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The Renal Society of Australasia Journal: Journal of the Renal Society of Australasia is the peak scholarly journal for nephrology nurses and associated professionals to share their ideas and their research to promote evidence-based, high quality care for persons living with renal disease. The Journal provides a national and international forum for the exchange of ideas, practice and research. It is a vehicle for on-going education.

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Selected Abstracts Renal Society of Australasia Conference

The rate of flushing anticoagulation locks into dual lumen dialysis catheters influences the formation of thrombus: 101

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The formation of thrombosis in dual lumen dialysis catheters remains a major problem that compromises dialysis adequacy, shortens the lifespan of an access, and can cause frustration to both patients and medical staff. During interdialytic periods, catheters are locked with varying concentrations of heparin or citrate based solutions as a prophylactic measure to deter the formation of a thrombus. Both solutions have different clinical side effects and have different economic costs.

There is much discussion about which type of solution can deter the formation of a thrombus, but there is a lack of focus on the rate of infusion and how it influences the efficiency of anticoagulation. There is dearth of journals discussing the rate of infusing anticoagulant locks on the internet.

During this presentation, a short video will be showed demonstrating how the rate of the flushing of a catheter can affect catheter leakage, and how circulating blood can enter the catheter at its tip. It is possible that there may be blood reflux into the catheter lumen when flushed.

The information provided in this demonstration suggests that it may be beneficial to reduce the rate of infusing anticoagulant locks. This is irrespective of discussions relating to different types of anticoagulants, varying concentrations and cost effectiveness. However, further clinical studies are required to evaluate the results in clinical applications.

Quality of Life (QoL) in the St George Dialysis Population: 102

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Australia
Mark Brown,
The St George Hospital and UNSW,
Australia

Objective:

This study is to determine the QoL of dialysis patients and to determine if there is a relationship between QoL, specific biochemical markers (albumin and haemoglobin), dialysis adequacy (Kt/V, a measure of urea clearance), age, and diabetic status.

Methods:

All eligible chronic dialysis patients from all modes of dialysis (hospital haemodialysis, home haemodialysis, peritoneal dialysis and satellite haemodialysis) were invited to return SF-36® questionnaires. The Short Form 36 (SF-36®) QoL survey form measures QoL in eight parameters; physical functioning (PF), role-physical (RP), bodily pain (BP), general health (GH), vitality (VT), social functioning (SF), role-emotional (RE) and mental health (MH). Statistical analysis includes t-tests, Z-tests, correlation and regression analysis and chi square tests to determine if there are any significant relationships.

Results:

The overall QoL results remain poor in comparison to Australian normalised results. Mean scores in dialysis modality show a significant difference in PF and RP ($p < 0.05$) with home haemodialysis scoring the best results. Diabetics and non-diabetics score significant differences in PF, RP, BP and MH ($p < 0.05$). There are significant differences in scores between the age groups in the parameters PF, RP and MH ($p < 0.05$).

Conclusion:

Dialysis patients continue to have significantly poorer self assessed quality of life compared to the Australian normative scores despite improvements in dialysis treatments and quality improvement programs to improve dialysis adequacy and biochemical markers. Dialysis patients appear to require more than just good biochemistry and better dialysis to achieve a good QoL.

A Criticism of the Hemodialysis Adequacy Concept: 103

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Currently used formulas to measure dialysis adequacy such as Kt/V and URR failed to reflect the actual medical conditions and the clinical outcome for dialysis patients. Patients still having multiple intradialytic complications such as cramps, nausea, vomiting, headaches, fatigue, hypotensive episodes during dialysis, hangover after dialysis, patients remain fluid overloaded with subsequent poor blood pressure control, left ventricular hypertrophy, and high cardiovascular mortality.

Dialysis adequacy measures did not address the urea rebound concept and middle molecule clearance. If Kt/Vurea and URR are the only measures of dialysis adequacy, it is much easier to achieve high Kt/V in small patients even with reduced dialysis time. The long term effect of middle and large molecules are fatal. They are responsible for anemia, arteriosclerosis, chronic inflammation, increase mortality, malnutrition and dialysis amyloidosis.

Convective Transport Increases middle and large molecule clearances reduces the mortality by 10% and lowers morbidity by 40% in terms of carpal tunnel syndrome surgery. Membrane biocompatibility and good quality of dialysate helps in improving malnutrition, inflammation, atherosclerosis and anemia.

Hemodiafiltration (HDF) as an alternative to conventional hemodialysis that allows online sterile fluid production has proven to be economically viable.

The current norm of thrice-weekly scheduling was borne of pragmatism rather than evidence. There is evidence of an increased rate of sudden and cardiovascular death after the "long gap" (Friday to Monday and Saturday to Tuesday) in USRDS data

Finally recommendations for optimal dialysis treatment will be explored in depth during the presentation.

The First Treatment of Calciphylaxis using IV Sodium Thiosulphate at Waikato Hospital: 104

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New Zealand

Background:

Calciphylaxis is a rare but potentially fatal condition occurring in 1-2 % of dialysis patients worldwide. It is characterised by painful subcutaneous calcification and tissue necrosis, leading to ulceration, secondary infection and has a high mortality rate. Disorders that are most often implicated in the pathogenesis of calciphylaxis include chronic renal failure, hypercalcemia, an elevated calcium-phosphate product, and secondary hyperparathyroidism.

Sodium thiosulphate is a colourless crystalline compound which has been used with success in other countries in the treatment of calciphylaxis. In 2007, dialysis staff at Waikato Hospital administered their first dose of sodium thiosulphate to John (name changed), a home haemodialysis patient. This report covers the life changing outcomes following the course of treatment for John's extensive lower limb calciphylaxis.

Case report:

John is a 37 year old man with a history of PD (1997-2002) followed by HHD (2002-present) for chronic GN. First suspected calciphylaxis noted by renal physician in January '07, further diagnosed by a subsequent physician in February '07. John was admitted in May '07 for treatment post HD using IV sodium thiosulphate. A protocol was specifically developed for its use at Waikato Hospital by the service director. Although John was unable to tolerate the initial dose of sodium thiosulphate, and was not strictly compliant with the dosing schedule, significant gains were made to the point where John returned home to an active lifestyle.

Baby Steps: Introduction of a Renal Diabetes Management Program: 105

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Toowoomba Renal Unit,
Australia

In 2007 a Renal Educator/Diabetes position was created and recruited to in a rural renal unit. Prior to 2007 limited renal specific, standardised diabetes management procedures and education were available to staff and patients. This new position is supported by the facility Endocrinologist and existing Diabetes Educator in a mentor arrangement. Deficits were identified and collaborative strategies developed to provide a more focused approach for renal diabetic clients. Strategies implemented were; routine blood glucose monitoring and trending for haemodialysis clients, a database of all diabetic clients accessing the renal service and a Chronic Kidney Disease Diabetes Clinic. Education of all renal staff has created an increased level of awareness, enthusiasm and competence in diabetes management for the renal client. As a result, a diabetes portfolio has been implemented with offline time for a registered nurse one day per fortnight to take over the management of haemodialysis diabetic clients. This position consults with the Renal Educator/Diabetes regarding diabetic client management and provides succession training. Patient outcomes are measured via improvement in glycaemic control, HbA1C, level of self management, patient satisfaction and quality of life. Improvements in this client population are seen as baby steps; however those clients who have been successful within the program are truly inspirational. Renal staff are more motivated to participate in minimising the renal diabetes explosion and carry the message that diabetic client management can be simplistic and rewarding when taking baby steps.

Hepatitis B 'The Deadly Pathogen - Protection is Paramount: 106

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Hepatitis B is a virus that is replicated in the liver and causes hepatic dysfunction. The degree of infection is a state of dynamic interaction between the viral replication cycle and the host immune response. This acute or chronic status of hepatitis B is usually a lifelong infection leading to cirrhosis, HBV associated glomerulonephritis and hepatocellular carcinoma.

Hepatitis B infection is endemic in Aboriginal and Torres Strait Islander (TSI) people in remote communities in Far North Queensland. Effective prevention strategies have only started to be implemented in the past few decades. The remoteness, social structure and traditional activities of these people, plus the way in which these cultures view health, all impact on our health service delivery.

Aboriginal and TSI people also have very high rates of ESRD requiring renal replacement therapy. The purpose of our study was to define the prevalence of HBV infection in the renal dialysis unit in Cairns, and implement a coordinated algorithm based HBV immunisation programme, while working with primary health care providers.

Results:

100% dialysis patients tested and immunised.

Tracking method and data collection captured 100% targeted population.

Evaluation:

Worthwhile exercise for dialysis patients due to relatively high conversion rate.

Requires identified staff or system for longevity of programme.

Implementation of CKD patients initiated.

The clinical outcomes demonstrate the challenges in maintaining up-to-date client records in culturally diverse and geographically dispersed populations. Renal patients are immunocompromised, therefore, renal staff are committed to safeguarding their health status as Protection from Hepatitis B is Paramount.

