Qualitative exploration of the experiences of renal dietitians and how they help patients with end stage kidney disease to understand the renal diet

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Methods: Semi-structured interviews based on Sensemaking theory were conducted with renal dietitians (n=27) working in Australia and New Zealand from a range of metropolitan, regional and remote areas.

Results: Five major themes across two categories were derived from the data. The renal dietitians in this study experienced feelings of frustration, frequently worked in practice environments with limited or inadequate resources and perceived that establishing trust and demonstrating empathy were important to sense making. Renal dietitians helped patients make sense of and understand the diet by clarifying ambiguities and conflicting information; and simplifying complexity by using simple explanations, individualised advice and practical support. These strategies were considered critical to the renal diet sense making process.

Conclusions: The experience of providing renal diet advice to adults with end stage kidney disease was emotionally and professionally challenging. Alternative approaches to patient education may help dietitians to empower patients to better understand the renal diet. Further research exploring the experiences of learning about the renal diet from the patient and carer perspective would also help to inform future alternative approaches.

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education may help dietitians to empower patients to better understand the renal diet. Further research exploring the experiences of learning about the renal diet from the patient and carer perspective would also help inform future alternative approaches. **Keywords:** end stage kidney disease, qualitative research, renal diet, renal dietitian, treatment adherence.

**Introduction**

At least one in ten adults globally has Chronic Kidney Disease (CKD).\(^1\) Approximately 2% of patients with CKD will progress to end stage kidney disease (ESKD).\(^2\) Dietitians play a key role in educating patients with ESKD about adherence to their renal diet,\(^3\) which can help to slow disease progression,\(^4\) mitigate against complications and increase survival.\(^5,\,6\) However, the process of educating ESKD patients about their renal diet is complicated by the need to modify many nutrients simultaneously, as well as ongoing changes to the diet prescription over time. Other factors likely to negatively impact on a patient’s ability to comprehend and self-manage their diet include; the presence of cognitive impairment,\(^7,\,8\) inadequate health literacy,\(^9\) fatigue,\(^10\) and depression.\(^11\)

A recent review of 60 studies in adults with ESKD found that adherence to the renal diet was as low as 31.5%.\(^12\) Multiple factors contribute to non-adherence, and as identified by a systematic review of 46 qualitative studies, these may include that patients find the renal diet to be burdensome, challenging and overwhelming.\(^13\) This evidence primarily focuses on the patient and carer perspective, however and little is known from the perspective of the dietitians. The aims of this qualitative study therefore, were to (i) explore the experiences of renal dietitians
regarding the process of educating patients with ESKD and (ii) to describe the strategies they perceived to help patients understand the renal diet to support adherence.

Methods

Renal dietitians, working in all states and territories of Australia and New Zealand, were invited to participate in the study via professional dietetic and nephrology networks. This recruitment strategy was chosen to help ensure a diverse range of professional experiences among study participants from metropolitan, regional and remote areas. A purposive sample of renal dietitians (defined as individuals working predominantly with adults with kidney disease) who worked in these different geographical locations were approached via email by the main author (an experienced renal dietitian).

This study assumed a relativist ontological position, and utilised the ‘Sensemaking’ theoretical framework\textsuperscript{14} and methodology to construct the semi-structured interview guide (Table 1). The questions used in the interview guide are considered core questions in Sensemaking theory\textsuperscript{14} and the only adaptations to these questions were the insertion of reference to the renal diet. The Sensemaking theoretical framework uses dialogue to explore the expertise that individuals develop over time when they encounter situations or information that does not ‘make sense’. Thus, Sensemaking theory was used to explore both the experiences of dietitians, and the strategies they use to help patients comprehend and apply renal diet advice.

The semi-structured interviews lasted 30-60 minutes and were conducted in person or via the phone by the main author. Interviews were audiotaped and transcribed verbatim for analysis. No repeat interviews were undertaken. Participant checking of the transcripts was invited but no
participant wished to do so. Field notes describing participant demographics, practice location, staffing ratios, level of dietetic experience, and the general context of the renal dietitian role were obtained from all participants and recorded during the interviews. Participant recruitment ceased when no new themes or concepts were described by dietitians in subsequent interviews. This is in keeping with the literature relating to qualitative research that indicates theoretical data saturation is reached when interviews contain abundant and repeated accounts of the same phenomenon of interest. The distribution of themes across characteristics such as level of dietetic experience and geographic location were achieved using discussion and a consensus approach.

