience, following the pattern with historical data for budgeting and it has been helping to predict cash flow," showing a transition toward more dynamic budgeting methods.

In terms of budgeting effectiveness, the survey responses show that 9.6% of respondents consider their clinic's budgeting process "not effective," other 26.9% reckon "somewhat effective", while 23.1% find it "very effective" and 40.4% "effective." These indicate that while some clinics view their budgeting process as effective, but there is still space for improvement. These findings are consistent with the literature's suggestion that better implementation of advanced tools, such

as rolling forecasts and variance analysis, could significantly enhance financial sustainability and profitability (Samuel, 2024).

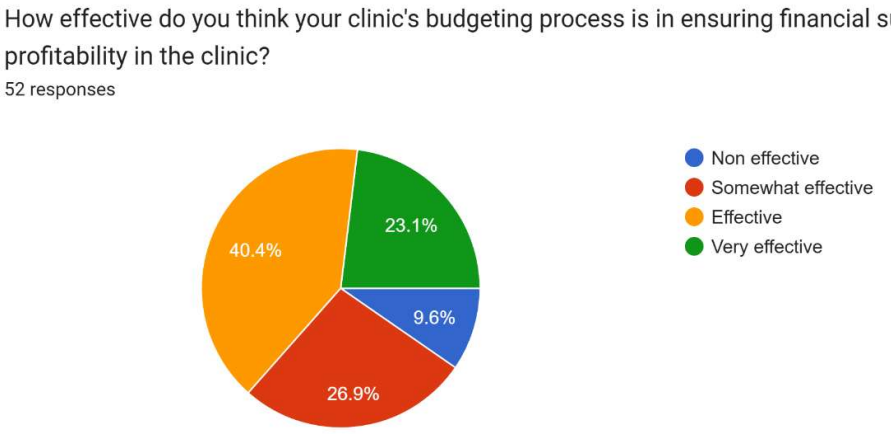


Chart 9 - Budgeting Process and Financial Sustainability and Profitability

The combined survey and interview data highlight the need for dental clinics to adopt more robust and dynamic budgeting practices. While some clinics are making large step by using rolling forecasts, the reliance on traditional budgeting methods and the challenges in forecasting patient flows point to a gap in financial planning practices. Further integration of digital tools and advanced budgeting methods could help improve the financial management capabilities of dental clinics, as recommended in the literature. These findings suggest that dental clinic managers would benefit from additional training in advanced financial tools to optimize their budgeting processes and improve financial sustainability.

4.3 Cost Management in Dental Practices

The most notable finding in this respect is that cost management is a key area of concern to dental clinic managers, most significantly in aspects such as equipment and labour. From survey responses, 23.1% reported giving “no attention” to controlling operation costs, while 23.1% gave

“extensive attention” to this area, 25% “significant attention” and 28.8% gave “some attention.” This is an indication that while most clinics consider cost management to be important, a significant percentage may not give proper attention to reducing overheads. This is in alignment with earlier work that emphasizes controlling labour costs and equipment expenditures is key to providing stability in finance (Nagarale et al., 2022).