Negative Clinical Behaviours - a four year review: 107

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In 2002, North West Dialysis Service (NWDS) developed an Anger and Aggression program in response to management and staff concerns regarding renal health care worker exposure to negative clinical behaviours in the dialysis setting

Since the implementation of this program, NWDS staff have continued to complete an incident report for any behavioural incident of concern to them or patients that arises in the clinical setting. The NWDS Quality and Safety and Occupational Health and Safety Committees, which include representation from all dialysis sites, review all service incident reports monthly, with quarterly and annual trend reporting and analysis. Action plans are implemented as required with relevant support provided by management, social work and OH&S personnel.

In 2008, NWDS conducted a four year retrospective analysis of reports of negative clinical behaviours. Each report information was broken down into the categories of age, sex, site of incident, whether it was verbal or physical (non violent) abuse and reason for expression of anger. In the 10 months to 31st October 2008, NWDS has noted a 100% rise in reports of anger and aggression compared with the previous year.

In 2008, in response to our analysis and trends, a formal multidisciplinary review of the NWDS Anger and Aggression was undertaken. The review resulted in some modifications to the program and recognition that evolving factors, such as mental health issues, needed to be addressed. As waiting was highlighted as significant trigger, NWDS is actively pursuing methods to reduce the factors that contribute to this anxiety.

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Australia, like New Zealand, is a nation comprised of many cultures. Kanitsaki describes culture as "a particular people's beliefs, value orientations and value systems, which give meaning, logic, worth and significance to their existence and experience in relation to both the universe and other human beings" (Kanitsaki, 1994, p.95).

Such cultural diversity gives rise to vastly different ethical thoughts and actions. As ethical behaviour and sound moral decision making are integral to professional nursing practice, a lack of knowledge and understanding of the different cultural ways of others can sometimes make it very difficult for nurses to provide culturally appropriate, therapeutically effective and ethically just care (Johnstone, 2004). This creates the possibility of undesirable moral consequences, when a patient's wellbeing, and perhaps even their life choices, may be placed at risk.

This case study looks at ethical considerations and moral judgments of a somewhat unique situation when Zoe, aged 46, educated, with a young family, supportive husband and otherwise good health, made an informed decision to discontinue dialysis. Her decision caused confusion and conflicting emotions amongst her caregivers. Her outcome is, however, surprising.

From every patient there are lessons to be learnt. For the nursing profession, this case study and these ethical considerations, give us knowledge for the future.

Child's Play.....Chucky does dialysisor how we managed a "unique" patient in an in-centre haemodialysis unit: 109

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Australia
Helen McIvor,
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Australia

This presentation will discuss how we managed a unique personality patient within our busy in-centre haemodialysis unit..... (And survived!!)

We found a variety of research on the depressed patient and dialysis but little on other mental illness that may affect dialysis patients such as bi-polar, schizophrenia, and the multi personality disorder.

Our objective was to successfully dialyse this patient within the confines of an acute/chronic in-centre unit safely....for the patient, the staff and other patients therefore we put into place a set of management/treatment guidelines that all staff (nursing and medical) could follow and adhere to, this would allow new members of the team to feel comfortable in dealing with this patient and adapt the principles to other patients.

We began with numerous staff meetings, which included nursing staff, the patients' consultant, clinical psychologist and input from the guardian board. During this time, we were able to identify staff's fears and misgivings regarding this patient. We were able to also identify staff members who felt "comfortable" dealing with anti-social behaviours.

From these meetings it was decided that 1 senior staff member would become the primary care giver. This person would be closely supported by senior staff.

Numerous interventions were put into place, these ranged from an agreement of care between the patient and staff, to seeking a limited guardianship order from the guardianship tribunal of NSW.

Three years later, we are still successfully caring for this patient. Treatment guidelines remain in place and been successfully adapted to manage other patients.

Palliative care for Indigenous renal clients living in remote Australian settings. A new public health model and services collaboration: 115

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Royal Darwin Hospital,
Australia
Suzanne Stewart,
Royal Darwin Hospital,
Australia

The burgeoning incidence of end-stage renal disease in the Indigenous population of the Northern Territory, Australia, being up to 30 times greater than the non-Indigenous Australian incidence, has severely stressed existing responses to service delivery. A focus upon institutional haemodialysis within regional centres, rather than offering community based treatment or palliative care options in the remote communities where the majority live, has been the traditional response.

Palliative care services have had to cope with a comparable escalation of ESRD deaths but receiving late referrals of hospitalised patients at the time of cessation or non initiation of haemodialysis. The patient's dislocation from their community has meant that the capacity to make the journey home, in preparation for their death and related cultural practices, often fails through lack of time, lack of available transport and poorly organised supports.

A public health collaboration between the Northern Territory's Renal Services, Chronic Disease Programs and Territory Palliative Care is implementing significant changes in the model of care in the decision making processes and care pathways for ESRD management. By engaging patients and communities earlier, offering advanced care planning and presenting palliative care as one of a number of management options it is hoped that decision making and cultural practices will be respected and that the changes will make a meaningful difference to the lives of patients, their families and communities.

This presentation will detail the elements of the collaboration model and changes between the services and present the preliminary data and evaluation of their impact.

Management of Behaviours of Concern in the Renal Patient Population: 116

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Alfred Caulfield Haemodialysis,
Australia
Roger D'Angelo,
Australia
Rebecca Clark,
Australia

Behaviours of concern in the context of occupational violence and aggression have been investigated as an area of alarm in health care (The 2004 Victorian Taskforce on Violence in Nursing. Department of Human Services (DHS).

The definition of Behaviours of Concern from DHS (Victoria), refers to any incident in which staff are threatened, abused, or assaulted arising from situations involved in the course of their employment.

Dr Julia Jones reported in the workshop, "Violence and Aggression in Renal Units" at the 36th EDTNA/ERCA conference, was that haemodialysis was an area where Behaviours of Concern were increasing in the United Kingdom.

In August 2008, we conducted a survey of two hundred and sixty Victorian renal nurses attending a seminar day. The survey was aimed at finding whether the incidence of behaviours of concern were prevalent in our own renal areas, what appeared to be triggers to these behaviours and what, if any, supports or mechanisms were in place to help the patient and staff. Seventy eight per cent returned their survey and eighty five per cent of the respondents reported that in the preceding twelve months, they had been involved in incidents where patients, or visitors had displayed concerning behaviours.

Surprisingly, the data collated in our survey, demonstrated similarities with the data from Dr Jones.

Our aim in this paper is to report the findings from the survey, to identify triggers to behaviours of concern, how to avoid or minimise them, and to offer a 'tool kit' to manage these behaviours.

Mary Buxton,
Peter James Centre
- Eastern Health,
Australia

Calciophylaxis or Calcific Uraemic Arteriopathy is a rare complication of Chronic Kidney Disease, difficult to treat and often resulting in high mortality rates.

This case study recounts the journey of one courageous person, challenged to the extreme by this complex condition, with a long history of elevated calcium phosphate product, resistant to treatment and inevitably, secondary hyperthyroidism. Painful tumours and lesions developed which took considerable time to diagnose correctly and the usual treatment options, as is often the case, were unsuccessful. Time was running out and with a leap of faith for all concerned, an experimental drug was commenced. This, combined with further surgical intervention, provided a favourable outcome.

This case serves as a reminder to all doctors and nurses who care for the End Stage Renal Failure population that we need to remain vigilant, observant and actively listen to our patients. Do not be afraid to become involved, instead, take up the challenge to identify the "unusual" and allow yourself to be inspired by your patients.

Look how far we have come: Renal Bone Disease Dilemma: 118

Dorte Goodger,
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Calcium/phosphate imbalance and associated Hyperparathyroidism often result in increased morbidity and mortality in End Stage Kidney Disease patients on haemodialysis.

Past, present and future management challenges of calcium, phosphate and parathyroid hormone balance, in haemodialysis patients at the Launceston General Hospital (LGH), will be discussed in this presentation.

In the past there was reliance on low phosphate diets, calcitriol, aluminium and calcium based phosphate binders and when all this failed, parathyroidectomy was the patient's only option.

With the introduction of the CARI guidelines, specific targets were established and renal healthcare teams now strive to maintain these Calcium, Phosphate, Ca X Po₄ product and PTH levels.

Since 2005, LGH Haemodialysis patients have had access to Cinacalcet (a calcimimetic) with successful reduction of PTH levels in 15 out of 18 patients in an initial trial. More recently there has been increased use of non-calcium containing phosphate binders such as Lanthanum and Sevelamer.

The dilemma we face is how to manage the patients who continue to have elevated PTH levels despite prescribed medication regimes. Is there an alternative to parathyroidectomy? What can we do with patients unsuitable for surgery? Pulse IV Paricalcitol, may be a potential option which we are soon to trial on a small group of haemodialysis patients.

Hopefully, the knowledge we have gained from past experience will guide future directions for the renal bone disease dilemma and provide better patient outcomes.

The nurse practitioner role in CKD disease management in the NT: building on the lessons learnt by others: 151

Beth A Amega,
Danila Dilba Health Service
Australia

The area of chronic disease management is an ongoing challenge and the role Nurse Practitioner in case management of chronic disease clients has the potential to improve services directly to clients. The NT is one of the last states and territories to implement the Nurse Practitioner role and therefore has the opportunity to learn from those who have gone before.