This study was approved by the joint Human Research Ethics Committee. All data was treated confidentially and to preserve anonymity, direct quotes are accompanied by limited demographic information, such as Dietitian participant number, and the geographic location of their practice (e.g. Metropolitan, Regional or Remote). Details of the study design and analysis are reported according to the COREQ guidelines for the reporting of qualitative research. Analysis of the transcripts was conducted using the Framework method. The initial step involved line by line coding of the transcripts by all authors, who formed their own initial codes. These codes were then compared and synthesized by all authors and refined to produce the final analytical framework. This framework was then applied to the transcripts and facilitated the identification of the main themes via an iterative discussion by all authors. This process was used to enhance study rigor and to ensure that the analysis reflected the full range and breadth of data. Illustrative quotes that best captured the essence of the main themes were identified by the main author and the final quotations included were agreed by all authors.

**Results**
Descriptive characteristics of the 27 renal dietitians interviewed in the study are shown in Table 2. Participants were predominantly female (92.5%), with a mean age of 43.1 years (range 27-59), and most had extensive dietetic and renal dietetic experience. Participants worked in a variety of geographic locations, and approximately half worked full time in nephrology and practiced in a metropolitan area. The case mix of patients seen by the study participants was dominated by those at the predialysis stage or individuals undertaking haemodialysis.

Analysis of the data yielded five themes across two categories: experiences of providing dietary advice and strategies perceived by dietitians to help patients understand the renal diet. These themes did not differ according to the geographical location of the dietitian.

Dietitian experiences of providing dietary advice

Frustration was the first of three major themes that emerged from the interviews about the experience of providing dietary advice to patients with ESKD. These frustrations were often related to the presence of cognitive impairment in patients with ESKD. For example, the scenario below was reiterated by many renal dietitians:

“I was asked to go back again and see the patient… he thought my explanation was absolutely wonderful but he just couldn’t remember any of it” (Dietitian 7, Metropolitan)

Other sources of frustration were the varying levels of patient motivation and engagement. Depression and dialysis related fatigue were perceived to be common and to negatively impact on adherence to the renal diet.
“I think he could take on the advice... but he just did not have the mental resilience or capacity to put anything into action...” (Dietitian 13, Metropolitan)

Participants were also frustrated with the structure of the health system and the types of dietary advice provided by other staff to their patients.

“I feel frustrated at the system and ... at other staff for the messages they have conveyed and you know that you may not see them (the patient) for months or years to correct that” (Dietitian 3, Metropolitan)

The second theme to emerge was that many dietitians work in clinical settings with limited or inadequate resources. Participants described resource constraints, such as inadequate funding to obtain interpreter services (when required), inadequate hours to service the number of patients referred, inadequate staff and a lack of appropriate resources/educational materials. Renal dietitians from all geographical locations described a lack of time as a key factor which negatively impacted on helping patients understand the renal diet.

“Lack of staffing interferes with the ability to review them regularly ...and see how they are going... so instead we are more reactive” (Dietitian 17, Regional)

“We don't have the staff ...and we are not able to meet the referrals” (Dietitian 27, Remote).

“There's never enough hours for the dietitians to do everything they need to... and how do you triage everyone when everyone is equally important or as needy” (Dietitian 6, Metropolitan)
The consequences of working with limited staff, time and resources were that renal dietitians described utilising social or chance encounters, in hospital waiting rooms or hallways, as informal opportunities for patient education and/or review. Follow up telehealth or phone reviews were perceived by several participants to be ‘cutting corners’, and detrimental to maintaining patient rapport.

Some participants reported that pictorial resources did not assist with renal diet sense making unless accompanied with education sessions. They also believed that there was a need to develop resources better suited to the patient’s health literacy levels. Some suggested that development of low literacy diet sheets were inhibited by public health system policy directives which prohibited the use of brand names or actual images of packaged foods.

“We wanted to steer the patients in the direction of appropriate low salt packaged foods but we couldn’t create a sheet that would be useful to them because of the policy”

(Dietitian 27, Remote)

Other participants highlighted the need for the provision of culturally sensitive practical dietary advice. They expressed a desire for additional cultural awareness training, to better understand how food is used in different cultures, especially during illness.

