

REVIEW ARTICLE

Management Responsibilities Among Dietitians: What is the Level of Job Satisfaction and Skills Involved? A Scoping Review

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ABSTRACT

The role of dietitians involves not solely on clinical responsibilities. Additionally, operation management responsibilities such as managing human labor, financial resources, and problem solver are the tasks that a dietitian look after. It is reported to be challenging and stressful and could affect job satisfaction levels in the working environment. This scoping review aimed to explore the job satisfaction level and skills needed among dietitians to assume management responsibilities at their workplace. This study was completed using PRISMA guidelines. Online databases (Scopus and Science Direct) were used to identify papers published from 2000 to 2019. We selected English publications from the United States, Australia, South Africa, Korea, and the United Kingdom that used job satisfaction as a primary or secondary outcome. Studies were included if they addressed dietitians who were involved in clinical work, food service, and management in their dietetic practices. Findings on existing skills, including managerial skills, communication, teamwork, and time management among dietitians with management responsibilities, have helped to enhance the job satisfaction and work quality of the dietetic profession. The findings would be useful for human resource management in the organisation, preserving the professional identity of a dietitian.

Keywords: Dietitian, Job Satisfaction, Human Resource Management, Skills

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INTRODUCTION

The dietetics career is the integration and application of concepts derived from the sciences of food, nutrition, management, communication, biological, physiological, behavioural, and social sciences in order to attain and keep the highest quality of human health (1). In Europe, management dietitians are often classified into one of the many duties related to foodservice management. In contrast, clinical dietitians may conduct management duties that are quite different from those in the foodservice industry (2). A study among Malaysian dietitians in private settings was reported to be moderately satisfied with their job (3). However, it reveals that dietitians were less satisfied with the promotion. A dietitian with management responsibilities was reported to be challenging and give stressful circumstances, even though high expectations were received in some workplace (4,5). Another example reported as a potential cause of dissatisfaction was when a dietitian is involved in operating conditions such as policies, regulations, procedures, and perceived red tape (5).

It has been said that there is no real definition of job satisfaction. The definition given by Hoppock is among the most commonly cited definitions describing job satisfaction as any article. A combination of physiological, environmental, and psychological conditions are factors that ultimately cause satisfaction on their job (6). According to this perspective, while job satisfaction is affected by many external factors, there is still something internal that has to do with the feeling of the employee. A definition by Spector (7), which is one of the most cited in articles, explained that job satisfaction is related to what people feel about their work and how different things affect them. Besides, job satisfaction is a dynamic and multifaceted term that can mean different things to different people, which is more of an attitude, and the internal state of a person (8). Job satisfaction is, therefore, the critical element for achieving particular objectives that contribute to a sense of fulfilment (9). It is generally considered to be directly related to both profitability and personal wellbeing.

According to several studies, the role of dietitians is now rising, evolving, and expanding as they play an essential key role not only in clinical management but also in operations, especially when involving food service management, private practices, and research (10,11). Besides, a dietitian will also face several numbers of administrative practices similar to the commerce

organisations. The practices are the presence of issues relating to hiring, pay allocation, workplace movements, decision-making, career planning, development of human resources, legal compliance, and task planning (12). These may require dietitians to acquire additional skills in managing foodservice operations such as managerial, communication, and management skills (13,14). These soft skills are considered a strategic element in any industrial organisation and have an impact on the professional career of employees (15).

On the other hand, in Malaysia, the majority of the dietitians, including clinical dietitians, are also involved in the hospital's food service management duties. Administrative tasks include menu development, budgeting, purchasing, production, managing food service staff such as chefs, dietary aides, and delivery staff and also handling reports and complaints from the clients. Similar findings were shared by Hussain (13) regarding management tasks done by dietitians in the foodservice field, which is a multinational operation that is often designated as a transforming input system. Human labor, skills, materials, and facilities to outputs, including meal, customer satisfaction, and financial accountability, were the responsibilities executed by the dietitians. In other words, in the past decade, the dietetic sector has doubled in size (16). In the literature review by Sauer et al., (5), over the past few decades, factors associated with job satisfaction among dietitians include the job scopes, general workforce, and co-workers. However, the skills involved among dietitians with management responsibilities, which could improve their job satisfaction level has not yet been clarified. Therefore, this review has examined the job satisfaction level over the past 19 years and skills needed among dietitians who have management responsibilities at their workplace

