Nephrology nurses’ views in giving a dietary recommendation for dialysis patients: An interview study

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Abstract

Background: Nutrition in dialysis patients plays an essential role in their life. Diet in dialysis patients are catered individually and applied according to the situation of the patients. A dietary recommendation is vital to dialysis patients, and nephrology nurses help patients understand the reasoning behind the dietary restrictions enforced.

Objective: This paper aimed to explore nephrology nurses’ views in giving dietary recommendations for dialysis patients.

Methods: In this descriptive qualitative study, one focus group discussion (n = eight nurses) and four individual interviews in one Renal Centre in Brunei Darussalam was conducted through purposive sampling. This interview took place between October 2020 and December 2020.

Results: Three major themes were identified: (1) Approaches in giving dietary information, (2) Getting patients to follow a diet plan, and (3) Negotiating with patients.

Conclusion: The importance of nephrology nurses in improving patient care, particularly in providing dietary recommendations to dialysis patients, cannot be overstated. They adopted different approaches, including negotiating with patients and using available resources to ensure that patients followed the dietary recommendations. However, they believe their current method and strategy for offering dietary recommendations to dialysis patients could be improved.

Keywords
focus groups; nephrology; diet; renal dialysis; nutritional status; nursing; Brunei

Giving dietary recommendations to patients is part of many tasks provided by nurses as part of their responsibility as professional healthcare providers. Knowledge and good clinical reasoning are key ingredients in caring for dialysis patients. As dialysis patients, diet restrictions are part and parcel of their new lifestyle. It is essential for them to comply with the restrictions set by their doctors as it may promote better quality and prolong the life expectancy of the patients. This was suggested by Dabrowska Bender et al. (2018) in their study, where they found that dialysis and diet play a significant role in patients’ survival rates. However, Murali et al. (2019) emphasise that non-adherence is common in patients with chronic diseases, especially dialysis patients and failing to adhere can worsen health outcomes.

Advocating for patients and carers is a significant task for the nurses working in the Renal Department besides giving them support through their illness. In Brunei Darussalam, patients referred from other health care are increasing yearly, and people coming for dialysis are also growing. The Renal Department stated an increase of approximately 40 per cent of patients admitted under the renal unit each year (Ministry of Health, 2019). The conventional dialysis performed in Brunei Darussalam is undertaken in four major hospitals in each district and two sub-units in Bandar Seri Begawan, namely Rimba and Kiarong dialysis centre.

As a health care provider, educating patients is a daily duty besides maintaining patients’ safety and well-being. Everyday conversation indirectly educates patients

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Regarding their diet and fluid restrictions and how following the diet significantly increases their quality of life. Mihai et al. (2018) indicated that the relationship between diet and kidney disease is interconnected; meanwhile, in their research, Dabrowska Bender et al. (2018) said evidence suggests that dialysis and diet play a crucial role in patient survival rate. However, Freedman (2016) and Meule and Vögele (2013) argue that food choices and eating behaviour are also the influence factors besides the culture and social practice, which determines the ability of patients to manage their diet.

The majority of the literature reviewed is devoted to dietitian advice for patients, with an emphasis on the scope of work of dietitians and physicians. This contrasts with the notion that nurses spend more time with patients and provide follow-up information during dialysis. However, no concrete food advice or standard responses from nephrology nurses have been established. Thus, the study aimed to explore nurses’ views in giving dietary recommendations to dialysis patients.

Methods

Study Design
A qualitative descriptive study design was undertaken as it was the most appropriate in addressing the research questions. In addition, it allows the voices of nurses in Brunei to be heard, thereby creating a real opportunity to explore nurses’ views in giving dietary recommendations for dialysis patients in Brunei Darussalam.

Study Participants
The inclusion criterion was that the nephrology nurses had to have at least two years of working experience as registered staff nurses, posted more than one unit, and experienced delegating tasks to other nurses. The nurses were recruited through the gatekeeper, who has given eligible nurses access to the inclusion and exclusion criteria. The gatekeeper also helps in negotiating the interview location, date, and time. A single recruitment briefing was held whereby a written participants’ recruitment sheet with information about the study was given to 20 nurses who had agreed to participate. However, due to the participants’ hectic schedule, which makes it impossible to do interviews in the renal setting, only 12 nurses were interviewed. The majority of the participants were women with mean ages are between 30-54 and men between the ages of 20 and 40. The participants’ average work experience was between 2-20 years of service. All sessions were conducted in a private meeting room within the Dialysis Unit.

