Pre-Dialysis Partnerships
Rachael Walker, Hawkes Bay District Health Board
Supported by Graham Burnley Memorial Scholarship

In my recent research into “Pre-dialysis nurse’s perceptions of effective care” a number of themes were identified. This presentation will discuss the theme of pre-dialysis nurse-patient partnerships and the issues surrounding this which arose from the research findings. The nurses in this study described the importance of a trusting partnership which was built up over a period of time. This relationship enabled the nurse to know and understand the patient and all the different aspects of their life which influence their care. In order to be able to build this trusting partnership a number of enabling factors were identified by the nurses interviewed. Time was an imperative factor in the partnership development, not only time to spend with the patient, but also the referral time and the number and quality of interactions the nurses and patient had. The importance of continuity in being able to develop and strengthen this relationship, build the trust of the patient and provide their care and appropriate education delivery were also identified. Other issues such as allaying patient fear, honesty and being an advocate for the patient were also identified as key factors in relationship building to provide effective care. The importance of home visits to meet and assess the patient in their home, meet with their families and see how they lived was seen as a vital opportunity by the majority of nurses to break down barriers, build relationships and provide effective care. As with the majority of themes identified in this research, as well as enablers in providing effective care there were also barriers to building these relationships, such as the lack of time, late referrals and difficulty in breaking down patient barriers which will also be discussed.

Reducing Complications during Dialysis.
Sarah J. Ward
Acute Dialysis Unit
Christchurch Hospital, Christchurch

Some of the most common complications during haemodialysis (HD) are hypotension, muscle cramps, nausea, headache and vomiting. During a HD session these complications will often require nursing interventions such as adjusting blood flow rates, administering replacement fluids and providing reassurance and comfort to patients. This is a presentation of a literature review that examined clinical trials and specify interventions for the treatment of cramps during HD. Eleven papers were found that met the criteria of discussing specific treatments and reporting interventions that reduced cramping in patients undergoing HD. Four areas where medical teams could possibly intervene to alleviate cramping were identified. These areas were – using nutritional supplements, for example vitamins, modification of the dialysate composition, optimizing patient compliance, and using modifications to ultrafiltration goals such as adjusting flow rates or gradients. The literature review suggests that cramping and other dialysis intolerance symptoms warrant further study. The causes tend to be multifactorial, and complex, and will differ from patient to patient. In nursing practice when we are faced with a patient who is cramping during HD, we must choose interventions and apply our knowledge to try and alleviate the symptoms as much as possible.

Implementation of a pharmacist medication review clinic for dialysis patients
S. Mirkov, Principal Pharmacist
Medical, Middlemore Hospital, Auckland

Introduction: Patients on dialysis take multiple medications. Shared care among multiple healthcare providers and frequent medication changes increase the risk of inaccurate medication profiles and create adherence problems for patients. This leads to a high incidence of drug-related problems (DRPs).

Aims: To implement the Dialysis Medication Review Clinic and establish a sustainable clinical pharmacy service.

Methods: Prospective clinical medication review conducted by trained clinical pharmacists using standardised tools. Medication histories were reconciled with patients’ general practitioners, community pharmacies, retirement villages, dialysis unit records and patients’ own medications. Pharmacists’ intervention included medication recommendation and patient education using written information and self-monitoring charts to facilitate adherence.

Results: From December 2007 to July 2008, medication reviews were conducted with 64 haemodialysis patients prior to their 6-monthly nephrologists’ clinic appointment. Patients were taking on average 13 medications. Drug-related problems were identified in 92% of medication reviews and a total of 278 DRPs were identified. The major DRP was non-adherence with medication regimen (33%), followed by excessive dose (9.3%) and untreated indication.
Patients of NZ Maori and Pacific Peoples descent were more likely to have more than three DRPs compared to patients of European descent. (NZ Maori OR 7.49 95% CI 1.15–48.9 p=0.035, Pacific Peoples OR 5.4 95%CI 0.96 to 30.34 p=0.055). Patients who spent from 3.5 to 6.3 years on dialysis (middle tertile) were more likely to have more than three DRPs compared to patients who had been less than 3.3 years on dialysis (OR 7.48 95% CI 1.45 to 38.76 p=0.016). Patients older than 55 were less likely to have more than three DRPs compared to younger patients. This was statistically significant for middle tertile age category ie 55 to 68 years (OR 0.14 95% CI 0.03 to 0.69 p=0.016).

**Conclusions:**
Structured pharmacists’ medication reviews can be readily integrated into the model of care for haemodialysis patients.