METHODS

The analysis of the Preferred Reporting Items for Systematic reviews and Meta-Analyses (PRISMA) was used as a tool for reviewing the related articles. This scoping review involves empirical studies on the topic published between the year 2000 to 2019 in the database of Scopus and Science Direct. The methodology is including the following statements: the formulation of a research question (i), identifying search strategies (ii), outlining the inclusion and exclusion criteria (iii), extracting and summarising of the relevant studies for analysis (iv), and picture conclusions, including the implications for future practice and research (v).

Identify the research question

The objective of this scoping review was to identify the level of job satisfaction and skills needed for a dietitian who has management responsibilities at their workplace. The research questions were (i) What is the job satisfaction's level among dietitians?, and (ii) What are the skills needed for dietitians who have management

responsibilities at their workplace?

Search strategy and inclusion criteria

Throughout this period, published articles from competency-based approach to managing tasks and job satisfaction among dietitians have increased. A search was carried out for English articles published between the year 2000 to 2019, in databases including Scopus and Science Direct, (Table I), using the keywords presented in Table II. For the document selection, it consisted of three phases. Phase 1 was the identification, of which the keywords used were (dieti*ians OR "Registered dietitian*" OR "clinical dietitian*" OR "clinical dietitian manager*") AND ("job satisfaction" OR "career satisfaction") AND (competence OR competencies OR skills OR abilities) AND management. The asterisk (*) symbol was used for truncation during database searches.

Table I: Scoping review of the literature

Scopus	Science Direct
38	47

Table II: Search terms

Dietitians	Job satisfaction	Skills	Responsibilities	Exclusion criteria
Dietitians Registered Dietitians Clinical Dietitians Clinical dietitian manager	Job satisfaction Career satisfaction	Competence Competencies Skills Abilities	Management	NOT dietitians

Search outcome and exclusion criteria

In Phase 2, the screening phase, the selection criteria used were determined. In order to find suitable and related articles in the scoping review process, the tasks or skills related to human resource management done by the dietitians were the main criteria for the selection in this review. Only a few studies were found dealing with the topics of job satisfaction and the psychological aspects of working situations. For the phase 3, through the eligibility process, the articles that did not meet the inclusion criteria were excluded, whereby the selected articles were reviewed. Any duplicate articles in the database were removed, and no study designs were excluded. Only articles published in English and provided the full text of articles were included in this study. The extracted articles were assessed to determine the eligibility of the article for its inclusion in the final review. About eight quantitative study designs were identified, followed by seven qualitative studies that involved an interview and focus group discussion.

Analysis

The remaining articles were evaluated for data extraction and analysis. The data were extracted by reading the abstracts to define relevant themes and then followed by the full articles in-depth. The codes were generated using a descriptive coding process. The next stage involved searching for themes by combining the different codes within the data, which were similar or considered in the

same aspect. All initial codes relevant to the question of research were incorporated into a theme. The thematic component analysis was used to describe the job satisfaction and competencies related to management among dietitians. The codes were categorised into four themes: (1) job satisfaction measures, (2) managerial skills, communication, (3) teamwork, and (4) time management. For data management and analysis procedures, the qualitative analysis software ATLAS.ti was used. The principal codes were used to create a summary for the review. After the primary analysis, the data was integrated into a narrative format for the results.

RESULTS

Study selection

Searches of electronic databases returned 85 records. Following removal of articles published in the year 2009 and below, non-English article, published in the form of an article (review), conference proceeding, book, book chapter, and report, 53 records remained for title/abstract screening. Twenty-one articles were excluded at the title/abstract screening stage, and three articles were removed due to duplication. The full text of 29 articles was assessed for inclusion, and 15 articles were included in the final data set. Fig 1 show a flow chart describing the study selection process.