Data Collection
Four nurses were interviewed through individual interviews, and eight nurses were interviewed through focus group discussion, fully audio-recorded and lasted from 30-45 minutes per session. The purpose of the one-on-one interview is to accommodate participants who are uncomfortable voicing their opinions in a group setting. The interview guide was pre-tested with no changes made. It is important to note that the focus group interview guide was slightly modified, especially when focus group discussion is looking for collective perspectives. There were a total of six semi-structured and open-ended questions. Two audio devices were used as backups, and field notes were recorded during and after each interview. The interview lasts an average of 45 minutes.

All interviews took place in the dialysis unit and lasted from October to December 2020. The interviews started with the question: What do you think about nurses giving dietary recommendations to dialysis patients? Depending on the interview, further follow-up questions were used for clarification when needed, such as ‘Can you explain more by offering some examples of what would be the best way to address such challenges?’ The data saturation was discussed, and multiple meetings with the research team members were held to develop the results during data analysis.

Data Analysis
All individual interviews and focus group discussions were transcribed verbatim and analysed using six phases of the thematic process described by Braun and Clarke (2021). The first phase involved the research team reading and re-reading to become familiar with its content. In contrast, the second phase entailed coding the transcripts and collating all relevant data extracts for further stages of analysis. The third phase prompted the research team to examine the codes and collected data to establish meaningful broader patterns of potential themes. Phase four involved comparing the themes to the transcripts to ensure they presented a credible story about the data and answered the research question. The fifth phase involved doing a detailed analysis of each theme and defining its scope and focus. Finally, in phase six, the research team combined the analytic narrative and data extracts and contextualised the results in the existing literature. It is critical to highlight that all phases were followed recursively, whereby we moved back and forth between phases. These phases were viewed as a roadmap for analysis, facilitating a complete and in-depth engagement with the data analysis. English words or phrases were used when translating from Malay to English since the source words have an English translation. There were no complicated words or phrases to translate or interpret.

Trustworthiness
This study established the four aspects of qualitative research trustworthiness: credibility, dependability, conformability, and transferability (Polit & Beck, 2018). Semi-structured open-ended questions guided the interviews. This encouraged the nurses to express their opinions as fully as possible. The interview was structured to encourage conversation and asks for clarification of the narratives to achieve credibility. Furthermore, the analysis process was conducted in a reflective dialogue between the
The researchers conducted the data analysis; the recordings were transcribed verbatim, and quotes from the nurses are presented in the findings for conformability. The findings might be transferred to inform other nurses’ understandings of the perceived nurses’ role in giving recommended dietary information, concerns over the compliance and patients’ readiness to adhere to the diet restriction. However, the individual reader must assess the suitability of transferring the study results.

Ethical Considerations
We obtained ethics approval from the Faculty and Ministry of Health Research Ethics Committees (Reference: UBD/PAPRSB/HREC/2020/64). A participant information sheet that included detailed information about the study was presented. Participation is voluntary, and informed consent was obtained before every participant’s interview. Any participants can withdraw participation at any point during the study. All data were treated confidentially.

Results
The analysis shows that three major themes were identified from the data, and the findings will be illustrated with participant’s quotes.

Approaches in giving dietary information
Giving information is a fundamental role in many nursing roles. The participants reported that nurses must possess good communication skills and sound knowledge to disseminate information effectively. To make the participants feel empowered and confident in giving necessary information, knowledge and experiences are required. When providing dietary recommendations, the majority of the participants described two critical approaches used by nurses. The first is through a proactive approach to information sharing. According to the participants, several nurses reacted to the patient’s inquiry without providing a more detailed explanation. When one of the participants was asked about it, she replied:

Many patients ask what they can eat or what they should do to drink on a hot day. Is it ok to drink soda or fizzy drinks or, worst, coconut water? I am so overwhelmed with these questions that sometimes I throw the info to yes and no answer only (Nurse 2, FGD 2)

However, another participant stated that:

I love to explain to patients and answer their doubts. I would explain when I was preparing the dialysis set while sitting on the treatment chair and giving them their treatment (Nurse 7, FGD 2)

When patients do not understand the information provided by other health care professionals, the second strategy is employed. The vast majority of participants indicated that their patients would continue to press them to share the information they receive from their physician or dietician. One nurse reflected her views:

If patients could not grasp the dietician or physician’s information, they would contact us again to ask the nurses more at ease. We will gladly explain any material they do not grasp (Nurse 5, 10, FGD 2)

When asked the source of the given dietary recommendation, one of the participants responded:

The majority of the information we receive comes from our experience as nephrology nurses. Some of it comes from the dietician or physician during patients’ monthly reviews; but, if we are unsure, we Google it (Nurse 5, FGD 2)