“Ethnic issues are important… some populations starve an illness and some feed an illness… so it would be nice… to try and understand” (Dietitian 7, Metropolitan)

Many of the participants believed that the diet sheets were primarily ‘Anglocentric’ and often contained meal plans not suited to their ethnically diverse patients.
The final theme about the renal dietitian’s experiences which emerged from the data included the need to establish trust and demonstrate empathy with their patients. Dietitians expressed a strong sense of empathy for the challenges faced by their patients, and felt guilty about the dietary restrictions required. “I feel like I am often taking away a lot… it made me feel sad” (Dietitian 13, Metropolitan)

To help facilitate a sense of trust, renal dietitians believed that it was important to genuinely acknowledge and understand the challenges imposed by the renal diet. “If you know their circumstances and what their goals are… you build that relationship with them… you feel there is a trust there… they are more likely to take your advice” (Dietitian 18, Metropolitan)

A collaborative relationship with patients was strongly desired, because it contributed to feelings of pride and professional satisfaction. “I get… satisfaction when I am able to help them put things (renal diet) in place… that assist them rather than just giving them a piece of paper” (Dietitian 13, Metropolitan)

Several renal dietitians specifically commented that positive descriptions by medical staff about the expertise or input of the renal dietitian generated a greater sense of trust and facilitated ‘sense making’ for patients. “If… doctors believe in you and they talk to the patient and say ‘I want you to sit down and talk with the dietitian and it is really important’… that makes a big difference” (Dietitian 1, Metropolitan)
Renal dietitians also felt that dietary advice from other health professionals was a potential barrier to patient empowerment, especially if the advice was inaccurate or incongruous with the education received from the dietitian.

Strategies perceived by dietitians to help patients understand the renal diet

Two major themes emerged regarding the strategies renal dietitians perceived useful when providing information about the renal diet and to empower patients with their dietary self-management. Firstly, renal dietitians believed that one of their main roles was to clarify ambiguous or contradictory diet information for patients, especially for common questions:

“I think the single biggest question is what can I eat?” (Dietitian 14, Metropolitan)

Renal dietitians believed that the confusing and unfamiliar language used to describe the renal diet (such as ‘low potassium” or “low electrolyte diet”) contributed to this ambiguity.

“People… don’t even know about potassium or phosphorus… it’s completely foreign to them.” (Dietitian 3, Metropolitan)

They also believed there were many sources of contradictory renal diet information, and this included commonly used renal diet education resources (diet sheets).

“I try and link potassium with plant based foods and phosphate with animal based foods and products” (D26, regional area)

Dietitians felt these resources contributed to patient’s confusion about what to eat. Dietitians also reported that patients often highlighted contradictions and inaccuracies within their own dietary education resources.
“Our diet sheets …aren’t even consistent… so even we (dietitians) can’t agree… no wonder patients, doctors and nurses are confused” (Dietitian 18, Metropolitan)

“There is a lot of confusion… probably brought about by… our resources… we have… one for salt …one for phosphate, one for diabetes. But if you go to the lower salt options… they are mostly high in phosphate” (Dietitian 23, Remote)

Participants also suggested that patients may receive conflicting advice from different health professionals.

“Inconsistency with different health professionals is a real issue… (contradictory) messages can undermine their (the patient) faith in your advice” (Dietitian 26, Regional)

Study participants believed that their patients, especially those with comorbidities, become even more confused when trying to balance competing dietary priorities.

“A common one is ‘I am a diabetic and I’ve always been told to eat whole grain and healthy food and now you tell me I can’t eat any of that because of my phosphate’” (Dietitian 22, Metropolitan)

Dietitians were of the opinion that patients (and/or their families) often turned to the internet to obtain renal diet information.

“It seems everybody, even the little 80-year-old ladies get information from the internet… and if they don’t ‘Google’ it… someone in their life will have! …it is frustrating and I would love to just get rid of that source of misinformation” (Dietitian 15, Regional)

They expressed strong reservations about the renal diet information available on the internet. They also felt strongly that information found online by patients was often contradictory to
evidence-based advice, and believed that this contributed to unnecessary diet restrictions, patient
confusion and anxiety.

“I actually encourage them not to Google stuff because that can overwhelm them”
(Dietitian 15, Regional)

The second major theme to emerge regarding the strategies perceived by renal dietitians to be
useful to patients was the need to simplify complexity. Renal dietitians strongly believed that
their patients struggled to understand the complexity of the renal diet, possibly due to the sheer
number of dietary restrictions required.