**Expectations of life as a renal transplant patient.**
Trudi Hall
Staff Nurse, Renal Department, Wellington Hospital.

Kidney transplantation is now widely accepted as the treatment of choice for Renal Replacement Therapy. Transplantation offers the best quality of life, most likelihood of rehabilitation, and the most cost effective care. Improved surgical techniques and new immunosuppressant drugs have led to transplantation being performed in increasing numbers of patients with excellent results in terms of survival. (Murray, et al., 1999; Thomas, 2008). In this presentation I examine relevant literature and use anecdotal patient experiences to discuss patient’s expectations of life with a renal transplant. Do they hear all the education they receive and have realistic expectations? Do they have the quality of life they expected, or were they surprised by the actual outcome, and what affects what they hear from health professionals? A kidney transplant is often the long awaited answer to the patient’s problem, as the patient’s perceived quality of life is associated with getting off dialysis and leading a normal life, but there are many stresses associated with transplantation that can be hard to live with. This presentation will show health care practitioners the benefits of acknowledging and addressing the stressors experienced by transplant patients. It will outline the strategies that have been shown encourage compliance with medical regime and therefore increase the chance of graft survival and improved quality of life.

**Vitamin supplementation in adult haemodialysis patients – can we do better?**
J.Sekula & L.Lloyd
Clinical Dietitians – Renal Auckland District Health Board

**Introduction**
Haemodialysis patients are susceptible to deficiencies of water-soluble vitamins. There are several reasons for this including decreased intake, poor nutritional status, increased degradation of vitamins from the blood, increased levels of vitamin binding proteins and loss of water-soluble vitamins into the dialysate. The aim of this audit was to assess and compare vitamin supplementation use in adult haemodialysis patients against international recommendations.

**Method**
A literature review on vitamin supplementation in haemodialysis patients was carried out to determine recommendations for the renal service at ADHB. Dietetic and nursing staff recorded vitamins prescribed to non-acute haemodialysis patients within ADHB in September 2007. 20% of these patients were further assessed to see if they were actually taking the vitamins prescribed, how they were taking them and if they were taking any non-prescribed vitamins.

**Results**
219 patient records were reviewed. 71% were prescribed both a multi-vitamin and folic acid three times a week; 18% of patients were prescribed both daily, 7% were prescribed other vitamins. The multi-vitamin prescribed provides an insufficient dose of thiamine, riboflavin and niacin compared to recommendations and contains no vitamin B6, B12, biotin or pantothenic acid. Of the 20% additional sample, all patients were taking their prescribed supplements though some at home rather than at the unit on HD days and no patients were taking any non-prescribed vitamins.

**Discussion**
The literature review recommended routine supplementation of B vitamins to haemodialysis patients. The multi-vitamin funded in NZ and prescribed to ADHB haemodialysis patients contains insufficient B vitamins to meet the guidelines and contains vitamin A which could be toxic to haemodialysis patients. After discussing the results with the renal service, it was decided that the pharmacist would review multi-vitamin supplements available in both NZ and Australia, and the Nephrologists would consider re-approaching PHARMAC to fund a renal specific multi-vitamin. The renal dietitians are to see if there is a problem with vitamin deficiency in the haemodialysis patients at ADHB by reviewing their intake and vitamin status.
Conclusion
Haemodialysis patients within ADHB currently receive inadequate B vitamin supplementation compared to international recommendations, this practice should be reviewed.

Wrestling with the Quality of Life dilemma
G.Treloar, Nurse Manager Renal Services & S. Conwell, Renal Social Worker, Midcentral Health, Palmerston North.

In recent years the subject of Quality of Life has stimulated much debate within the health care fraternity and reports from the numerous clinical trials that have been conducted have become the tool to measure the effectiveness of medical treatment, clinical decision making, health policy programmes and care planning. There is a plethora of literature on the meaning of Quality of Life dilemma. We looked at surveys available. While they appeared to provide statistics, we wrestled with the dilemma of how to apply them in a meaningful way for our patients. We decided a more personal approach to identify how patients view their Quality of Life at varying stages of the Renal journey. So where did we begin? It was decided that the most appropriate time to first consider the concept of Quality of Life with our Renal patients was during the Predialysis stage. The Social Worker arranged to complete a Social Work assessment with patients around 2-3 months before starting treatment. This assessment was conducted in their own home and the purpose was to prepare for dialysis commencement as well as begin to build an idea of what Quality of Life meant to them personally. A narrative approach was used for these assessments which allowed the chance for our patients to tell their stories. The role of the Social Worker was to work alongside our patients to help build a picture of who they are and what is important to them. The themes of gaining control, roles/relationships, learning styles and social networks were focussed on as ways to shape the Quality of Life discussion. The assessment tool used was based on Ecological Systems Theory – “Person in Context” and informed by a Strengths based approach which views the patient as their own expert with inherent resources and abilities that can often be harnassed for positive treatment outcomes through effective Social Work facilitation. This initial Social Work/Patient partnership lays the foundation for a holistic based Nurse/Patient partnership which is supported and evaluated by the Social Work/Nurse partnership.