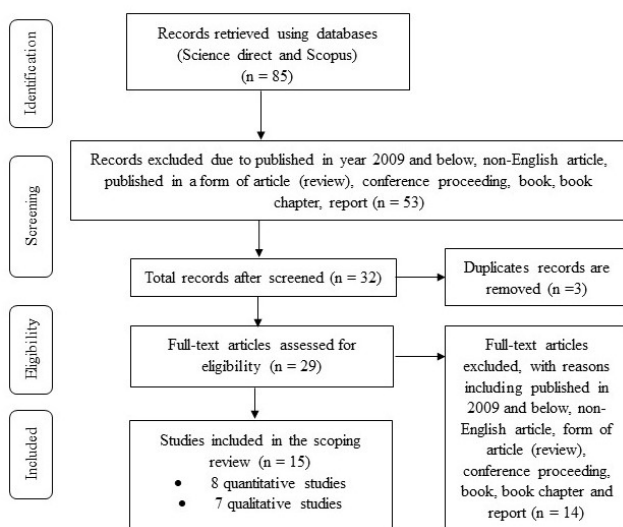


Figure 1: Flow chart describing the study selection process

Study characteristics

The number of respondents in these studies ranged from 10 to 1668, which involved dietitians in clinical practices, community service, and teaching. Many respondents were recruited as registered dietitians working in clinical settings. A self-report questionnaire, online survey, telephone interview, in-depth and semi-structured interview, and also focus group discussions were included in research methods.

Study location

The country in which the highest number of studies was

conducted was in the United States, with nine studies, followed by Australia with three studies. The rest was undertaken in other countries, including South Africa (1), United Kingdom (1), and Korea (1) (Table III).

Job satisfaction measures

The data from the 15 included articles were charted according to the author(s), publication year, country, the samples, and outcomes in the studies. The data relevant to the aims of this scoping review are presented in Table III.

In this review, Sauer, Canter, & Shanklin (5), identified the management dietitians had an overall satisfaction score of 153.75 ± 6.68 , which represent satisfaction towards the job. The score was higher than the study done by Spector (7) (138.00 ± 21.60), which involved service staffs from various professions in the United States from both private and public employees. Sauer (5) had assessed nine facets of job satisfaction among dietitians who manage personnel and finances. A positive association was found between professional involvement and job satisfaction (18). The dietitians who were involved in human resource management and finance were having moderately high career satisfaction even though they showed little intention to leave their profession (6). The interaction with client and co-workers, recognition for expert and helper roles, and involvement in disease prevention also were reported to have positively related to satisfaction (19,26).

Managerial skills

Managerial skills were identified in six studies (2,20,23,27,28,30). Recruitment selection, evaluation, and development in-service and professional programs for staff will be other responsibilities that need to be done by the dietitians (28). For a dietitian to stay efficient, they must familiarise themselves with new principles, find new ways to handle staff and assets, as these could sustain positive satisfaction ratings among patients at their organisations (20).

Communication

A total of four studies have described the importance of communication competencies among dietitians (19,25,30,31). The dietitians should enhance communication methods, including verbal, non-verbal, body language, and written, in order to acquire, interpret, and understanding people's needs (31). These values would help the dietitians to increase their confidence level when dealing with others (31). The presence of excellent communication will enable the dietitians to improve the relationship with others and exhibit effective teamwork (25). Misunderstanding and lack of confidence when communicating are challenges reported among dietetic practitioners (19).