“It is just a complicated diet full stop. Particularly when you get to the end where you
juggle protein, salt, potassium, phosphorous, fluid…” (Dietitian 3, Metropolitan)

Participants perceived that the experience level of the dietitian influenced how likely they
were to simplify their dietary advice. Inexperienced renal dietitians often described feeling like
they needed to be “an oracle and fountain” (Dietitian 8, Metropolitan) of all renal diet
knowledge and would provide patients with large amounts of information ‘just in case”
(Dietitian 15, Regional). This was in contrast to more experienced renal dietitians who used a
more simplified approach, preferring to give less information to avoid overwhelming patients.

“You want to give them enough to get by and then if something is an issue then at least
they have …heard the name of whatever it is in advance” (Dietitian 7, Metropolitan)

In an attempt to reduce the complexity of the renal diet, the study participants indicated that
they used simple explanations during the education process. They considered these essential for
teaching their patients about dietary self-management because they believed patients struggled to
understand why a special diet was required, and why it needed to change.
"Depending on who's sitting in front of me...I try and simplify it...I pick out of the diet history (food) that is important for them to change to make a difference (Dietitian 3, Metropolitan)

Many participants used the strategy of ‘teachback’ (the process of asking a patient to ‘teachback’ important concepts to the dietitian in an effort to evaluate recall, and to ascertain their understanding of important concepts) to help gauge whether further explanations were required.

“I try and do one thing at a time so they can get their head around one thing and then I try and get them to paraphrase that back” (D10, regional area)

To further simplify the complexity of the renal diet, participants prioritised issues for the patient, and this was often specifically requested by patients.

“Which bit do I concentrate on? That is their question... do I worry about the potassium or ...the phosphate or... the fluid or ...the salt or ...the protein? They struggle to understand what is the most important” (Dietitian 15, Regional)

“I know they (patients) have to learn to put it together themselves ...but sometimes all they can take in is ‘eat this’ and ‘don’t eat that’” (Dietitian 8, Metropolitan)

Some participants were uncomfortable with this approach because they felt it was inconsistent with their internal beliefs about what constituted patient centred counselling and education.

“A lot of people just want to know what they can and what they can’t have and that is not my style of dietetics ...that is a struggle for me ” (Dietitian 12, Remote)
Individualisation and layering of dietary advice was another strategy used by participants to reduce the complexity of the renal diet. Many believed that this approach helped to empower their patients to improve adherence to their diet. Individualisation, i.e. tailoring the dietary advice to the needs of the patient was also described as an essential skill that was learned over time with more experience in clinical practice.

“I think my practice has changed over recent years… I spent a lot of time giving out diet charts …whereas I spend a lot more time now giving individualised meal plans and often not giving a whole pile of information” (Dietitian 14, Metropolitan)

Staggering or layering dietary advice over several sessions was described as one of the most important strategies to assist patients with making sense of the renal diet. Participants believed that this strategy, motivated by a perceived need to avoid information overload, reduced the potential for further confusion amongst patients. They also believed that layering advice helped to preserve rapport and empower patients, which in turn facilitated long term professional relationships between themselves and the patient.

“It is a lot about just doing it in bite size pieces and … picking your battles “(Dietitian 17, Regional)

Finally, renal dietitians repeatedly expressed a desire to provide more practical support to their patients but felt that they lacked the time and resources to do so. Cooking classes, supermarket tours, cooking videos, podcasts, lengthy and detailed meal plans, involvement in patient support groups, and conducting home visits were suggested as desirable methods of providing practical support which would help patients understand and make sense of the renal diet.
“They struggle with applying that information to the real world… I would rather spend a couple of hours going out to teach them how to go to the supermarket, rather than just giving them lists …. Giving them actual skills rather than just talking at them. It all comes back to practical skills” (Dietitian 13, Metropolitan)

Other strategies perceived by renal dietitians to be useful mechanisms for simplifying the complexity of the renal diet included: plotting biochemistry results with patients on charts; linking dietary changes to symptom control; using anecdotes and stories about how other patients had managed the challenges of the renal diet; talking about the dietary changes in terms of food and not nutrients; and providing food composition lists, such as tables of foods high and low in potassium or phosphate.

Discussion

The renal diet is an area of self-management that is closely related to clinical outcomes, and is of great importance and interest to patients with ESKD. However, the provision of dietetic education to patients with ESKD is not simple and necessitates specialised knowledge and skills. The purpose of this research was to explore the experience of renal diet education from the perspective of renal dietitians, and to examine the strategies perceived by these dietitians to help their patients make sense of the renal diet. Although education is only one factor influencing adherence to the diet, the renal dietitians in this study emphasised the importance of providing individualised information and practical support to their patients; and recognised that one of their main roles were to clarify ambiguities and to help simplify confusing and complex diet information. The renal dietitians believed that a trusting relationship between themselves and their patients was important to help optimise a patients’ ability to effectively self-
manage their renal diets. They also believed that empathy was an important enabler of these relationships. However, renal dietitians indicated that working in health care environments with limited or inadequate resources strongly influenced their ability to effectively provide education to patients to make sense of their renal diet. As a result, the overwhelming emotion described by renal dietitians in this study was one of frustration.