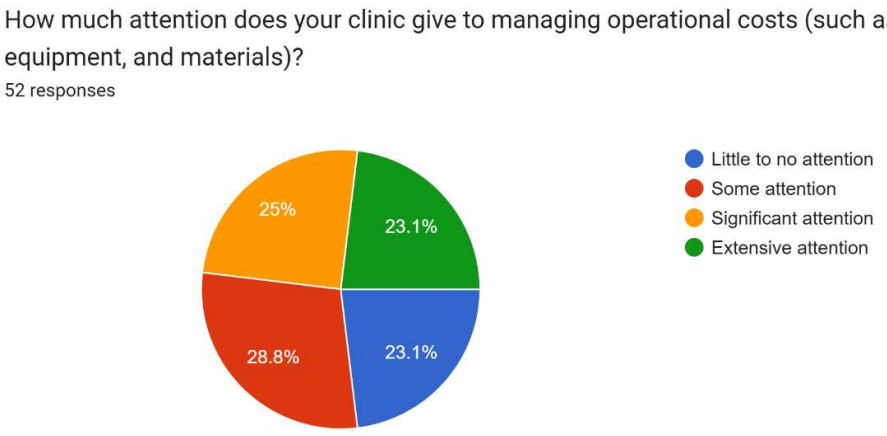


Chart 10 - Attention to managing operational costs

In labour cost management, survey responses revealed that 42.3% employed “optimized staffing schedules” to keep labour-related costs in check, while 19.2% employed “no measures.” Performance-related incentives came in third in cost-control practices employed by only 17.3% of survey takers. This is in alignment with literature that cites optimizing staff schedules and 21.2% cross-training as labour cost-saving practices while maintaining service quality (Nagarale et al., 2022). Participant 1 described, “We optimize staffing by adjusting schedules according to patient flow, Doctors here don’t work every day, and we can apply cross-training staff,” an indicator of widespread practice in these practices.

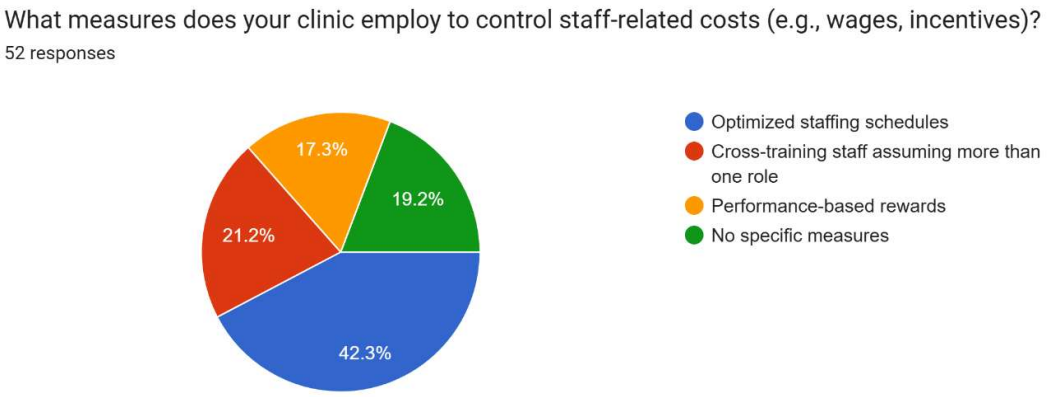


Chart 11 - Measurement control staff costs

In reaction to equipment prices, 15.4% of the sample indicated that equipment purchases, or equipment leasing are never considered by their clinic in terms of cost-effectiveness, while 42.3% "occasionally", 26.5% "regularly" and 15.4% "always." This suggests various clinics do not consider the cost-effectiveness of equipment purchases', leading to unnecessary spending. As described by Participant 2, "For equipment, we purchase used or refurbished equipment, when possible," focusing on considering equipment purchases' cost-effectiveness, which is encouraged by Whiteman (2020) and Shiem and Siegel (2012) to prevent unnecessary spending by considering equipment leasing or purchasing used equipment. Additionally, Participant 3 described, "we've shifted to leasing instead of purchasing, which has improved our cash flow" in alignment with the focus in the literature to embrace equipment leasing to handle equipment with steep prices and to maintain liquidity.

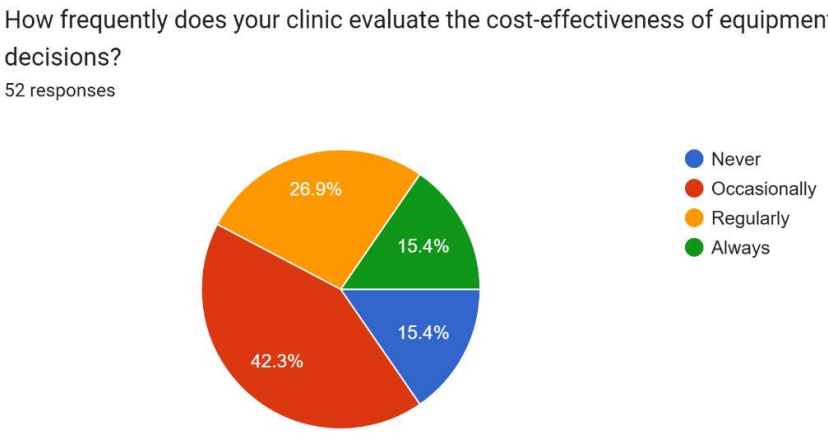


Chart 12 - Frequency analysis general costs

These outcomes indicate that while some dental clinics are making full use of cost-saving practices, others may not be making full potential in the management of equipment and labour spending. Embracing advanced budget practices, such as cost-benefit analysis in the management of equipment and labour, is indicated to continue to propel better performance in finance. Lack of consistency in embracing these practices is an indication that systematic budgeting should be done in addition to regular appraisals to ensure cost management and financial sustainability.