Out of the box – again!
D. Lilley
N. Van der Schrieck
S. Patience

Home haemodialysis in the Auckland region has been managed by Counties Manukau District Health Board (CMDHB) since 1983. At the end of 2007 there were 24 Auckland District Health Board (ADHB) and Waitemata District Health Board patients cared for by the Middlemore Home Haemo Service. These people were facing major changes in their dialysis routines as ADHB was in the process of establishing their own Home Haemodialysis Unit which would involve transfer of the whole group of 24 within a short period of time. Some of these people had been on home haemodialysis for more than 20 years and so had well established ties to their provider. Their Transition was going to be, at best, stressful and at worst, traumatic, as many were quite set in their ways and very used to their machines. The process of establishing the new unit was a positive partnership in every respect involving ADHB staff, Auckland District Kidney Society (ADKS), CMDHB, Fresenius Medical Care and these home patients. All of these groups wished to make the transition as smooth as possible for patients while also coordinating the physical establishment of a new facility, model of care, and service provision. In our roles as a nurse and patient advocate our primary concern was the transition process itself. Change is stressful particularly if not ones own choice. Ownership is a powerful motivator in adapting to change, and so, the focus was on patient involvement at every step of the way from the design of the unit, to the dates (within a specific timeframe) of their transition. Our collaborative presentation would like to give an overview of the steps taken to guide the patients through the process and give them time to adapt. Most of all we want to illustrate that pulling together such a diverse group of stakeholders is possible when all are working toward a common goal. An excellent result was achieved for all concerned. Our thanks and appreciation go to the management teams involved in allowing an open forum for ideas to be presented and freedom to follow through with these.

Positive partnerships indeed!
Preserving residual renal function in haemodialysis dependent patients.
Sarah Morten, Clinical Nurse Coordinator, Dialysis, Capital and Coast District Health Board, Wellington

Residual renal function in a haemodialysis patient can be protected and preserved by several nurse initiated actions. Residual renal function is clinically important as it contributes to the adequacy of dialysis, quality of life and mortality of dialysis dependent patients. Research has shown that the use of biocompatible dialyser membranes, ultra-pure dialysate, introduction of bicarbonate as a buffer, high-flux dialysis and avoidance of intradialytic hypotension are factors that all help to preserve residual renal function. By having an understanding of the implications dialysis has on residual renal function, haemodialysis nurses can reduce the factors that accelerate the deterioration of this native kidney function. During this presentation literature surrounding residual renal function and its clinical benefits is fully discussed and reflected upon. Studies based around the factors associated with preserving residual renal function are then critiqued and related back to clinically based nursing practice.

It is concluded that multiple dialysis related factors can be changed or implemented to enhance the preservation of residual renal function in dialysis dependent patients. Haemodialysis nurses should be supported and encouraged to be fore-front in driving these changes or in the implementation of evidence based practices that help preserve residual renal function. An effort should be made to protect residual renal function in all haemodialysis patients so that they can continue to experience the long-term benefits. Therefore all nurses delivering haemodialysis therapies should be aware of their patient's residual renal function and be proactive in preserving it.

Kidney Health Australia provides grants for Registered Nurses wishing to study Masters Degrees in Nursing. The aim of the program is to encourage nurses to pursue a career in renal nursing in any of its components – clinical practice, education or research - across the continuum of chronic kidney disease from prevention and early detection to renal replacement.

Nature of Funding. The amount of the grant will be up to $3,000 per year for a maximum period of up to 3 years. The funding is awarded annually for the duration of the Award but funding in the 2nd and 3rd year is contingent on Kidney Health Australia receiving evidence of satisfactory annual progress from the relevant university. Funding may be provided to those already enrolled in one of the above courses. While grants of this nature are usually tax exempt, the final determination of their tax status rests with the Australian Tax Office.

For further information go to http://www.kidney.org.au and follow the links to nursing scholarships or contact KHA by phoning 08 8334 7555 or email teresa.taylor@kidney.org.au