Getting patients to follow a diet plan
According to the participants, nephrology nurses must be reminded of the value of explaining dietary information to patients. With this understanding, nurses can provide patients with accurate nutrition information. However, it is challenging to get patients to accept and follow the diet recommendations because they have their own set of mentality and attitudes. The majority of the participants feel that one of the issues they confront from time to time is disregarding diet information. As one of the participants put it:

It appears that dialysis patients need to be reminded about diet restrictions several times, and although some may listen, others will not. It makes me feel despondent and dissatisfied, and I am sure I would reply by reminding them of food they can or cannot consume (Nurse 4, FFI 2)

When the participants insist on the patient adhering to the restrictions, some may openly refuse to listen to the recommendations, leaving the participants feeling powerless. The participant went on to say:

I once cared for a patient who had a fluid overload and a moon face, yet she continued to eat and drink more during dialysis. When I came to counsel her on the diet recommendation, she just responded, “Let me enjoy my dinner because I do not know when it would be my final meal” (Nurse 15, FF 1)

The majority of the participants verbalised that patients’ attitudes might make nurses feel helpless and hopeless at times. Nevertheless, the participants believed they had been doing an excellent job in assisting the patient. However, they speculated that some patients still struggle to manage and control their dietary intake.

Negotiating with patients
The majority of the participants reflected on the art of negotiation they engaged in with their patients regularly. While the patient’s blood routine may be discussed, most of the conversation is about dealing with food cravings. As described by the participant in various cases:
If the patient has a craving, I will allow them to eat whatever they want in little amounts. I will tell them, however, that if they wish to eat the restricted fruit, they should do so a few hours before their dialysis treatment, not the day before or on the weekend, because the potassium levels accumulated during this period can harm their heart (Nurse 1, FF 3).

When a patient asks if they can eat tapioca starch, I tell them that they can; however, because the key ingredient in tapioca starch is water, the patient should consider their fluid intake. Furthermore, since dialysis patients’ fluid intake is generally restricted, they should consider reducing additional fluid throughout the day until they get their dialysis (Nurse 9, FGD 2).

According to the participants, empowering patients with the knowledge necessary to manage their cravings can make them feel more independent and confident in managing their food and hydration consumption. This, in turn, assists nurses in gaining the patients’ confidence and trust to assist them in receiving their treatment. Through negotiation, participants established that patients would feel more comfortable asking questions and providing more candid feedback. Additionally, it may facilitate the nurse’s workflow, and patients may experience increased emotional and psychological well-being while undergoing dialysis. The participant elaborated:

When you cannot control what your patients eat or drink, it is frustrating. Seeing others who refuse to comply makes me want to figure out how to work around their eating habits. At first, the patient will be hesitant and irritated, but I have ways of negotiating and convincing the patient to do what I say (Nurse 9, FGD 2).

Despite this, the participant believes that it is still up to the patient to follow the nurses’ instructions. For the majority of them, there is a meaningful sense of relief when patients demonstrate a greater willingness to conform to recommended diets. However, it is disappointing when patients inevitably end up in intensive care units as a result of their dietary practices.

Discussion

The first theme of the findings indicates that different patient approaches can be positively received or the opposite. In dialysis patients, diet restriction is imposed throughout their lifetime (Efe & Kocaöz, 2015). However, diet restriction is not easy for anyone to adhere especially for dialysis patients. As a result, the study participants would have to think of new ways to help patients. Some of them would be proactive in their advice, while others would provide material to answer patients’ concerns without explanation. Health professionals’ ability to deliver correct, realistic, and reliable nutritional advice to patients is limited (DiMaria-Ghali et al., 2014). Thus, in this study, the participants describe that to be a practical nephrology nurse, one must absorb as much information and skills as possible about their unit. In addition, they must avoid becoming sedentary in their function as primary healthcare professionals.

Although the participants agreed that knowledge alone does not change health outcomes for patients, it is an integral part of educating patients, so they understood the information presented to them. Patients might not appreciate the relevance of this information and may not recognise the most crucial aspect of the information given. They may believe the information but may choose not to act on it. Halle et al. (2020) advised that dietary and fluid restriction adherence is crucial for treatment to be successful, and failure to follow the adherence may lead to unwanted complications. This is also supported by Ozen et al. (2019) that non-adherence and social support status are related. However, some studies, for example, Beto et al. (2016), argue that understanding the information as dialysis patients and acknowledging the importance of adherence is relatively related to the level of education of the patients and the level of nurses in giving information. However, this was stated by Yangoz et al. (2021) in their research, stating that having a higher level of education does not necessarily increase patient adherence.