4.4 Cash Flow Management in Dental Clinics

Evidence in this survey reveals that 21.2% never experience frequent cash flow problems, while 26.9% “occasionally” and 11.5% experience this “frequently”, 40.4% report that cash flow problems occur “rarely” in their practices. This is reflective of cash flow problems in dental practices occurring in practices during off-season in patient visits or in unexpected occurrences. This is in accordance with literature that highlights that fluctuations in patients can lead to liquidity problems in payment to employees, purchasing equipment or supplies, or investing in equipment (Bright & Li, 2017).

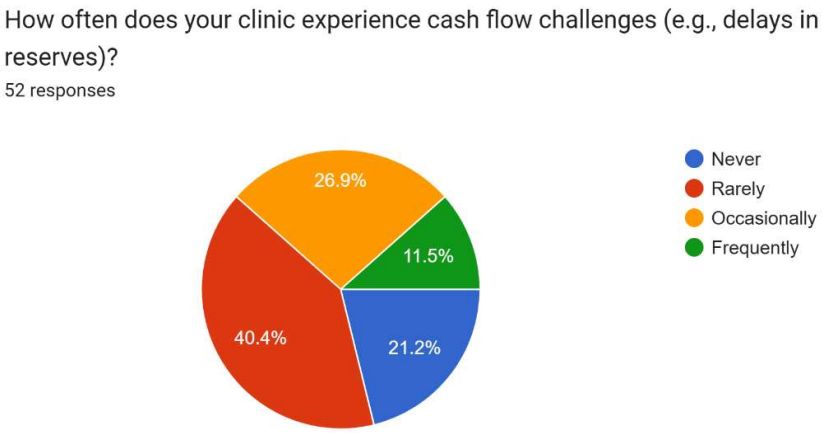


Chart 13 - Cash Flow challenges

The survey further discloses that 42.3% maintain an ongoing cash reserve to support unforeseen financial setbacks, while 17.3% are never maintained, while 40.4% maintain occasional reserve. This implies that most clinics understand that an economic cushion is required to maintain stability in months with fewer patients. This is a recommended practice by the literature as Harby (2016) advises that an ongoing cash reserve is an essential practice in ensuring efficient management of cash flow to maintain stability in months with fewer patients or in unforeseen events.