The findings of this study are consistent with previous research that has explored the antecedents to effective dietetic care. This includes studies confirming the importance of providing patient centred nutrition care; and research confirming the critical role of developing rapport with a patient. Also similar to other previous research, is the finding that renal dietitians in this study, regardless of geographic location reported a distinct discrepancy between ‘ideal’ practice and actual clinical practice. The discrepancy in this study appears to be closely related to renal dietitians not being able to spend adequate time to develop individualised dietary educational resources for their patients and the time to effectively develop the dietitian-patient relationship. Similar to this scenario, nephrologists have also reported that inadequate time is a barrier to facilitating discussions with their patients. Solutions to address this challenge are required from a health system perspective because having adequate time with health professionals helps to facilitate more effective education, self-management, and trust.

In the current study, renal dietitians emphasised that it was equally important for patients to gain knowledge about what to do and why, as well as to be empowered about how to self-manage their renal diets. This suggests that both health literacy (the degree to which individuals can obtain, process, and understand information to make informed health decisions) and patient empowerment (the psychological sense of control and efficacy that an individual can manage their own health behaviours) are considered essential for patients to make sense of, and
adhere to the renal diet. This is not unexpected as both health literacy and empowerment are closely related concepts. The study participants described using ‘health literacy sensitive’ techniques, such as teachback; or endeavouring to simplify diet sheets using health literacy principles. The findings of the present study highlight that inadequate time, conflicting input from other multidisciplinary team members and local health service policies can negatively impact patient empowerment and understanding. Increasing patient empowerment is an important global health priority, with the potential to decrease health costs, improve patient outcomes, and is a good predictor of dietary adherence.

Another important finding from this study was that other members of the multidisciplinary team were perceived to be important moderators of how patients make sense of the renal diet. Receiving dietary advice from other members of the team was considered desirable, if it reinforced or supported the key messages delivered by the renal dietician. This is consistent with previous work on successful lifestyle change in the paediatric context, where all of the multidisciplinary health care team are ‘singing off the same song sheet’. However, little is known about the knowledge base or impact of non-dietetic nephrology staff providing dietary advice to patients. Only two small surveys have been published and these indicate that the nutrition knowledge of renal health professionals (such as nurses and doctors) was suboptimal. This is of concern because many health professionals believe they have a significant role in the provision of dietary advice to patients with chronic disease. Furthermore, findings from a study of patients receiving dietary advice for cardiac rehabilitation indicated that patients stopped following dietary recommendations after receiving contradictory advice from other health professionals. Further research into the relationship between trust in the health professional and patient empowerment is warranted.
The implications of these study findings are both theoretical and practical. Given the high levels of professional frustration reported by renal dietitians in this study, it is important to ensure that they have regular professional supervision. From a theoretical perspective, the pedagogical approaches to renal diet education should be revisited. It is suggested that the educational strategies used by dietitians take into consideration the concurrent high rates of cognitive impairment and low health literacy in patients with ESKD. For example, motivational interviewing, a popular behaviour change technique used by dietitians, may not be appropriate or effective for patients who have cognitive impairment or inadequate executive function, attention and memory, as is common among many patients with ESKD.

Alternative educational approaches should therefore be considered when educating patients with ESKD. From a practical perspective, the educational approaches used by renal dietitians must be effective, as well as pragmatic because of the resource and time constraints experienced by renal dietitians. Alternative educational approaches could include the use of question prompt lists, reducing the cognitive burden, using dialogue boards or conversation maps and increasing the actionability of renal diet patient education resources. Further studies on the usefulness of improved printed patient education materials (such as diet sheets) and supermarket tours should also be undertaken.