Objective:

By undertaking a small qualitative study of Nurse Practitioners within Australia working within the renal and diabetic specialties of chronic disease management the author will identify the barriers and enablers to the implementation process and using the results formulate an implementation framework for use in the NT preventable chronic disease programs.

Mortality in the dialysis population- when should palliative care be considered? :152

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Australia
Hilton Gock,
St Vincent's Hospital
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Australia
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St Vincent's Hospital
Melbourne,
Australia

As the dialysis population becomes older and the number of "aged persons" commence dialysis there is a rise in the number of people dying whilst on dialysis. Increasingly withdrawal from treatment is tabled as an option for the patient population.

The aim of our study was to profile the dialysis population, determine current practice with regard to withdrawal from dialysis management and attempt to identify factors suggesting end of life which may be used as predictors for those who may benefit from supportive management within the nephrology unit and when to involve the palliative care team when the patient decides to withdraw from dialysis.

Iron Alert! Reporting Adverse Reactions: 153

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Adelaide,
Australia
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Prince Of Wales Hospital,
Sydney,
Australia

Intravenous iron supplementation has been found to increase the efficacy of Erythropoietin Stimulating Agent (ESA) by improving anaemia in Chronic Kidney Disease (CKD) patients and allowing a reduction in dose of up to 70%. Studies have shown that haemodialysis patients need approximately 1000mg of iron yearly to replenish iron stores for haemoglobin maintenance. Iron therapy alone has been associated with improving haemoglobin (Hb) for patients not yet receiving ESA. Iron Polymaltose has been administered as the preferred iron therapy in Australia since 1999. Currently Ferrosig® (Sigma Pharmaceuticals) is the brand widely used.

Iron Polymaltose is generally well tolerated and the incidence of adverse reactions is small. However between April and May 2008 we experienced an increased number of patients having adverse reactions to this medication. In total 27 adverse reactions were reported to the Therapeutics Goods Administration (TGA) leading to a product recall.

This presentation discusses the types of reaction our patients experienced and what was reported to the Adverse Drug Reactions Advisory Committee (ADRAC/TGA). We will explore the different options for reporting an adverse reaction to medications and medical devices.

It would seem Nurses are reluctant to report adverse reactions, we see it as the Pharmacists or some one else's job. As we have all the information at the time of the event, empowerment to report is ours.

An innovative technique for renal dialysis cannulation receives positive evaluations from the patients and nurses: 154

Vicki Hartig,
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Queensland,
Australia
Wendy Smyth,
Townsville Health Serviced District,
Queensland,
Australia

Objective:

This poster presents an evaluation of the buttonhole technique for cannulation, which we introduced into our Renal Dialysis Unit several years ago, and which we continue to use. This particular technique is very useful in patients with very short arterio-venous fistula access, and in patients with maturing and fragile access sites.

Method:

After writing an evidence-based procedure, nurses were educated and assisted to attain the necessary expertise. There was some initial staff hesitancy, despite the use of a consultative process. Twenty months after the introduction of the technique, a written questionnaire about the satisfaction with the outcomes from the use of the buttonhole technique was devised and administered to all nurses and patients involved.

Results:

Patients overwhelmingly supported the procedure because there was less pain; they felt less anxious; cannulation was quicker, with fewer 'missed cannulations'; and they preferred the appearance of the cannulation sites. Nurses indicated that they had overcome their initial resistance, because they themselves felt less anxious and perceived that the patients also were less anxious; and that problems associated with cannulation were markedly reduced.

Conclusion:

Importantly, both nurses and patients reported that the buttonhole technique increased the ease and decreased the discomfort associated with access cannulation. We continue to explore strategies to assist us to overcome the requirement to have the same nurse cannulate a patient while the cannulation tunnel forms, which can span several weeks to ensure access is well-established. One such strategy has been the creation of the Renal Access Coordinator nurse role.

Quality of life in dialysis patients living in United Arab Emirates (UAE): 155

Abdelbasit M Ayoub,
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Background:

Quality of Life (QOL) has emerged as an important parameter for evaluating the quality of health care for patients with renal failure. The literature suggests that religious beliefs of dialysis patients impacts on their QOL. But, nothing was found in the literature with regards to Islam as a religion and Arab as ethnicity and QOL in dialysis patients. This research will examine the cultural relevancy of two quality of life tools for dialysis patients in UAE.

Method:

Co-relational survey design was used to study the QOL in UAE dialysis patients. Ethics approval for this study has been granted from Victoria University of Wellington Ethics Committee and Sheikh Khalifa Medical City research committee. 150 dialysis patients completed the QOL Index and the SF 36 questionnaires, and questions on demographic and clinical data.

Results:

The overall QOL was rated higher when self-assessed using the QOL Index compared to SF 36 tool (77.2 vs 58.90). Multiple regression analysis indicated that presence of chronic health problem was the only significant predictor variable in explaining the total scores of both tools. Furthermore, some variables that had a significant influence on the tools in the correlation, using t-test and ANOVA were no longer significant in the multiple regressions such as ethnicity and living arrangement.

Conclusion:

The influences of QOL in UAE population are different from dialysis patients in western countries. This is the first study done on UAE dialysis patients. More studies are required to uncover the concept of QOL in the Arab dialysis population.

Haemodiafiltration: Pre Dilution 'v' Post Dilution - A lesson learned or knowledge gained?: 156

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Australia

Introduction:

In many Dialysis Units Haemodiafiltration (HDF) is now a routine treatment offered to many patients. In our experience, Pre dilution was previously the mode of delivery, however earlier this year, post dilution was introduced to our units. Objective: To investigate and compare three case studies of patients who have received HDF for an extended period of time. All have undergone pre dilution and post dilution HDF. Design: A quality improvement Assessment of Case Study Patients undergoing Pre/Post Dilution HDF. Setting: Haemodialysis Unit Patients: 3 adult patients with end stage renal disease on HDF. Intervention: With patient consent, we have examined the data collected from both Pre Dilution and Post Dilution (routine blood tests, dialysis adequacy, size and type of dialyser, volumes of on-line fluid). In addition we will do a quality improvement assessment of pre and post dilution HDF, to examine the impact on the Quality of Life of the three case studies and involve their participation with the completion of a short QoL survey.

Main Outcome Measure:

to identify the potential critical elements between the two modes of HDF and investigate the outcomes that will impact on the patients Quality of Life.

Results:

showed definite improvements in the removal of small molecules and the removal of beta 2 microglobulins when data was reviewed in comparison with base line data taken for pre-dilution HDF. There was also some improvement in the patients' quality of life. Conclusion: the study indicates that small molecule clearances in general were improved, there was some significant improvements on the patient's quality of life.

Bringing The Policies And Procedures Into The 21st Century: Starting The Manual From Scratch: 167

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Melbourne
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Debbie Gregory,
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The policy and procedure manual is not only a legal requirement but also a very handy tool for dialysis staff to make certain that there is consistent patient management. Additionally, with the looming accreditation review that the hospital was facing our challenge was to bring the unit policies and procedures in to the 21st century. The aim of this poster is to explain the hardships of creating all the policies from scratch, dispelling any "that is what I was told" myth and also ensuring that we met the strict hospital guidelines on policy writing. Furthermore that each policy needed to have evidence based practise and at least 2 reviewers.

Development of a patient education tool for Simultaneous Pancreas and Kidney Transplantation: 158

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Tia Mark, Monash Medical Centre,
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Diabetic nephropathy is of increasing concern in Australia and accounts for 30% of new dialysis patients. Simultaneous pancreas and kidney transplant (SPK) is a treatment option available to some but not all Type 1 diabetics. Monash Medical Centre is one of only two transplant unit's nationwide conducting SPK transplants.

SPK transplantation does not come without risks and patient education is essential to ensure that patients are well informed and to promote long term viability of transplanted organs.

As part of Monash Medical Centre's drive to promote positive patient outcomes, a DVD was produced to provide audio and visual information to all prospective SPK patients. This project covers all areas of pancreas and kidney transplantation, including pre and post operative care, benefits and risks, surgical implications and a short segment from a patient's perspective. An extensive internet search revealed a dearth of information available to these patients.

Development of this educational tool has facilitated a pathway for patients to make an enlightened decision about this treatment option.

Future Dialysis Research Priorities: Have we learnt from the past?: 159

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Flinders University of South Australia,
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Australia

Background:

Even though there has been high quality nursing research related to dialysis care, there are still many areas where clinicians request more information.

Methods:

A web-based survey was emailed to dialysis managers in Australia and New Zealand covering 265 dialysis units. This survey requested participants to nominate areas related to dialysis where they would like to see more research being undertaken. Ethics for this study was approved through the source academic institution using the National Ethics Approval Form (NEAF).

Results:

Response Rate = 100%. Areas where dialysis managers saw the need for further research varied greatly. Research areas in order of frequency were: Workforce issues, nurse education, patient quality of life, end of life care, ethical issues, modality choice, medication management and technology.

Conclusion/Nursing Implications:

Dialysis managers identified many areas for future research ranging from workforce, education, ethical and clinical issues. Research previously completed in these areas may not be accessible to clinicians at the coalface. Education and technological strategies achieving better dissemination of research may be required to transition research into practice in the Australian and New Zealand context. There are many areas for future research related to nursing, dialysis and patient care.