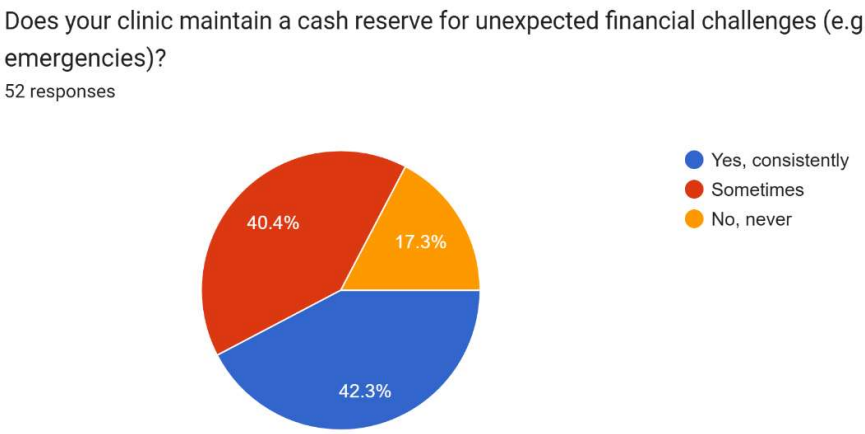


Chart 14 - Cash reserves for financial challenges

In cash flow management practices, survey responses indicate that 42.3% respond by predicting cash flow problems using financial forecast tools and 38.5% by adjusting payment timing. This is in alignment with practices outlined in the literature, where forecast tools and aligning payments should be used to forecast potential cash flow problems in order to act before problems materialize. “We normally can maintain a cash reserve and use financial forecasting tools to predict potential cash flow issues” was reported by Participant 1, while “we offer special promotions to attract more patients” was reported by Participant 2, both practicing combining multiple methods to maintain cash flow stable. “We adjust staffing levels and promote discounted services during slow months, offering new services such as aesthetics” was added by Participant 3, practicing adaptable practices to maintain cost in months with fewer patients.

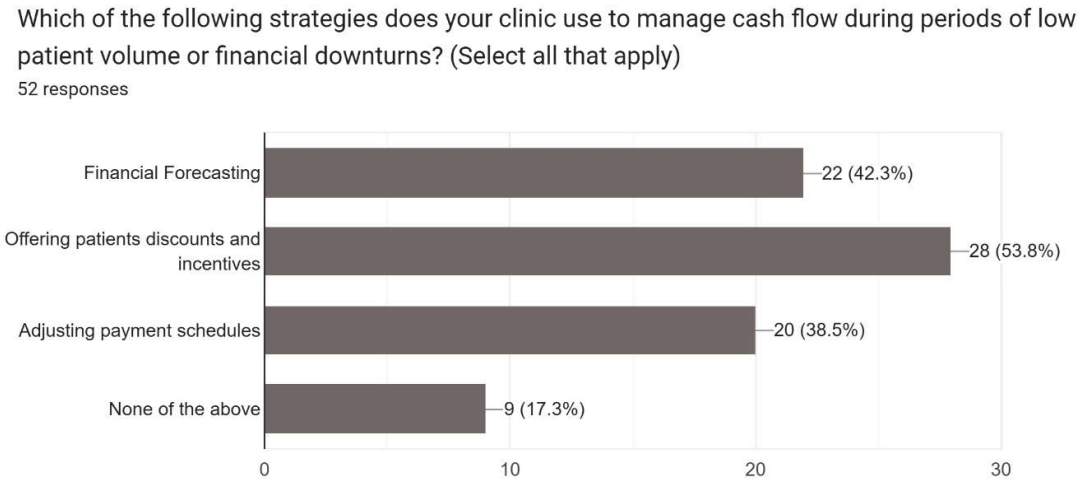


Chart 15 - Strategies to manage cash flows

The literature emphasizes frequent modifications to plans to take note of cash flow issues and to change services and payment timing, or to offer incentives to attract patients during months in which demand is low (Schleyer, 2002). All these practices are confirmed by the core research,

which establishes that practices that employ combinations of forecasted revenues, reserves, and incentives can withstand economic fluctuations better.

4.5 Income Generation for Dental Clinics

Survey results indicate that fee-for-service is used by 50% of respondents as the key source of income, followed by cosmetic treatments by 44.2% (such as whitening and braces), and membership programs by 36.5%. Sequence, others and Insurance reimbursements such as Medical Card by 21.2%. Though fee-for-service is leading because is a private kind of consultation, results indicate that most clinics are considering or have adopted additional sources of income, including cosmetic treatments and membership programs. This is by the literature that suggests the growing emphasis is being placed by dental practices to diversify sources of income through additional services such as cosmetic dentistry and wellness programs to gain additional sources of income and to treat an expanded range of patients (Powell, 2023).