Time management

Time management is a desirable skill to be enhanced

Table III: Job satisfaction and management practices studies in the review

Year	Author and country	Subjects	Method	Findings
2000	(17) United States	Dietitians of the Clinical Nutrition Management, n=348	Questionnaire	Clinical nutrition managers are empowered and able to assume leadership roles in today's health care settings. High empowerment scores may be enhanced by asserting more pressure to gain greater access to sources of power which are support, information, resources, and opportunities
2002	(18) Utah, United States	Registered dietitians, n=2600	Questionnaire	A positive relationship between markers of professional involvement and employer support was found. Professional involvement included six characteristics which are having had a mentor, being a mentor, self-assessed high professional involvement, full-time employment, high annual income, and increased hours worked per week.
2004	(19) New York, United States	Dietitians and nutrition practitioners, n=24	Interviews	Practice satisfactions related to positive interactions and measurable outcomes of work with clients and co-workers, recognition for expert and helper roles, and also involvement in disease prevention. There are challenges reported among dietetics practitioners, including misunderstanding by co-workers and clients, lack of confidence and skills in outcomes evaluation, communication, and teamwork.
2005	(20) Texas, United States	Clinical nutrition managers (CNM), n=1668	Questionnaire	All listed management responsibilities were showed prominent among the CNM. To stay efficient as a CNM, they must adapt to new standards, find new ways to manage staff and resources, and also maintain positive patient satisfaction ratings. Improvement in knowledge, confidence, and skills related to management is essential to be used when performing management tasks.
2006	(21) United States	Registered dietitians (RDs), n=440	Questionnaire (online)	RDs appear to be interested in obtaining advanced practice competency and enrolling in professional doctorate degrees in clinical nutrition, in which employers were interested in hiring RDs with a professional doctorate. However, their knowledge and skills needed to be enhanced.
2007	(22) South Africa	Community service dietitians (CSD), n=15	Focus group discussions	The majority of the subjects were neutral to very happy about the placement process. However, there were lacking communication, teamwork, and a lack of understanding of CSDs' role by others.
2010	(5) Manhattan, United States	Registered dietitians with management responsibilities, n=851	Questionnaire (online)	Management dietitians in this study had an overall satisfaction score higher than the study reported by Spector for multiple occupations of both private and public employers in the United States. Lower satisfaction scores were reported significantly for pay, contingent rewards and nature of the work whereby, operating conditions such as policies, procedures, rules and perceived red tape, was a possible source of dissatisfaction.
2011	(23) Australia	Queensland clinical dietitians, n=28	Semi-structured telephone and face-to-face interviews	Career progression, flexibility in work, the collegial and supportive culture of the workplace, and job security were identified as contributing factors to recruitment, job satisfaction, and retention. The subjects reported that the management style and leadership of the clinician's immediate manager, such as the Department Director, would give impact their employment either positively or negatively. They were aspired to stay in the field of clinical with progress through specialising and moving into management or focussing on research.
2012	(2) Manhattan, United States	Registered dietitians with management responsibilities, n=851	Questionnaire (online)	Managers and clinical nutrition managers were significantly less satisfied with career success compared to district managers and directors. Similarly, clinical managers and managers were both significantly less satisfied than directors in terms of career advancement whereby, their tasks involving management responsibilities usually will include management of nutrition services, products, people, and financial resources.
2012	(24) United Kingdom	Registered dietitians (RDs) working in dietetics faculty at the universities, n=13	Semi-structured interviews.	Research involvement is fundamental to the practice of dietetics and dietetics faculty; hence knowledge, skills, and time management could increase the involvement of the RDs in the research.
2016	(25)Australia	Griffith University, Master's Nutrition and Dietetic Alumni, n=18	Semi-structured telephone interview	Competencies of Communication, teamwork, counseling, and specific disciplinary knowledge were rated as most relevant to effective practice. Career success and satisfaction were determined more by intrinsic factors, including helping people, being effective in job tasks, and being acknowledged as a specialist.
2016	(26) Australia	Dietitians from 11 NSW public hospitals, n=32	In-depth interviews	Five sources identified were the acquisition of knowledge, relationships with others, work culture (which included patients, peers, managers, or health workers such as nurses, doctors, and other allied health professionals), role clarity, and personal attributes. A great deal of satisfaction was reported when their team/patients recognised their contribution, understood their role, and also learning and gaining new knowledge.
2017	(27) Korea	Nutrition teachers and, n=94 and dietitian, n=46	Questionnaires	Work tasks that reported have high importance and performance are menu planning, purchase management, cooking and serving, facility management, sanitation management, human resource management, quality management, cost control and office management, and also jobs relating to administrative tasks in meal management. Job satisfaction levels of nutrition teachers were lower than the expected levels before they became nutrition teachers.
2017	(28) Chicago, United States	Clinical nutrition managers (CNMs), n=101	Questionnaire (online)	The study reported responsibilities for CNMs more important to be involved in, including budgeting in the future. Besides that, other responsibilities already have been done by the CNMs are hiring and evaluating staff, monitoring quality assurance, participating in interdisciplinary committees and councils, development in-service, and professional programs for staff.
2019	(29) United States	Registered dietitian nutritionist (RDN), n=29	Semi-structured interviews	High level of participation of RDN in research activities, which have factors that contribute to their success in research involvement, are having an available mentor, support from their workplace environment, and personal drive were integral to their success.

