Abstract

Background
Formalised predialysis care has been shown to extend the wellness of individuals with advanced chronic kidney disease, slow disease progression and increase the uptake of home dialysis. Predialysis care, incorporating multidisciplinary input is also vital in delaying the onset of end-stage kidney disease and reducing hospital admissions; thereby decreasing financial demands on health budgets. Predialysis care should include comprehensive information provision and predialysis education. This empowers patients to choose self-care strategies and therapies.

Keywords
Predialysis, Low clearance clinic, Patient satisfaction, chronic kidney disease

Introduction

In 2011, the nephrology outpatient health care team at a large, metropolitan, tertiary hospital in Brisbane, highlighted concerns in the management of patients who were approaching end-stage kidney disease (ESKD) and the need for kidney replacement therapy (KRT). The historical process was for all patients regardless of their level of kidney function, to be assigned to one of five nephrology consultants (medical practitioners). However, patients were then seen by numerous other medical staff (including different registrars who rotate through the clinics) at their outpatient appointments. Consistency of care was a challenge, and while safe, professional care was provided, being seen by different medical staff often resulted in a lack of clarity for patients in regard to a management plan and preparation for KRT.

After discussion between stakeholders (nephrologists, nurses and the allied health team), the low clearance clinic (LCC) was introduced in August 2011 to assist a specific cohort of patients with ESKD (estimated glomerular filtration rate <15 ml/min/m²) to seamlessly transition to KRT. The LCC’s aim is to facilitate a collaborative approach between the person and the health care team to devise a coordinated KRT management plan. This plan incorporates predialysis education, multidisciplinary support, touring the home dialysis...
units, and timely referral and placement of permanent dialysis access. Ideally attending the LCC will maximise independence and quality of life, slow disease progression and encourage the uptake of home therapies. Patients are managed in this clinic until they commence KRT.

Current trends in health services champion a consumer-oriented approach and patients’ perspective on their care is a key dimension on health care quality and is useful in improving services (van der Veer et al., 2012). The Australian Commission on Safety and Quality in Health Care (2012) recommends that when assessing whether a health service is delivering safe, high-quality care, it is important to evaluate patient experience. Patient experience and satisfaction with health care provision is an important quality indicator and has benefits from both a patient and health provider perspective (Ilouidi, Lazakidou & Tsironi, 2013; van der Veer et al., 2012). According to Ilouidi et al. (2013), patient satisfaction is related to the extent in which general health care and condition-specific needs are met. These authors also explain that evaluating the extent of patient satisfaction with health care services is clinically relevant as satisfied patients are more inclined to adhere to treatment prescriptions and take an active role in their own care. Furthermore, a health care service can benefit from satisfaction surveys that identify potential areas for service improvement and resources may be optimised through patient-guided planning and evaluation.

Patient surveys are a credible way to measure patient satisfaction and should be conducted routinely, especially when a new service is introduced. Therefore, monitoring patients’ perceptions of their health care experience is vital in forging a genuine partnership between patients and health care providers which, in turn, is likely to influence health outcomes. Patient experience and satisfaction is a reputable indicator of the quality of care and that care should be responsive to the preferences, needs and values of each patient (van der Veer et al. 2012).

A patient satisfaction survey purposely designed to target a specialist service can provide useful information on the quality of a service and how best to improve that service (Patient satisfaction survey, 2012). The domains frequently included in patient satisfaction surveys include waiting times, access to the service, information sharing, communication, physical environment and overall satisfaction (Australian Commission on Safety and Quality in Health Care, 2012). The Commission’s report also highlighted improvements can be made to a health service as a result of measuring patients’ experience and satisfaction such as reduction in wait times, medication safety, infrastructure planning, patient awareness of their rights, and complaints management. However, there is no previous study of how satisfied patients are in attending an Australian nephrology outpatient service that provides a coordinated management plan. While most patients appeared satisfied with the new LCC, there was no objective evidence to demonstrate their satisfaction level; therefore a patient satisfaction survey was conducted.