Nephrology nurse employed different approaches in giving information to patients. In this study, the participants described that irrespective of whether the patient accepts it, the nurse has a moral obligation to use their technical knowledge to overcome any obstacles they meet while approaching patients. Furthermore, a study by Miyata et al. (2018) has shown that many patients can cope with their dialysis treatment and understand more if they talk more to their healthcare staff. Patients’ autonomy and adherence to dietary limitations can be increased by assisting them in understanding their conditions and diet restrictions (Arrieta Valero, 2019).

Patients may find it difficult and time-consuming to adhere to their diet (Tirfie et al., 2020). Therefore, to bring about a positive impact, the nurses must have various ways to handle the situations. Feeling helpless and frustrated is always in the nephrology nurse’s heart whenever the patients are not compliant with the recommended dietary. The participants in the study are keen to provide information regarding the diet. However, given some patients’ unfavourable reactions, they also feel that it can be futile to persuade them on the notion that diet restriction is a necessary component of their new dialysis lifestyle.

Meanwhile, reflecting on the second theme, several participants shared stories where patients might adhere to their diet restrictions at the beginning of their treatment but, along the way, would lose interest and resume consuming prohibited foods and beverages (Hong et al., 2017). This is not due to the participants’ ineptness but rather internal factors leading to non-adherence. The participants recognised that some patients were well aware of their consumption’s effects, such as fluid overload and moon face, but they chose to disregard this consequence. The participants viewed that patients only see their imminent death caused by this illness and prefer to enjoy the remainder of their lives with the barred items. Thus, it is
essential that nurses continue to encourage patients to be optimistic and trust their healthcare professionals (Birkhäuser et al., 2017). This will assist the patient in deflecting negative and powerless thoughts, which will impact the patient’s treatment and adherence. At the same time, the participants agreed that consistency is essential since it boosts morale and indicates solidarity and support for patients’ needs. It is hoped that the patient will cooperate if they are reminded regularly of the dietary recommendations. Furthermore, there is also a need to strengthen the nurses’ nutrition knowledge. Most health professions training programs do not include a comprehensive understanding of nutrition and its application to healthcare. However, healthy nutrition has a significant positive impact on health and well-being (Munuo et al., 2016).

Drawing on the third theme, the participants expressed concerns regarding the effectiveness of their negotiation strategy while dealing with patients. Negotiation generally transpires between nurses and patients, with empathy as one of the most critical aspects of healthcare systems, including in negotiations with patients (Kerasidou et al., 2020). It leads to more success in getting patients to accept the adherence. The negotiation strategy is also one of the central elements that need to be highlighted when giving information (Berggren et al., 2020). At the same time, the participants expressed concern over the effectiveness of the recommendation as patients tend to follow what they want instead of what they need. This challenge has been the most frequently faced by nurses in previous research.

Dabrowska Bender et al. (2018) contended that healthcare professionals and patients often encounter challenges in their interactions due to many different cultures and education systems. In this study, the participants are prepared to go the extra mile to ensure that the patients comprehend the information they are being provided with. Most of them find it rewarding when patients follow the food restriction, which is evident in their monthly follow-up. Some participants, however, viewed that patients just nodded to what the doctors had explained. Nonetheless, most participants observed that patients do not always understand what they are being told, much to the dismay of the participants and that eventually, the patients will ask the same questions to the nurses. Thus healthcare professionals must identify the barriers that hinder patients from adhering to their treatment plans and empower them with the tools they need to make the necessary changes to their lifestyles (Chan et al., 2012).

This paper contributes to the growing emphasis on the need of providing patients with information. Increasing patient self-esteem may lead to them valuing themselves and caring more about adherence. However, while providing dietary recommendations, language is an issue that must be taken into account to ensure patient understanding. Meanwhile, the implications of this study for nursing practice highlight nurses’ efforts to improve the critical role of encouraging dialysis patients to take adherence more seriously, which can be accomplished by training and supervising nurses to deliver dietary information to dialysis patients. Meanwhile, at least the presence of one family member of the patient during the delivery of dietary information may improve the patient’s understanding and adherence in the home setting.

Conclusion

Dialysis patients rely on nephrology nurses for many aspects of their health treatment, including dietary recommendations. Nurses can use their knowledge to improve patient care and foster a strong bond between patients and nurses. While diet and restriction adherence can be arduous, patients can be empowered to comprehend and adhere to dietary recommendations by communicating and delivering correct information. One critical characteristic that nephrology nurses should embrace is a positive attitude toward patient care, particularly when giving a dietary recommendation for dialysis patients.

Declaration of Conflicting Interest

The authors declare no conflict of interest.

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Authors’ Contributions

All authors have equal contributions in this study started from the proposal, data collection, data analysis, final report, and development of the manuscript.

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Data Availability Statement

The data that support the findings of this study are available from the corresponding author upon reasonable request.

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