among dietitians (24). Time constraints prevent dietitians from doing research activities (32). Dietitians were inspired to stay in the clinical field and progress through specialisation and focussing on research (23). The research activities give benefits to dietitians to keep up to date on their knowledge and skills when doing the research (21,24).

Teamwork

Teamwork was rated as the most relevant to dietetics practice (26). Great satisfaction was reported when

dietitians understood their roles (26). Participating in interdisciplinary committees and councils that need a good relationship were reported responsibilities that have been done by dietitians (28). The availability of mentors, continuous networking, and supporting one another was essential to their success and satisfaction (18,20,28,32).

DISCUSSIONS

Satisfaction levels may have a definite relation to the

outcomes of work with clients and co-workers in a supportive culture of the workplace and recognition as experts in their field and helper roles (23). It shows that great recognition and understanding of their role would increase their level of satisfaction. According to Mislevy, Schiller, Wolf, & Finn (30), high empowerment scores may be improved by putting more significant pressure on more exposure to power sources like funding, information, resources, and opportunities. The involvement and recognition by others, such as when dealing with disease prevention, also give a positive interaction with job satisfaction (19). It will give opportunities for career progression, which would help the dietitians to feel secured with the job and will contribute to lower the intention to leave the profession (23). In dietetic practices, some dietitians choose to work in the field related to nutrition health programs, products, personnel, and resources. In contrast, some dietitians need to do both clinical and management duties at the same time. Thus, this could give a different level of satisfaction, whether high or low, towards the dietitians, which depends on their credibility to perform the tasks.

Health care professionals work in an environment with a high workload, which requires competent leadership and management skills. Time management behaviour is a method that contains aspects such as the goal setting, planning, administration, minimising time wasting and prioritising (34). However, poor time management skills may lead into several implications such as poor quality of work, missed deadlines, and negative adverse impacts on career path (35,36). Excellent time management allows dietitian to accomplish more tasks in a shorter period, which leads to lower their stress level, and leads to career success. Dietitians' career success is achieved due to their credibility and past performance, hard work, skills and abilities, and their networking with other professionals (5).

A registered dietitian nutritionist (RDN) has established skills or knowledge in dietary fields through new awareness, experience, and training (32,37). While engaging in management tasks, an individual should have several abilities on how to think creatively, how to make sound choices, and seek complex solutions. A dietitian needs to improve these skills in themselves, and such skills need to be acquired amongst workers when they hold the title of a manager. Continued evaluation of management competence in both hard and soft skills is significant. For those who have spent long periods in the field, they are more likely to have developed coping skills and strength. Getting a mentor early in a career and becoming a mentor to other dietetic professionals will enhance the professional engagement that helps a professional to stay up-to-date with information, develop skills and grow a career (18). This is why mentoring is one of the best practices that should be done among the dietitians. The senior dietitians can share their

experiences and knowledge with the junior dietitians, and this might help the dietitians to develop their skills in management, so that, they are more prepared to face the challenges in the future.

A previous study among nutritionists had found that teamwork, either with a mentor and colleagues or teams of practitioners, is described as the critical determinant of the development of skills among advanced nutritionists (31). Working in teams is more effective than working individually. However, teamwork could be challenging due to barriers, including team size, since the understanding of support is less sensible and creates a relational loss (38). According to Salas (39), the study has proposed five core components of effective teams, including team leadership, mutual performance monitoring, backup behaviour, adaptability, and team orientation. To improve the performances of the team members, the team members need to have trust and respect for each other (40). With the right teamwork environment, a high-performance work system can occur in the organisation, which helps the team members to develop the interprofessional relationship. Therefore, allowing shared decision making and promotes several benefits of teamwork will enhance staff knowledge, documentation, and communication (39).