Kimberley Indigenous Kidney Education Package: 160

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Kimberley Aboriginal
Medical Services Council,
Australia
Chrissy Fiegert,
Kimberley Aboriginal
Medical Services Council,
Australia

Objective:

To increase the level of understanding of Chronic Kidney Disease in the Indigenous population of the Kimberley through the development of culturally appropriate kidney educational resources.

Method:

Renal staff in consultation with the Ord Valley Aboriginal Health Service (OVAHS) in the East Kimberley, WA designed a package of culturally appropriate kidney educational posters, booklets and DVD's; covering awareness and prevention of kidney disease, the kidney disease pathway, dialysis therapy options and conservative care. The resources were developed, trialed and evaluated over a 3 year period at the visiting nephrologists' clinics, OVAHS clinic and at CKD family meetings. Evaluation was performed through verbal questioning and surveys to clients, families and health clinic staff, resources were adapted as necessary.

Results:

Evaluation to date shows an increase in the understanding of kidney disease. Results of questionnaires suggest that the kidney disease pathway and management is now much clearer for both kidney clients, AHW's, RN's and GP's in the East Kimberley. The development process of such tools has also resulted in a partnership of Indigenous Corporations in the East Kimberley working towards improved kidney health outcomes.

Conclusions:

The kidney education package has improved communication and understanding of kidney disease in the East Kimberley. Developing culturally appropriate kidney education resources requires timely consultation and collaboration with Indigenous groups. Cultural input that engages ownership of resources is imperative for success. The kidney education package will now be distributed to other Aboriginal Medical Services throughout the Kimberley, with the aim of slowing the progression of kidney disease.

The challenges of training patients for Home Haemodialysis: Training a patient with psychological disorder: 161

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St Vincent's Hospital,
Melbourne Australia
Gwen Still,
St Vincent's Hospital,
Melbourne Australia
David Cork, St Vincent's Hospital,
Melbourne, Australia

Home haemodialysis (HHD) is one of the treatment options for patients requiring life long dialysis treatment. According to ANZDATA 2007 there has been a slow increase in the number of patients undertaking dialysis at home- with a stable total of only 9 % undertaking home haemodialysis of recent times. St. Vincent's health has an active home therapy and to continually develop and enhance the program the home therapy team actively recruit interested and suitable patients to either home haemodialysis or peritoneal dialysis. What happens when an interested patient has a diagnosed mental illness and what are the challenges to manage to train them to be safe at home? This case presentation will explore the modality choice: individualized learning needs established; strategies implemented; resources utilised and multidisciplinary team involvement with training a person with Attention Deficit Disorder who was desperate to dialyse at home. Did we succeed ?

The Portable Reverse Osmosis Unit – An anti-bacterial challenge: 162

Patricia I Campbell,
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Australia

Monitoring the bacterial count and maintaining the water quality for haemodialysis as per recommended guidelines requires constant vigilance by the dialysis staff. This is particularly problematic with chemically sterilised portable Reverse Osmosis units when they are used intermittently for Intensive Care treatments. In early 2007 high bacterial counts caused a number of interruptions to the acute haemodialysis service lasting two - six weeks, as staff attempted to decontaminate the unit. This occurred over a twelve-month period.

A literature review was undertaken and liaison with a number of related departments and companies occurred as answers were sought. Systematic assessment and evaluation of all procedures relating to the disinfection of the water treatment plant and the collection of samples was carried out. A review of laboratory testing techniques and reports was also implemented by microbiology.

Via a process of elimination two major sources of contamination were identified - Intensive Care tap water and staff contamination during specimen collection. Renal unit policy was changed to include flushing of Intensive Care taps for five minutes prior to connection to the portable Reverse Osmosis unit. Renal staff are now educated and assessed for annual competency on the collection of water specimens.

Follow up review of water results in September 2008 showed a vast improvement in the bacterial counts with the majority well within standards. However we are still finding the occasional inconsistent reading. A trial of an additional inline filter has commenced. The results of this trial will also be included in the presentation.

Dialysis Allergy – One Mans Dialysis Dilemma: 163

Robyn L Bailey,
Queensland Health
- South Burnett Renal Service,
Australia

In today's environment it is easy to forget the haemodialysis reactions of old. Today's reactions appear rarely and if they do occur, seem to be milder. Technological advances in machines, dialysers, sterilisation methods, water treatment and anticoagulation therapies has occurred in the haemodialysis field seeming to make the dialysis process less problematic, in the case of reactions.

While this appears to be true for a majority of the dialysis population there are still those patients whose dialysis experience is fraught with danger and even death. This presentation is one such man's journey through haemodialysis. The presentation will talk the listener through the patient's multiple reactions, the resulting dialysis regime changes, possible causative agents and this patient's continued survival.

Sleep disorders, exercise & haemodialysis: 164

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Hampstead Dialysis Unit,
Australia

Leo Breugelmans,
Australia

Paul N Bennett,
School of Nursing and Midwifery,
Flinders University,
Australia

Lauren Potter,
Australia

Background:

Sleep disorders in the form of insomnia and lethargy can occur in up to 80% of adults receiving haemodialysis. These conditions decrease quality of life and may increase cardiovascular morbidity and mortality in this population. Restless legs syndrome, periodic limb movement disorder, lack of exercise, inflexible dialysis treatments and sleep apnoea may contribute to sleep disorders in this population.

Methods:

Patients in one Australian metropolitan satellite haemodialysis unit were surveyed using the Berlin Questionnaire to identify patients at high risk for sleep apnoea and disrupted sleep. Secondary analysis was designed to identify the association between intradialytic exercise and sleep disorders.

Results:

The Berlin Questionnaire highlighted that 66.6% of our patients are at high risk of sleep apnoea. Following this we analysed data comparing exercising cohorts and non-exercising cohorts. This secondary data is unavailable at time of abstract submission.

Conclusions:

Sleep disorders were under recognised in our haemodialysis unit. The study contributed to an increased awareness of nursing staff of the quality of sleep and health-related quality of life in our haemodialysis patients. In addition our study highlighted the possible inverse association of exercise and sleep disorders. Further multidisciplinary research (involving sleep researchers) is required to explore whether nocturnal dialysis and/or exercise may improve sleep disorders

Anticoagulation in haemodialysis: 165

Susanne Ehram,
PA Hospital,
Australia

Medication safety- are we taking this seriously, or is it all too hard?

Anticoagulation regimes are often based on the nurse's knowledge and experience which may be supported by a variable standing order or a signed medical order. The policies and procedures available contain inadequate information about the use of the anticoagulants. Where is the evidence to support our current practice?

To perform an effective treatment, anticoagulants are prescribed. The requirement of anticoagulation is very individual. Over and under use can be associated with severe consequences. Different methods are used to prevent the blood from clotting in the circuit, depending on the patient's bleeding risk (e.g. varying doses or omission of heparin). Regular review of regimes is essential to optimize the use of the drugs.

To improve the management of anticoagulation we have developed a learning package, including this poster and we are promoting the extensive use of the Activated Clotting Times machine (ACT). We are reviewing our current practices to find out if or when a change of lines and filter is needed to perform a safe and successful heparin free treatment.

This poster is a staff education tool to increase awareness of anticoagulation drugs and promote individual patient regimes. This will ultimately lead to improved understanding and promote patient safety.

Anna M Flynn,
Bendigo Health,
Australia
Annette E Linton,
Bendigo Health,
Australia

Daisy is a 67 year old IDDM in ESRF who presented to a regional hospital in February 2008 with exacerbation of CCF, recent weight gain of 3+ kg, pitting oedema to below knees, lethargy and anorexia.

On admission there was an incidental finding of a small lower abdominal erythema, this progressed over the weeks to a number of lesions and was ultimately diagnosed on biopsy to be Calciophylaxis.

Calciophylaxis is an incapacitating condition with 80% mortality rate and an estimated prevalence among haemodialysis patients of 1 – 4%.

Calciophylaxis

- Abnormal calcium deposits in the blood vessels causing subcutaneous nodules of infarction and skin necrosis
- Commonly in areas of thickened subcutaneous tissue eg breast, abdomen & thighs
- Extremely painful
- Poor healing and high associated infection rate
- Increased risk in female, obese and diabetic patients
- Death usually results from sepsis and organ failure

Surgery and antibiotic therapy did not contain the spread of the lesions. In July Daisy commenced hyperbaric oxygen therapy at a metropolitan hospital. Unfortunately a severe life threatening reaction to the therapy occurred so she was transfer back to her regional unit.

Final resort – expensive Sodium Thiosulphate therapy

Sodium Thiosulphate

- Calcium chelator – increases solubility and mobilization of vascular Ca deposits thereby promoting removal via haemodialysis
- Assists restoration of endothelial cell dysfunction promoting vasodilation
- We will follow Daisy's Calciophylaxis progress through 2008 and ultimately ask..... treatment but at what cost.