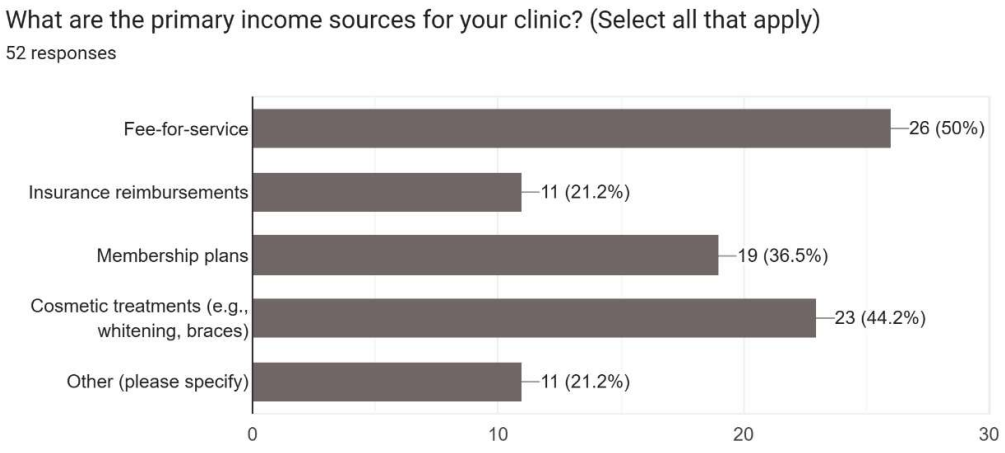


Chart 16 - Income resources for the clinic.

Additional survey results reflect that 34.6% have researched additional revenue-generating services extensively, while 17.3% have not done this. However, 48.1% do this occasionally. This is an emerging trend but is an area where full diversification in revenues has not yet been met. Participant 1 reported, “We've added things and services like cosmetic treatments and membership programs,” an active response to increased revenues. Similarly, Participant 2 reported, “We’re exploring membership programs for patients,” reflecting increased momentum in membership programs that earn more stable and certain revenues (Tsuneishi et al., 2013).

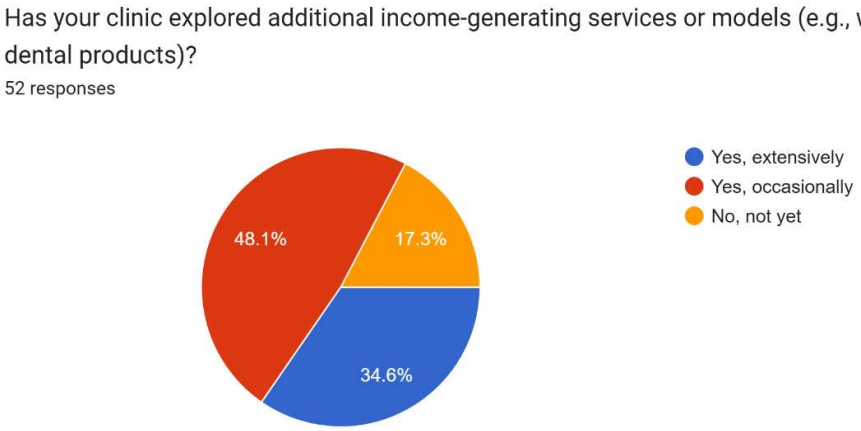


Chart 17 - Additional Income generation services or models

Results in digital marketing are not as promising. When effectiveness in bringing in new patients and building revenues is into consideration, 21.2% rated digital marketing as “not effective” while 32.7% rated it “somewhat effective.” This suggests that although most practices have embraced digital marketing, effectiveness is not as influential as anticipated (Samuel, 2024).

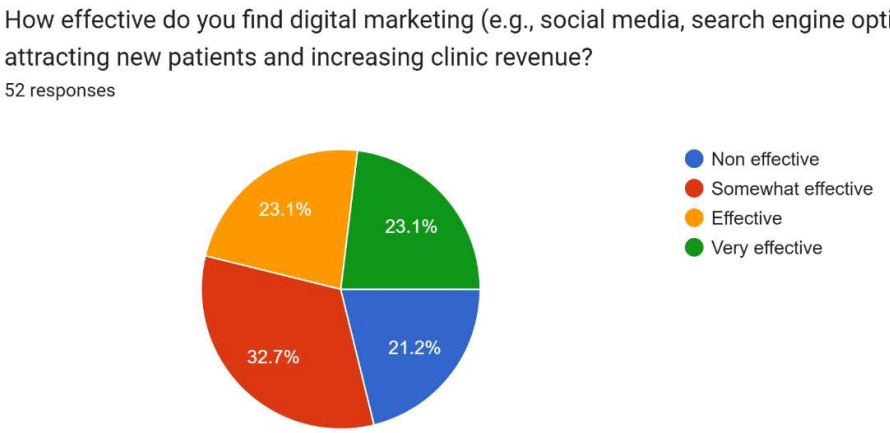


Chart 18 - Use of Digital Marketing to attract more patients and generate income.