It is believed that effective communication, either communicating with multidisciplinary team members, patients, or staff, is a crucial element in the dietetic profession. Moreover, there are individuals born into different generations would have different communication styles (41). There is a millennial group born between 1980 and 2000, who mostly have a connection with each other through communication technology (42). Thus, it may have contributed to their lack of soft skills in verbal communication. In the past, to get the full conversation, it is essential to have face-to-face communication. Right body language and facial expressions may deliver the correct information and better understanding (43). Those are from different cultures may assign very different meanings to non-verbal communication expressions, including, gesture and use of space (44). An imperfect communication skill often generates conflict and misunderstanding (44). Poor communication in the organisation may not only have significant adverse effects on patient outcomes, and quality of care (45), but it could affect job satisfaction (46) and stress (47).

Stress can also contribute to increased burnout and is characterised as depersonalisation syndrome, psychological distress, and a sense of low personal achievement (47). Stress can negatively affect the effectiveness of the profession, which may reduce concentration (48), and reflect negatively on decision-making capabilities (48). Although the effects of stress on health were well documented, stress can motivate people to reach their goals and lead to accomplish tasks

more efficiently. As dietitians, they should develop the ability to accept and learn from feedback, adaptability, and the ability to work well under pressure to ensure they have a strong work ethic, positive attitude, and self-confidence. Furthermore, dietitians can gain respect for their profession from other health-care colleagues if they behave professionally at the workplace.

Some dietitians may have the opportunity to practice management skills. While some of them want growth in their career, but the organisation may not provide sufficient opportunities for them. However, they might not be prepared for these management prospects and always find themselves suddenly transitioning into different roles when performing managerial responsibilities without any preparation (49). A comprehensive strategy that involves organisational strategies, such as creating a more supportive work environment, was recommended to be implemented as a prerequisite to the workforce development among the dietitians (50). Furthermore, the quality of supervision, acknowledgement for doing the job, warm feelings, and support from the top management have significant correlations with the intention to leave the job among hospital clinical allied health staff in a study done in New South Wales, Australia (51).

Concerning the outcomes of job satisfaction and management roles, future research will focus on the impact of reasonable job satisfaction and productivity in performing tasks. Besides that, factors determining whether emotion, including burnout and workload, could also be included in future research. A limitation of the current study is that only 15 studies were included in the job satisfaction and management responsibilities among dietitians, and this may be subjected to a biased opinion of past studies. Furthermore, only a few studies related to management responsibilities among the dietitians were available, and the job satisfaction measures used were quite different in these studies. Thus with these variabilities, a meta-analysis of the results of previous studies could not be achieved, and the relevance and generalizability of findings were also limited.

CONCLUSION

The findings of this analysis present evidence of a positive relationship between job satisfaction and soft skills related to management tasks, including managerial skills, communication, teamwork, and time management. A prepared dietitian with competencies for managerial tasks and workload, as well as establishing supportive and inspiring approaches of dietitians, especially those that involve human resource management, are essential to positively influence the job satisfaction level and work outcomes. These approaches may also increase dietitians' satisfaction and promote future dietitian career development. The management board in an organisation

has primarily responsible for implementing career paths to their employees. Fostering effective communication, and provide employee assistance programs such as training may have a direct impact on career satisfaction, motivation, and morale among the employees. Since this scoping review only highlights study outcomes from the western countries, it may not reflect the actual situation in the local context. Therefore, suggestions on future research to focus on Malaysian dietitians are recommended. Firstly, further research on factors that contribute to job performance among dietitians in Malaysia should be done in order to have a better understanding of job performance. Secondly, further qualitative research needs to be done as it provides an in-depth analysis of competencies for dietitians to have when they are engaged in management tasks.

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