A Collaborative approach to CKD management with the Indigenous Wellness Centre: 201

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Service District,
Australia

A collaborative project is being undertaken between the Nurse Practitioner led chronic kidney disease team and the Indigenous Wellness Centre in Bundaberg to screen the local indigenous population, identify risk factors and implement sustainable management strategies. The screening was undertaken by indigenous health care workers(IHCW) that have recently been recruited to work for the Indigenous Wellness Centre. The Nurse practitioner and CNC identified the risk factors and discussed with the clients and other health care workers strategies that need to be used to manage these risk factors.

Currently results from the initial screening of 45 people have been identified and the strategies relating to addressing the risk factors are currently being developed.

The rationale for the screening and management strategies will be discussed within the context of Indigenous health in Australia. One key strategy that has been identified is to continue with the training and education of IHCW's utilising resources such as KCAT education programs.

Recommendations on how we aim to continue a sustainable approach to management of kidney health within the indigenous populations of our area will also be covered.

Against the Grain - A case Study on Nephrotic Syndrome: 202

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North West Dialysis Service,
Australia
Jamie Rutherford,
North West Dialysis Service,
Australia

In nephrology health care the aim is often to preserve residual renal function for as long as possible to optimise health, improve outcomes and enhance lifestyle. However, in some cases, this preservation may cause significant morbidity and mortality. In these circumstances, nephrology health care must be tailored and delivered outside our routines to meet the needs of the individual.

In Dec 2006, a 54 year old man was referred to North West Dialysis Service(NWDS) with membranous glomerulonephritis and nephrotic syndrome. On admission, his serum albumin was 16g/dl, eGFR 25. He felt tired and depressed, experienced some pain and at times severe shortness of breath. He was obese at 114kg.

Plasma exchange was instituted over 15 weeks to reverse his nephrotic syndrome. However, his albumin failed to respond. To correct his persistent and morbid hypoalbuminaemia, he was prescribed a non-steroidal anti-inflammatory agent and commenced dialysis to sacrifice residual renal function.

The medical team, the acute, regional and home dialysis nurses supported this gentleman through the stages of his illness and treatment regimes to progress to nocturnal dialysis where he has regained both normal albumin (38g/l) and his independence.

This case study illustrates the extraordinary journey of a 56 year old man from a very difficult and restricted life with nephrotic syndrome to what ultimately proved to be a much healthier and happier life on dialysis. It highlights the importance of individual treatment plans to maintain the best interests of the patient.

The Chronic Kidney Disease Clinic Pilot Site – Reporting 2 years' results: 203

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Brisbane,
Australia

The CKD Clinic at Princess Alexandra Hospital opened in April 2006, as the Queensland Health pilot site for a multidisciplinary approach to Chronic Kidney Disease (CKD) patient care. This created not only a new model of care, but also a new advanced practice role for nurses.

Evidence based guidelines have been used to develop individualised patient treatment targets and manage risk factors, with the aim of reducing complications of CKD, and avoiding or delaying the need for dialysis and transplantation. The main intervention targets in this group of patients were identified as blood pressure control, blood glucose control, proteinuria, lipids, mineral and bone disease, and anaemia management.

As the nursing role has previously been discussed this will not be re-examined, but we are now considering if this model of care has achieved its goals. We will present the results of nearly two years experience of this model of care. There will be discussion of factors which have contributed to successful outcomes and lessons for future practice.

“I saw people on home HD and they looked better.” Patient and carer preferences for treatment of end stage kidney disease: a synthesis of qualitative studies: 204

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Allison Tong,
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Australia

Kirsten Howard,
The University of Sydney,
Australia

Paul Snelling,
Sydney South West Area Health
Service,
Australia

Angela C Webster,
The University of Sydney,
Australia

Objectives:

To describe preferences for treatment of end stage kidney disease from the patient and carer’s perspective.

Methods:

A systematic review of qualitative studies regarding decision making and choice for dialysis, pre-emptive transplantation or palliative care was undertaken. A comprehensive literature search of publications using qualitative methods (focus groups, interviews, or case studies) was conducted in Medline, PsychINFO, CINAHL, EMBASE and Social work abstracts from inception to October 2008. Synthesis involved line-by-line coding of the findings of the primary studies and development of descriptive and analytical themes.

Results:

12 studies that reported the experience of 273 patients and 62 carers were included. 9 studies focused on preferences for dialysis modality, 2 studies on transplantation and 1 study on palliative management. Five major themes were identified as being central to treatment choices: (1) confidence in care; (expert management; not being abandoned); (2) seeking further information (influence of family members and other patients, needing time to consider options); (3) personalising the choice; (weighing alternatives to fit with lifestyle; managing logistics, transport, social/family roles); (4) other’s decision (no choice, treatment based on medical factors, doctor’s preference, available space); (5) living with the decision (anticipating the future, support of the family, relationships with staff, relationship with carer).

Conclusions:

Patients and their carers are interested in knowing about their treatment options, even if they are happy for the choice to be made for them. The perceived impact of the treatment on the patient/family life appeared more influential than the medical effectiveness of the treatment.

Linking the Silos – Acute Renal Services, Chronic Disease Management & Palliative Care: 205

Elaine R Bowen,
Royal Darwin Hospital,
Australia

During 2007 - 2008 Top End Renal Services, Darwin NT focussed on improving patient management between the acute renal sector, chronic prevention and palliative care services to improve care outcomes for our patients.

2007 saw the appointment of the renal/palliative care liaison officer to improve the end of life wishes for our renal patients. Project targets were for Advanced Care Planning for all chronic kidney disease patients, renal replacement treatment choices before referral to renal services, congruent educational resources, returning to homelands to die as a priority for most Indigenous patients, and inclusion of palliative care nurses in weekly care management meetings already established in renal services.

2008 saw an 800% increase in nursing staff appointments for management of chronic kidney disease in the Top End. Formerly there was one CKD Nurse for 350 patients. The appointment of eight Public Health Nurses in the Chronic Disease Network focused case management responsibilities for chronic kidney disease patients in rural and remote regions. Workshops and numerous meetings resulted in referral pathways being established to renal dietetics and renal social work, palliative care and access to a nephrologist for remote clinics.

Commencement of weekly case conferences between acute renal services and chronic disease networks, include remote clinic nurses, aboriginal health workers, regional medical officers, nephrologists, the acute CKD nurse and the renal nurse manager. Palliative care involvement is also by referral from these case management meetings. Access to acute renal services is now available for all remote patients who do not come to town.

Nutritional management of a patient with sclerosing peritonitis – a case study: 206

Kim J Ashcroft,
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New Zealand

Sclerosing peritonitis (SP) is a rare but serious complication of Peritoneal Dialysis (PD). SP is associated with complications of bowel obstruction, sepsis and malnutrition. It has a poor long-term prognosis and very high mortality rates. In the most severe form, sclerosing encapsulating peritonitis (SEP), the intestine is entrapped by a fibrous sac resulting in complete intestinal obstruction.

A 33 year old woman, developed signs of SP in November 2004 after nine years on PD. Her usual dry weight of 53kg had dropped to 48kg by March 2005. Initial nutritional management was oral nutritional supplements (ONS), which provided up to 1400 kcal/day in addition to her food intake. Abdominal pain, nausea, vomiting and poor appetite continued over the next 12 months, along with hospital admissions for intermittent bowel obstructions.

Intradialytic Parenteral Nutrition (IDPN), which provides nutritional substrates intravenously at the time of dialysis, was commenced in February 2006 when her weight was 35kg. The IDPN provided \approx 1300 kcal during each HD session (3x/week). After nine months on IDPN her weight had increased to 40kg, but as SP symptoms continued to worsen, her weight dropped back to 36.5kg by March 2007.

Total Parenteral Nutrition (TPN) was commenced at this time and continues today, with the patient administering her own TPN at home five days/week. With further complications of SEP, including an entero-vesicular fistula requiring ongoing drainage, her weight is now 49kg. This case demonstrates that in severe forms of SP, nutritional supplementation with ONS and/or IDPN is inadequate to meet requirements.

Experience with the Tego™ Luer lock Access Device: 207

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North West Dialysis Service,
Melbourne Health,
Australia
Jenny Beavis,
North West Dialysis Service,
Melbourne Health,
Australia

Background:

In conjunction with Melbourne Health Product Review Committee, NWDS participated in a trial of the Tego™ connector¹. This neutral pressure connector allows access for luer lock syringes and dialysis lines and reportedly reduces the opportunity for infection and air embolism. The Tego™ connector requires connection using a sterile procedure. Once in situ it can be accessed by disinfecting with an alcohol swab. This is seen as a procedural advantage due to the reduction in requirement for sterile equipment and reduced time for staff intervention.

Method:

12 in centre haemodialysis patients using a central venous catheter access were selected for a four-week study. Packaging, connections and procedural advantages were evaluated by questionnaire (supplied by Mayo Healthcare). The Tego™ connector was attached to each catheter lumen and changed weekly. Dialysis staff also evaluated connectivity, blood flow rate, venous pressure, line reversal and requirement for anti-thrombolytic agents and recorded the number of activations of the Tego™ connector per dialysis session.

Results:

Staff evaluated the product by questionnaire using a 5-point Likert scale. 79% of staff (n=19) found the Tego™ connector to be better overall than the current connector. No difference was identified in blood flow rates, venous pressures, requirements for anti-thrombolytics or line reversal.