4.6 Conclusion

This chapter provided detailed breakdowns of key results through triangulation to relate survey responses, interview responses, and earlier literature in accordance with key themes. This was to acquire detailed knowledge regarding practices dental clinics adopt to manage finances, maintain cost control, and diversify sources of revenues. This chapter placed these results in perspective to theoretical contributions to lay the foundations for Chapter 5 where the overall research problem shall be answered. Chapter 5 presents final results through this culmination to present final answers and actionable recommendations towards better dental clinic finance practices.

Chapter 5: Conclusion and Recommendations

5.1 Conclusion to Research Question

The current study evaluated methods by which dental practices can utilize effective finance management to internalize better processes, react to issues, gain long-term viability, and propel increased profitability. In my opinion, a well-managed internal control can help the business achieve the success. Findings in this survey and interview series reflect several key issues. The research revealed widespread gaps in dental practice managers' finance training. Many managers received little or no training in finance and thus failed to analyse statements or to make informed decisions. Financial illiteracy has adverse implications in budgeting, cost management, and cash flow management, ultimately influencing overall finance in the clinics even most of the business don’t suffer with cash problems.

In budgeting, although certain modern practices including zero based budgeting and rolling forecasts are used by some clinics, big part utilize traditional fixed budgeting methods. This inhibits finance management from being agile since patients' visits continue to be unstable. Research warrants invoking dynamic budgeting practices to better handle these instabilities.

Aside from this, most clinics fail to optimize cost management in areas including labour cost, equipment cost, or labour scheduling. Failure to conduct cost-effectiveness evaluation in equipment purchases or equipment leases results in unnecessary spending that can be better contained through making better decisions.

Cash flow is always an issue, particularly in seasons with fewer patients, but they are managing it very well. Financial stability is improved in clinics that utilize cash reserves and budgeting tools. Overall, while dental clinics diversify revenues through cosmetic dental work and membership

programs, digital marketing effectiveness in bringing in new patients and driving revenues was insufficient, thus calling for an enhancement.

5.2 Recommendations

Based on these outcomes, the following solutions can be recommended:

- Provide continuous finance training: Provide managers with tools to analyse finance (Assery, 2016).
- Make use of advanced budgeting methods: Implementing rolling forecasts to respond to fluctuations in patient flow (Powell, 2023).
- Optimize cost management: Assess cost-effectiveness in equipment acquisitions or leasing (Whiteman, 2020).
- Improve cash flow management: Better practices and use cash flow forecast tools to forecast and manage cash flow issues (Bright & Li, 2017).
- Income diversification: Reduce overreliance on traditional methods by diversifying to newer products (Powell, 2023).
- Boost digital marketing: Strengthen online strategies to achieve greater patient acquisition and revenues (Samuel, 2024).

Future work can examine the impact of certain computer programs and tools on dental finance management in dental clinics, most notably in enabling better budgeting, forecasting, and cash flow management. Research can also examine finance aspects related to embracing more sophisticated analytical functionality in management in dental clinics. Research can further examine methods through which dental clinics can utilize membership schemes to obtain stable recurring revenues.

5.3 Limitations and Future Research

The drawbacks to this work are that it is limited in sample size and is only in dental clinics. Also, was very difficult to meet in person professionals for interview due to lack of time of them to answer the questions. Future research can consider the impact of digital tools in money management and discuss methods by which membership schemes can achieve stable recurring revenues.

5.4 Final Conclusion

The current work in this study provides essential recommendations to dental clinics to considerably boost finance management practices towards greater viability and sustainability. This work emphasizes essential areas to be developed in finance training, embracing budgeting practices that can adapt changing market conditions and in accordance with dynamic needs and diversifying sources of revenues. If these recommendations are implemented by dental managers and owners, finance practices can be better managed to realize viability and profitability in the future. This work goes beyond theoretical standards and is helpful to dental professionals, managers, and owners by providing direct recommendations to perform better in finance management to realize overall practice success.

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