There are several limitations to this research. Firstly, it is possible that renal dietitians not included in this study may offer differing perspectives to those described. Secondly, ecological barriers identified in this study, such as the constraints of the health system and local health department policies that dictate staffing and dietetic resource development may also be different in other geographic locations or health jurisdictions. Another limitation is that even though Aboriginal and Torres Strait Islander patients are over represented in the population of
Australian adults with CKD, specific issues pertaining to educating this patient group were not specifically explored. Further research in this area would be useful. Despite these limitations, one of the strengths of this study was the wide cross section of renal dietitian perspectives captured during the semi-structured interviews, in terms of level of clinical experience and geographical settings. The researcher who conducted the interviews is also an experienced renal dietitian, and their clinical knowledge and experience of the issues described may have facilitated a richer exploration of the topic.

In conclusion, renal dietitians in the current study found the experience of providing renal diet advice to adults with ESKD, both emotionally and professionally challenging. They employed a range of strategies that assist patients to make sense of the renal diet advice. However, it appears, based on the experiences and perceptions of the renal dietitians who participated in the current study, that alternative approaches to patient education are warranted to help overcome the factors which negatively impact on patient empowerment.

References


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I would like you to think back to a time that really stands out in your mind, when you were teaching a patient about the renal diet. It might be the first time or might be another time. I want it to be a time that is memorable – good or bad.

Can you describe that experience of providing the dietary advice?

Prompts:

- a) What was the reason you were asked to provide the advice?
- b) Who was present?
- c) Where was the advice provided?
- d) What were the issues that stood out for you about this time?
- e) How did the experience make you feel?
- f) Did you use any particular resources at the time? why or why not

Was there any part of the experience that the patient found reassuring or helpful?

Prompts:

- a) What information did you provide? In what format?
- b) What do you think were the consequences of being given this information?
- c) How did you help / facilitate this patient?

Was there any part of the experience that you believe the patient or carer found difficult or unhelpful?

- d) What were they? Why?
- e) Was there anything that you did that hindered the patients ability to follow the advice? (And if so how do you know?)

What do you think are the big questions that patients struggle with as a result of renal dietary advice?

Prompts:

- a. What do you think they are trying to figure out?
- b. Why do you think they struggle with this?
- c. Is there anything you try and do to help them understand?

How does providing renal dietary information make you feel?

Prompts:

- a. What emotions do you have at these times?
- b. Are they related to the experience?
- c. What conclusions do you come to from this situation?

If you could wave a magic wand what do you think would help patients to understand the renal diet?

Prompts:
a) What do you think is missing from the renal diet advice you provide?
b) How does that stop the patient from understanding or following your advice?
c) Is there anything else that is limited, incomplete, not effective or not helpful?
d) What do you think could make a difference?
e) Is there anywhere else that you suggest people look or talk to for renal diet advice?
f) Why do you think this will help?
Table 2. Characteristics of renal dietitians in the study

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Number of dietitians N=27</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender (female)</td>
<td>25 (92.3%)</td>
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<tr>
<td>Mean (sd) age in years</td>
<td>43.1 (11.0)</td>
</tr>
<tr>
<td>Mean (sd) years of experience as a dietitian</td>
<td>19.2 (10.8)</td>
</tr>
<tr>
<td>Mean (sd) years of experience as a renal dietitian</td>
<td>11.3 (8.5)</td>
</tr>
<tr>
<td>Employment status</td>
<td></td>
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<tr>
<td>- Working full time in nephrology</td>
<td>14 (51.9%)</td>
</tr>
<tr>
<td>- Working between 0.5-&lt;1.0 full time equivalents in nephrology</td>
<td>7 (25.9%)</td>
</tr>
<tr>
<td>- Working &lt; 0.5 full time equivalents in nephrology</td>
<td>6 (22.2%)</td>
</tr>
<tr>
<td>Characteristics of patients usually seen by renal dietitians</td>
<td></td>
</tr>
<tr>
<td>- Predialysis and conservatively managed</td>
<td>26 (96.3%)</td>
</tr>
<tr>
<td>- Hemodialysis</td>
<td>26 (96.3%)</td>
</tr>
<tr>
<td>- Peritoneal dialysis</td>
<td>23 (85.2%)</td>
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<tr>
<td>- Kidney Transplant</td>
<td>23 (85.2%)</td>
</tr>
<tr>
<td>- All of the above</td>
<td>20 (74.1%)</td>
</tr>
<tr>
<td>Geographic location of renal dietitian services 16</td>
<td></td>
</tr>
<tr>
<td>- Metropolitan area</td>
<td>16 (59.3%)</td>
</tr>
<tr>
<td>- Regional center</td>
<td>6 (22.2%)</td>
</tr>
<tr>
<td>- Remote area</td>
<td>5 (18.5%)</td>
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</table>