Conclusion:

Tego™ demonstrated advantages in decreased connection time and ease of use without reduction in catheter function. 100% of staff wished to continue to use the Tego™ connector.

Encouraging Confidence through Independence: 208

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Australia
Elaine R Bowen,
Royal Darwin Hospital,
Australia

In the mid 1990's dialysis was delivered for the Top End from the Community Centre at Nightcliff in Darwin, NT. Patient care was independence based but there was no official training program.

Patients from the Tiwi Islands (20 minutes North of Darwin by plane) lobbied the Federal and Territory Governments for self-care dialysis at Nguuu.

The go-ahead was given to build the unit at Tiwi with patients responsible for their own dialysis care.

A self-care training team was established and designated staff were rostered. A training manual was compiled for consistency of approach, which the patients had input into. The training program also prompted the need for competency assessment tools.

Other satellite patients were also interested to learn the machine despite not wanting to return home.

A new home dialysis training program at Nightcliff meant withdrawal of self-care in the satellite and teaching only home patients. No allowance was made for non-home patients. Staff and some patients expressed dissatisfaction and this gave opportunity to start self-care again in the satellite.

Measuring our success over the past 3 years since reintroduction of self-care training:

- 3 unsupervised patients without staff allocated
- 14 supervised patients (requiring needling only)
- 5 semi-supervised patients (doing what they can)
- 7 patients fast tracked to complete home training

Staff challenges:-

- Nurses to keep their hands off
- Trust assessment of patient independence
- Relinquish control

Outcomes include increased patient confidence and participation, and shortened home training times.

Extended hours in hospital based dialysis centre: 209

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Sydney Adventist Hospital,
Australia
Trish Campbell,
Sydney Adventist Hospital,
Australia

Objective:

There is evidence to suggest that home patients on extended hours do better and are able to cease phosphate binders and achieve serum phosphate levels within the normal limit. These patients have opted to do longer hours and are generally a fitter younger patient. However these findings have never been put into a comparative randomised study The ACTIVE trial is a pilot, to study the effects of extended dialysis (more than 24hrs per wk), compared to standard dialysis (less than 18hrs per wk). This evidence will have direct relevance to decisions about the care of patients with ESKD.

Method:

Sample size of pilot trial will be 40 patients with approximately 6 from the Sydney Adventist Hospital. It will be an open label, randomised controlled trial of extended hrs vs. standard hrs. Patient will participate for a 12 month duration. Data collected will include physical examination, medical history, vital signs, blood results and quality of life questionnaires KDQOL-SF 1.3 and EQ-5D.

Conclusion:

Offering extended hours has proved feasible through modifications to the dialysis rostering system, the dialysis prescription and to routine biochemical monitoring. The first participants were randomised and have completed 6 months of the trial.

Conducting extended hours in an in-centre unit poses special challenges for patients, nursing staff and administration but is achievable and will provide invaluable evidence on ways to improve the well-being of haemodialysis patients.

Sally Carpenter,
Princess Alexandra Hospital,
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Australia

The Princess Alexandra Hospital is home to the only tertiary adult transplant unit in Queensland, and our haemodialysis unit is fortunate to be associated with this service. In the last 2 years we have experienced an increase of 130% in the number of plasma exchanges performed on patients in both the pre and post renal transplantation period. This treatment is clinically beneficial for patients with recurrence of focal segmental glomerulosclerosis (FSGS) and antibody mediated rejection such as positive B cell cross match and ABO incompatibility.

We were not prepared for the impact of provision of this service on staffing ratios, workload, staff education and budget, which have been influenced not only by the number of patients requiring this service but also by the conditions under which these transplants are performed.

This presentation will provide an overview of our experiences, including some case studies to highlight problems we encountered along the way. The objective of this presentation is to share our experience with other centres in the hope that they will be more prepared for these developments than we were.

24 Hour Telephone Support Service: A Quality Improvement Project: 211

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Shore Hospital,
Australia
Linda McGrail,
Australia

Sydney Dialysis Centre manages 155 home haemodialysis patients throughout NSW. The distribution of patients is: 70% Sydney Metropolitan and 30% rural NSW. The service provides telephone support 24hour per day, seven days per week. Each telephone call is logged as an Occasion of Service (OOS). In addition an OOS report is documented and filed in the patient's medical record. Each month the number of OOS calls are collated and submitted to the Department of Health as activity statistics.

A six month audit of OOS was conducted and calls were categorised to group commonalities, training location and rural/metro split. Percentage calculations were completed for each category. Four major groups were identified: 1) Clinical; 2) Technical; 3) Nursing/Administration; and 4) Stores. The following subcategories were identified under Clinical: Access; Modality; Dialysis Management; Troubleshooting; and Anticoagulation.

This audit has provided the opportunity to: document the nature of the calls; identify trends; recognise shortfalls in the training program; utilise information to feedback into the training program; and ultimately improve patient outcomes.

Preliminary findings suggest that once a patient is discharged from the home training program vigilant follow up is important in keeping the patient well dialysed and at home. Surveillance in areas such as: access, ideal body weight, blood results and technique is essential. Recognition of the need for additional home visits, retraining and/or respite is also important.

We plan to repeat the audit biannually to graph trends and implement a continuous quality improvement program.

The past, the present and the future - Vascular Access: a necessary evil: 212

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Australia

Successful haemodialysis depends upon the patient having a patent, functional vascular access. The most successful of these is the native arterio-venous fistula (AVF), with the synthetic graft running in second place and a tunneled catheter as a last choice for long term use. The evolution of dialysis access has been dependent upon the determination of a few clever people and history has seen some remarkable advances and changes.

Come on a journey which begins in the late 1800's when Jabouley and Briau first experimented with suturing an artery-end-to-end anastomosis in dogs. Follow the path and meet Alexis Carrel, who was awarded the Nobel Prize in 1912 for his work and discover the revolutionary development of the Scribner Shunt to the present day where the Cimino-Brescia AVF is still the best option. Let us also look to the future and explore the potential of dialysis ports. The journey is never ending as the development of a fullproof successful dialysis access continues.

This presentation will offer a journey through the history and evolution of the various stages and types of vascular access and how we access them with the view of enlightening colleagues of the past and what the future holds. All the time remembering that sometimes what is old becomes new again.

The Palliative Patient... that did not die: 213

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Australia

Caroline Drewe,
Princess Alexandra Hospital,
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Australia

Christine Bond,
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Brisbane, Queensland,
Australia

Linda Smith, Caboolture Hospital,
Brisbane, Queensland,
Australia

Patient A, a male in his 60's married with children had several co-morbidities. Together with his family made the decision to cease treatment. Admitted to hospital as a palliative care patient his dialysis was discontinued. Prior to admission he had said goodbye to family and friends and expected that his stay in hospital would be relatively short. This client lived for several months, his renal function improved causing himself and family much distress. He was placed into nursing home care.

Client B, a female in her 70's residing in a nursing home chose to cease treatment due to increased pain and decreased quality of life. After several weeks in hospital her renal function also improved. She returned to her nursing home and continues to reside there despite ceasing treatment more than 12 months ago.

These 2 case studies demonstrate where early initiation of Renal Replacement Therapy (RRT) was unsuccessful. The cost for RRT per patient per year is approx \$50,000-\$75,000. With limited haemodialysis machines and places these resources may have been used more effectively elsewhere.

These patients were subjected to haemodialysis access procedures, the stress of undergoing RRT three times per week and the emotional distress which resulted.

Is Dialysis For Me? - Introducing the Concept of Conservative Management into Patient Education Programs: 214

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Melbourne Health,
Australia

Background:

As one of the largest renal services to metropolitan and regional Victoria, North West Dialysis Service (NWDS) co-ordinates the care of ~630 dialysis patients and 320 patients in varying stages of Chronic Kidney Disease. NWDS convenes monthly metropolitan education sessions and seven rural sessions per annum.

Methods:

In acknowledgement that not all patients registered with NWDS will proceed to dialysis or transplantation, and with growing evidence that quality of life for elderly patients or those with significant co-morbidities may be better preserved without dialysis, NWDS re-designed the patient education pathway in March 2003 (Ashby et al 2005). Embracing the concept of "Managing Kidney Failure" (MKF) as opposed to "Pre-Dialysis Education" involves introducing "not for dialysis", with conservative medical management as a treatment choice for some patients. What is not well documented is how we express this option in the context of large patient forums, with audiences varying in age, co-morbidities, lifestyles and cultures.

Results:

Of the patients attending MKF between November 2007 and November 2008 (age range 28 to 85 years), 5% have elected for conservative care, 71% have yet to commence dialysis, 20% proceeded to dialysis, 2% were pre-emptively transplanted and 2% passed away.

Conclusion:

An investigation into introducing conservative management information to patients has borne unique patient reactions, raises questions about the methods of expressing this information in a diverse audience group, patient expectations of renal services and contemplates whether subsequent one-on-one patient education is a more appropriate forum in which to discuss palliative options.

The Australian and New Zealand Dialysis Workforce Survey: Knowledge for the future: 215

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Background:

In Australia and New Zealand (NZ), nursing workforce interest groups have been exploring strategies to address nephrology nursing recruitment and retention issues. However, there is limited information about the nephrology nursing and dialysis workforce.