Study aim

The PREPARE Study sought to determine if people approaching ESKD and transitioned into the LCC were satisfied with the new streamlined service.

Method

A descriptive, cohort quality improvement study was used to determine patient satisfaction with the LCC. Inclusion criteria included people 18 years and over with ESKD, who had been attending the LCC for a minimum of three months, were able to read and write English, or had a family member or interpreter who could assist with completion of the questionnaire, and who were willing to participate in the study. Exclusion criteria were those under 18 years of age, those with cognitive impairment, and people who had chosen conservative management for their ESKD (as these people are managed in the usual nephrology outpatients clinic). The study received approval from the Metro South Hospital and Health Service Human Research Ethics Committee. Convenience sampling was used to recruit all eligible patients (n=47) who were attending the LCC over a five-month period.

Instruments

The satisfaction questionnaire was developed from existing patient satisfaction questions used at the treating hospital and from chronic kidney disease (CKD) literature. A frequent weakness of patient satisfaction surveys is low response rates (Gayet-Ageron, Agoritsas, Schiesari, Kolly & Perneger, 2011). These authors offer several recommendations to enhance participation, including a convincing cover letter, an appealing layout of the questionnaire, clearly worded questions, assurance of confidentiality, and a lack of intrusiveness of the questions. The provision of a prepaid, pre-addressed envelope can also assist participation. These recommendations to maximise responses were included when the questionnaire was devised. The questionnaire was circulated to nursing and medical stakeholders for comment. It was piloted with five people who had previously attended the LCC (that is, those now on dialysis) prior to the main data-collection period; these people were no longer eligible for the study. The final questionnaire comprises 28 items and has two parts: i) demographic questions (age, gender, marital status, distance to outpatient department, method of transport); and ii) satisfaction questions.
Data collection
An administration officer or an assistant-in-nursing at the reception desk provided an envelope containing: 1) participant information sheet (to explain the purpose of the study); 2) questionnaire; and 3) return envelope to all eligible people. The questionnaire was anonymous as it did not collect any identifying information. A return box was located at the reception desk so participants could complete and return the questionnaire at their clinic visit. Alternatively, participants were provided with a prepaid, pre-addressed envelope for those wanting to complete the questionnaire at home. It was clearly advised that completion and return of the questionnaire would imply consent to participate and that anonymity was ensured. Returned questionnaires were stored in a locked filing cabinet in the office of the first author.

Data analysis
Data was entered onto a spreadsheet and descriptive statistics were calculated. Qualitative comments were grouped into favourable and least favourable aspects of the LCC.

Results
The overall response rate was 72% (n=34). Demographic data highlighted the majority of patients were aged between 55 and 74 years (47%), female (64.7%), married (55.8%) and English-speaking (79%). A large number of patients were retired (41%) or on a disability pension (20%). Only 11% were working full-time or part-time. Distance travelled to their appointment is shown in Figure 1, with 26.4% travelling <10km and 34% travelling >51km to their appointments. Mode of transport to appointments was mostly self-driving (37%) followed by being driven by another person (26%) (Figure 2). Many patients had been attending appointments at the Nephrology Outpatients Department between one and three years prior to moving to the LCC (38%) and 35% had been seen in the LCC for greater than 12 months. A large proportion (67.6%) of patients understood what the LCC was and most had been provided with information about the aims of the clinic (64.7%). The majority found the appointment times convenient (76%), with most being seen within 15–60 minutes of their scheduled appointment time (85%).