Aim:

To provide a snapshot of the current workforce in Australia and NZ in order to inform nurse clinicians, managers, educators and researchers in future planning.

Methods:

A web-based survey was emailed to dialysis managers in 240 Australia and 25 NZ dialysis units. The survey requested participants to complete 15 questions related to dialysis unit nursing workforce characteristics.

Results:

The average age of the dialysis nurse was 42. A higher proportion of registered nurses (RNs) worked full time compared to enrolled/division 2 nurses (ENs) and dialysis professionals. RNs had a significantly higher proportion of post registration renal qualifications than ENs and dialysis professionals, however the majority of dialysis RN's had no formal post-registration renal qualification. The majority of dialysis managers reported that they "usually had enough dialysis staff". In contrast, most dialysis managers used overtime or calling in other staff to supplement their dialysis workforce.

Conclusion/Nursing Implications:

Recruitment and retention remains a major issue in most Australian and New Zealand dialysis units. Access and availability of post registration qualifications vary. Access to post registration ENs and other dialysis professionals is limited. Further nursing dialysis workforce research is required.

Barbara Harvie,
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Australia

Critical thinking is thinking about your thinking while you're thinking in order to make your thinking better.

Undergraduate students are provided with a strong theoretical background which incorporates critical thinking and reflective practice and many postgraduate courses also provide this learning. Senior nephrology nurses who are responsible for precepting and mentoring novice and beginner nephrology nurses need to develop an understanding about how Critical Thinking (CT), Reflection (R) and Critical Reflection (CR) can impact on clinical practice.

Preceptorship plays a substantial role in developing and sustaining professional education, and CT, R and CR are all integral components of preceptorship. In this paper, the principles of each is discussed and linked into practice. The benefits and limitations of CT, R and CR are also identified, along with strategies to encourage and promote successful utilisation within clinical settings.

Attributes of successful critical thinkers and reflective practitioners are explored, and endeavours to demonstrate how CT, R and CR can be incorporated into personal growth and development.

Clinical Trial Coordinators: Providing Knowledge for the Future: 217

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Ky-lee Pirone,
Royal Adelaide Hospital,
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Anna L Hooper,
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Randall J Faull,
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Background:

Many hospitals run extensive clinical trial divisions. Renal medicine is no longer an exception. Medications have reached the marketplace in the past without being trialed on subjects with renal impairment. In the last 5 – 10 years this has changed dramatically as medications previously not given to subjects with renal disease are being found to be potentially beneficial in this population. Nurses play an important role in the potential for improved care.

Aim:

To increase the knowledge, understanding and awareness of the role of clinical trials in the presence of kidney disease, and the process behind the appearance of the drug on the pharmacy shelf from a nursing perspective.

Discussion:

Our clinical trials department employs 3 nurses with an average of 14 years experience in nephrology nursing. Currently we coordinate 22 trials ranging from Phase II to Phase IV, involving approximately 200 subjects. Trials are sponsored by drug companies, others are nephrologist driven, or in collaboration with local/international universities. The processes involved in clinical trial coordination are complex. These involve the development, recruitment, maintenance and cessation of studies under the International Code of Harmonisation Good Clinical Practice code of practice. The importance of the nursing role in this process will be presented.

Clinical Implications:

Increasingly nurses are finding their way into roles within clinical trials that benefit people living with renal disease. This is a move away from the more traditional bedside care of the patient and has extensive implications for improving future outcomes for these patients.

Renal Nursing in The Northern Territory The Red Centre Experience: 218

Jenny S Cutter,
Southern Health Monash Medical
Centre Dialysis Unit,
Australia

The South Eastern suburbs of Melbourne are culturally diverse however, this area of Victoria does not provide the opportunity for a nurse working in the field of renal dialysis to have an insight into the complex issues and challenges faced by indigenous Australians with End Stage Renal Disease.

To improve my knowledge and understanding of the challenges faced by, not only indigenous Australians when accessing the healthcare system in a remote environment, but also nursing and medical staff working in these areas, I attended the Renal Society Australasia conference in 2006 to source information from a Northern Territory Representative.

The information provided described employment opportunities open to renal nurses looking to gain experience working in the Northern Territory.

Following discussions with my employer and family members, I negotiated a 6 month leave of absence from my position of Nurse Unit Manager of a 9 station satellite dialysis unit, making it possible to take up a position at the 20 bed hospital in Tennant Creek, working within an 8 station satellite dialysis unit.

The experience gave me the opportunity to care for indigenous patients, and to experience first hand the problems that contribute to a number of healthcare issues that they commonly face, furthermore I was able to observe how the multidisciplinary healthcare team provide vital healthcare for the community of Tennant Creek.

National audit of information about treatment options given to new end-stage kidney disease patients – results from a pilot study: 219

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Australia
Kirsten Howard,
The University of Sydney,
Australia
Paul Snelling,
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Australia
Angela C Webster,
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Australia

Objectives:

To pilot a questionnaire on routinely collected data of incident end stage kidney disease (ESKD) patients and their carers, evaluating information about treatment options provided by renal units, prior to a planned national audit.

Methods:

The questionnaire was completed by pre-dialysis and chronic kidney disease coordinators in Australian renal units regarding information about treatment options given to ESKD patients. New patients included those commencing dialysis, pre-emptive transplant, or palliative care. Data were collected about the timing and type of information provided, who it was provided by and whether information was offered specifically for the patient's carer. The study was approved by the University of Sydney Human Research Ethics Committee and endorsed by Kidney Health Australia.

Preliminary results:

New ESKD patients (median age 61, 52% female, n=21) commenced centre haemodialysis as their first mode of renal replacement therapy (RRT) in 62% of cases; peritoneal dialysis (19%) and palliative care (19%). 67% received information about treatment options prior to RRT with a mean eGFR of 12.5 ml/min/1.73m². Renal nurses provided information about treatment options for 95% of new patients and nephrologists to 67%. 62% of patients had a carer present when they received information and carer-specific information was given on an as-needs basis.

Conclusions:

One third of new ESKD patients received information about treatment options after commencing RRT. This pilot study has demonstrated that the questionnaire is acceptable and can be used for the main study of a National Audit to be conducted over a 3 month period in 2009.

The role of the 'online' Renal Course Tutor: how experienced nephrology nurses can create a new generation of leaders: 220

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Barbara Harvie,
The Canberra Hospital, ACT,
Australia

Online and Distance Education is a phenomenon that is increasing in the global community. In 2007, we experienced our first step into acting as online Tutors for students completing Renal Professional Development modules. The key recommendation for teachers, according to Kunzle & Thomas (1994), is assisting students to complete nephrology nursing postgraduate studies including facilitating situational learning experiences and performing skills assessments. Therefore the role of the teacher in a 'virtual' environment has indeed provided many challenges.

Weekly quizzes and discussions based around current guidelines and clinical practice have provided the students with a firm theoretical platform and strong reflective practice skills, in order to enrich their careers and work towards postgraduate qualifications.

Acting in the tutor role has provided a fantastic opportunity to create and expand national networks. Observing and facilitating the personal and professional growth of the students has been incredibly rewarding. It is these new networks that will provide the next generation of nephrology nurse leaders as clinicians, managers and educators.

As senior renal nurses, it is imperative for us to create robust succession plans for our profession. This experience has facilitated a unique and innovative opportunity, which has assisted students to learn without the need to travel, while also providing an enriching personal journey for the tutors.

Ref: Kuntzle, W & Thomas, N. (Eds.) (1994) European Curriculum for a Post-Basic Course in Nephrology Nursing. European Dialysis and Transplant Nurses Association. Switzerland.

A long and winding road: The implementation of Clinical Vision Data Management System in St Vincent's Dialysis Unit, Melbourne: 221

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Australia
Debra Gregory, St Vincents Health,
Melbourne,
Australia

St Vincent's Dialysis Unit incorporates a 4 bedded acute unit, 15 chair chronic dialysis unit, home training, CAPD and transplantation on the Fitzroy Campus, plus a 7 chair chronic satellite dialysis unit on the Kew campus.

In late 2005 St Vincent's Dialysis implemented a comprehensive patient data management system, Clinical Vision and Exalis. This system is designed to give the staff an integrated clinical record for all patients under the care of St Vincent's. The expectations were that Clinical Vision in conjunction with Exalis would improve dialysis data collection, generate multidisciplinary care plans, create paperless correspondence between the units and renal clinics, and allow for easy generation of reports for internal audits and ANZDATA registry.

The aim of this paper is to discuss the challenge of implementing Clinical Vision in a cross campus dialysis setting. It will cover the education of nursing, administrative and medical staff. It will discuss technical issues that had to be overcome requiring communication with England, USA and Australia over 3 different time zones. In addition it will address the difficulty in maintaining staff motivation during a long implementation period.

In hindsight errors were made and there were many setbacks but with the dedication of staff and a willingness to make it work there is finally light at the end of the tunnel.

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Australia

The Department of Justice, whilst acknowledging that there may be many of the inmates with a chronic medical illness, is sometimes challenged in the management of patients with chronic renal failure who are on dialysis.