Responses identified that the majority of patients preferred to be seen by the same doctor at their appointments (79%); however, only half the patients (50%) reported seeing the same doctor all the time or most of the time. Seventy-nine per cent indicated that the doctor was aware of what was involved in their care and 82% of patients felt that they were given enough time to ask questions during the consultations. On the whole, most revealed the doctor talked to them in a way they could understand (85%) and they were encouraged to be involved in decision making about their care (70%). Overall, nearly everyone (94%) found the health care team at the LCC professional and friendly, with family and friends welcome to be involved in most instances (79%). Patients reported the predialysis nurse was present during their consultation most of the time (73%). Multidisciplinary support at the LCC (that is, dietician, social worker, pharmacist and clinical psychologist) was offered to most patients (88%). Overall, 97% of patients in the study indicated they had enough information to make an informed decision for KRT and most (88%) had a definite KRT plan. On the whole, patients were very satisfied with the care
The survey also provided a free text space for participants to add any other services they would like included in the LCC service. Responses included “free parking — gets expensive”, “physiologist to help with exercise program — resistance training”. Eleven participants stated there was nothing they wanted included. There was also a free text section where participants could write comments on the aspects they liked most and least about the LCC. Most comments were very favourable and included statements about the friendliness of staff (Box 1). The few negative comments were related to waiting time; transport issues and not seeing the same doctor (Box 2).

Lastly, participants were asked to rate different members of the health care team (doctor, nurse, dietician, social worker, pharmacist, and psychologist) and the receptionists on how helpful they were in managing their kidney problems on a scale of excellent to very poor. The results were positive, with most responses ranging from excellent to very good or good. It did, however, highlight areas for improvement in the clinic. Despite 88% responding they had been offered multidisciplinary support, many indicated they had not seen various member of the multidisciplinary health care team; 17% had not seen the dietician, 47% had not seen a social worker, 17% had not seen the pharmacist, and 55% had not seen the clinical psychologist. As the questionnaires were anonymous, it was difficult to ascertain the reasons why this occurred.

**Discussion**

This was the first study to report on patient satisfaction with a nephrology outpatient service. The results obtained from the PREPARE Study patient satisfaction survey, demonstrated participants were highly satisfied with the care and treatment they received in the dedicated LCC. We achieved an adequate response rate (72%) which was possibly due to the recommendations of Gayet-Ageron et al. (2011) being included during the developmental phase of the questionnaire as well as the procedure of questionnaire distribution when patients presented to the LCC for their appointments.

The majority of the participants were aged between 55 and 74 years, which is comparable to the mean age of patients (60 years) commencing treatment KRT in the Australian and New Zealand Dialysis and Transplant Association Registry (2013). It was reassuring that most patients in the LCC were aware of the purpose of clinic and found the treatment times convenient. The response that patients preferred to be seen by the same doctor each visit was not surprising. Some patients stated their consultations were now more productive with the doctor being familiar with their medical and physical conditions, disease trajectory and treatment plan. However, it was concerning that only 50% of participants saw the same medical practitioner most or all the time as this was one of the LCC aims. While the

**Box 1: Favourable patient responses of the LCC**

- I am made to feel that people care for my health and wellbeing
- All staff make me feel welcome. Their attitude towards patients is that nephrology failure is normal. This helps take the fear away
- The friendly staff who remember my name and take into consideration the fact that I am in a wheelchair
- The ability of the staff to understand my weird sense of humour
- All staff are friendly, kind, know what they are talking about and listen to you and make sure you understand what they are saying. If not they explain it in easier terms so you understand

**Box 2: Least favourable patient responses of the LCC**

- Always having to wait
- The scheduled time should be earlier because it interferes with my class
- When they tell you you’ve been bad
- Holding up the transport bus
- Belonging to such a large group of older people when I am only 58
- I am very happy — but for other people starting it might all be a bit of a mystery the journey you are beginning. I feel it might be helpful knowing some of the tests you need to have and what might be ahead
- Not seeing the same doctor

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**Figure 2. Mode of Transport used by patients to attend the LCC.**

- Walk 8%
- Self drive 37%
- Driven by Others 26%
- Public Transport 14%
- Arranged Transport 9%
- Public Transport 14%
- Ambulance 6%
LCC endeavours to deliver consistency with all members of the multidisciplinary team, it is difficult at times to ensure continuity due to staff annual leave and other professional commitments. It was also surprising to learn that patients had not seen various members of the multidisciplinary team. We do know that patients who have attended predialysis education are offered multidisciplinary support. It is possible that too much information is provided or that patients do not recognise who they have seen. This result has led us to improve our written information and monitoring of multidisciplinary appointments.

Results revealed that many patients travelled >51km to their appointments. The reasons for this include centralisation of specialised services in Queensland (few tertiary renal services) and absence of adequate telehealth facilities. Additionally, telehealth reviews are not always appropriate when a physical assessment is required, which is often necessary in the predialysis phase. Attending the LCC also gives the patients access to multidisciplinary services at the one visit. The LCC is scheduled in the afternoon to give patients more time to travel to the clinic, and they can have appointments with the medical practitioner, predialysis nurse, pharmacist and dietician during one trip to the hospital. In addition, we have found that identifying participants’ mode of travel to their appointments (for example, being able to drive) also assists in ascertaining the patients’ independence in getting to their appointments and their ability to perform self-care.

**Limitations**

The study did have some limitations. Firstly, the study recruited patients from only one site, making it difficult to generalise to other nephrology units which have a dedicated LCC. Secondly, the study was conducted when the LCC was a relatively ‘new service’ and patient numbers were small and manageable. With more patients now being managed in the LCC, regular scheduling of patient satisfaction is warranted to ensure the service continues to meet the needs of the patients. In future surveys, it would also be beneficial to assess if the participants felt their treatments and/or interventions for symptoms of kidney failure were managed effectively. Another limitation of the study was the inability to follow up on individual responses due to the anonymity of participants. However, the purpose of a satisfaction survey is to get the patients’ honest opinions and it is less threatening when it is given anonymously.

**Implications for practice**

The findings of this study provide some information and guidance for continued practice improvement. The results from the PREPARE Study revealed that the LCC has had a favourable impact from a patient perspective. Most patients indicated they were satisfied with the care received, and most responded they now have a definite KRT treatment plan in place. Additionally, responses confirmed that patients believe that medical practitioners were more familiar with them and their treatment plan. It was surprising that only 50% of patients reported seeing the same medical practitioner at their appointments. As previously mentioned, this was one of the aims of the clinic. To address this issue, we have reduced the LCC clinic patient numbers on the days the consultants are away or alternatively have allocated another consultant to see their patients.

Several improvements in the processes of the LCC have been made as a result of this study. Firstly, the predialysis nurse has increased case-management focus for all patients in the LCC and is present during appointments with medical practitioners to improve consistency of communication and actions for patients. Secondly, the LCC aims to increase referral and consultation with other members of the health care team as part of the case-management role of the predialysis nurse. If face-to-face appointments cannot be organised with the dietician, social worker, pharmacist and/or clinical psychologist, phone consultations are arranged and follow-up care is offered as necessary. Lastly, as mentioned above, a one-stop service approach has begun, with patients able to have appointments with all members of the multidisciplinary team on the one day, whenever possible. We hope to see improvements in our next survey in 2016.

From a service perspective, the LCC has also had a beneficial impact. When comparing the annual report data from 2010 to 2013, there has been a greater uptake of home dialysis and a larger number of patients commencing dialysis with permanent access. In 2010 there were 91 patients in the LCC, with 56% of these patients transitioning to home dialysis commencing during that year, and 72% started dialysis with a permanent access. In 2013 (two years after the commencement of the LCC), there were 133 patients in the LCC, 65% commenced a home dialysis therapy and 76% started dialysis with a permanent access. The results of the PREPARE Study adds a patient-centred perspective to our understanding of the LCC.

**Conclusion**

Conducting the patient satisfaction study has been very valuable. It has provided evidence from the patients’ perspective that they are satisfied with the LCC and the results have provided us with an opportunity to improve our service. We will conduct the survey regularly (every two years) to ensure the service continues to meet the needs of patients who are nearing KRT. To date, the LCC is continuing and has a growing number of patients being managed in the clinic. From a personal perspective, it has been rewarding to know that we are providing a service that has positive outcomes for both the patients and the health care service.
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References