St Vincent's Health currently manages the medical support of the correctional system in Victoria and in 2007 suddenly had three chronic dialysis patients incarcerated for varying lengths of prison terms. Interestingly the lead time of notification to the dialysis service of the patient admission to the prison system was minimal – with the dialysis service being informed as little as 12 hours prior to the inmate being incarcerated.

Consequently, the challenge was for the dialysis service to manage these patients, ensure that there was adequate and appropriate medical and nursing support for these patients and the potential long term medical care for the inmates.

This case presentation will explore the relationship building between two very different areas, challenge the perceptions of life behind bars, educational support given to staff; individualized learning needs established; strategies implemented for patient management; resources utilised and multidisciplinary team involvement with training.

Did we succeed and were there long term benefits?

Implementation of pharmacist medication review clinic for dialysis patients: 223

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Introduction:

Patients on dialysis take multiple medications. Shared care among healthcare providers and frequent medication changes increase the risk of drug-related problems (DRPs).

Aims:

To implement the Medication Review Clinic and establish a sustainable service.

Methods:

Prospective medication reviews were conducted by trained clinical pharmacists using standardised tools. Pharmacists' intervention included medication recommendation and patient education.

Results:

From December 2007 to July 2008, medication reviews were conducted with 64 haemodialysis patients prior to their nephrologists' appointment. Patients were taking on average 13 medications. Drug-related problems were identified in 92% of medication reviews (a total of 278 DRPs). The major DRPs were medication non-adherence (33%), excessive dose (9.3%) and untreated indication (8.6%). 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 0.96-30.34 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 1.45-38.76 p=0.016). Patients older than 55 were less likely to have more than three DRPs compared to younger patients (middle tertile age category ie 55 to 68 years OR 0.14 95% CI 0.03-0.69 p=0.016).

Conclusions:

Structured pharmacists' medication reviews can be readily integrated into the model of care for haemodialysis patients.

Rhabdomyolysis and Hyperosmolar non- ketotic coma (HONK): A Case Presentation: 224

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Southern Health,
Australia

Rhabdomyolysis is a potentially fatal disorder characterized by elevated serum levels of creatinine kinase (CK) as a result of skeletal muscle injury. The leakage of cellular contents into the circulation can result in electrolyte disturbance, acidosis, clotting abnormality, hypovolaemia, compartment syndrome, and can rapidly progress to acute renal failure. Dialysis may be required in 50–70% of all diagnosed cases, however with prompt diagnosis and aggressive treatment a return to full renal function is favourable. Rhabdomyolysis is more common in diabetics than the general population, and in the United States the syndrome accounts for 7–15% of all reported cases of acute renal failure. The causes of rhabdomyolysis are multifactorial but include endocrine disorders, muscle ischaemia and infection.

Hyperosmolar non-ketotic coma (HONK) is a life threatening endocrine disorder manifested by extreme elevated blood glucose levels, hyperosmolarity and the absence of ketosis. It is common in Type 2 diabetics who have enough circulating insulin to suppress the production of ketones, yet not enough to prevent hyperglycaemia. In recent years the increasing prevalence of Type 2 diabetes has increased the likelihood of encountering HONK in the healthcare setting. Aggressive treatment is required to promote a favourable outcome, with rhabdomyolysis being one of the complications of inadequate treatment.

In 2007 patient A was found unconscious in his truck, near to death. On admission to hospital he was found to have HONK, complicated by rhabdomyolysis, acute renal failure and sepsis. This is his story.

Client empowerment in the haemodialysis setting: the inside story: 225

Anne Maguire,
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Australia

Aim:

A haemodialysis unit is an ideal setting for maximising client involvement but this requires a commitment to the process on the part of the nurse. The aim of the study was to discover the nurse's experience of client involvement in an acute haemodialysis setting

Method:

Semi structured interviews with five senior haemodialysis nurses were transcribed and analysed for themes.

Findings:

Four themes were revealed: forming relationships, navigating the way, finding the balance, and riding the rapids. Nurses described the way they steer their clients through their dialysis experiences using various strategies dependant on the relationships they developed. They described the involvement continuum and the methods used to gradually release the clients from their initial dependence on nurses. Participants revealed many barriers to the client's successful transition to independence.

Conclusion:

The findings emphasize the importance of the nurse-client relationship, the extent to which the relationship is influenced by the dynamics of the situation and the influence of the philosophical outlook of the nurse.

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NT Renal Services - Top End,
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Karolynn Maurice,
NT Renal Services - Top End,
Australia

ANZDATA for 2007 has shown >26% of patients in the Top End of Northern Territory commencing dialysis chose PD first. In the past 50% of patients have presented with inadequate or no access for treatment. This necessitated the insertion of a central line and emergency dialysis. The lack of a ready access is well recognised as a cause of poor long term survival and reduced quality of life.

A buried catheter programme was initiated in Darwin in February 2006 and more than 60 catheters have now been buried. The aim of the programme is to better prepare patients for renal replacement therapy and to allow for planning within the PD unit for training and the commencement of dialysis before the patient becomes acutely ill.

Historically, patients have been reluctant to commit to PD as their first dialysis option due to the risk of infection and the many circulating stories built around misinformation.

The insertion of a buried catheter gives the patient and their family opportunity to understand their diagnosis, removes the care, maintenance and associated risks of infection with an unburied catheter.

An unexpected benefit has been for those patients on haemodialysis who have rapidly run out of vascular access options. A buried catheter was inserted and a period of healing followed. When the vascular access was no longer an option the buried catheter was exteriorised and PD was commenced, thereby prolonging life and reducing the risks of central line infections.

Innovative Approach: Taking Rural/Remote Dialysis Patients to the City without moving a mile: 227

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Keren Fuhrmeister,
Bairnsdale Regional Health Service,
Australia

In February 2008, we embarked on a journey to design a system to graph our haemodialysis patient's pathology results. These graphs would be a visual tool, which would assist in demonstrating the correlation between changing medications and their subsequent impact on pathology results.

A group of key pathology results, both biochemical and haematological, were identified using the CARI guidelines, these target ranges would be built into the graphs as a visual reference point. Other crucial input from nephrologists and dieticians was obtained to ensure all aspects were encompassed.

The ICT (Information Communication Technology) department was approached to design a system on the brief we gave them. This design allowed for quick entry of the pathology results, logical graph sequences, and most importantly, ease of interpretation. The system could only be accessed by password, and track which staff entered the data.

During the design process it became evident that this system could be developed further to improve the communication between our visiting nephrologists and a rural/remote dialysis unit. As this system is web based, it is able to be accessed offsite by all multidisciplinary team members; with password access. Medications can be altered by the nephrologists' accessing this system. An encrypted notification is sent back to the dialysis unit; ensures prompt implementation of treatment.

This system has been in operation in our unit and is contributing to improved patient outcomes, more effective time management for dialysis staff and nephrologists, quality use of medications, and essentially, best practice.

Debbie Fortnum,
Home Dialysis W.A., Fresenius
Medical care,
Australia

Renal Health care is increasingly being moved from hospital to community and also from public to private provision. In 2007 the W.A. health department was the first world-wide to corporatise all training and management of all PD and HHD patients. Whilst care outcomes are always of primary importance financial considerations also influenced this project. As the burden of disease grows improved care for less dollars is the trend for health care world-wide. For W.A. Increasing numbers on home therapies from 20%-30% of W.A. renal patients in 7 years is a target. The transition to this new home dialysis programme was change process on a mega-scale. It incorporated creating and changing of locations, conversion all 200 PD patients to new products for dialysis, developing new nursing care teams, and standardising care and protocols previously provided by 3 tertiary hospitals and 17 nephrologists. Reaction to this change from health care professionals and patients varied providing many valuable insights. The changeover process highlighted the need for broad consultation, clear visions and the ability to be tolerant whilst constantly problem solving. New ideas were tried and tested, modified, and tried and tested again. It is impossible to define objectively whether on balance the home dialysis programme has benefited overall from this change but it has certainly increased the level of discussion in W.A. re models of care. This must be positive in the long-term.

ID_entity crisis – turning the tide!: 229

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Australia
Alison Winsbury,
The Canberra Hospital, ACT,
Australia
Barbara Harvie,
The Canberra Hospital, ACT,
Australia

How many of us remember the old days when there was haemodialysis, peritoneal dialysis, some home haemodialysis training, the Physicians would see a lot of patients in their offices and the dialysis nurse was a jack of all trades?

Well how times have changed and thank goodness! Ten years ago, with the incidence of chronic kidney disease (CKD) on the rise, the renal services at The Canberra Hospital made a conscious decision to begin its journey to move from a focus on dialysis services to a preventative health model with increased consumer involvement.

Over the past ten years the service has introduced a number of roles and services to streamline and improve continuity of care. They include:

- Recipient and Live Renal Transplant Coordination
- Predialysis Coordination
- Hypertension nurse
- Clinical Nurse Consultant Renal Outpatients
- Vascular access nurse
- Nurse Practitioner (Chronic Kidney Disease)
- Research
- Quality Improvement Coordinator
- Data Collection Officer

This presentation outlines how the service made this move with the evolution of nephrology nursing roles to case manage and coordinate specific services, the creation of a renal outpatients department and the ongoing plan to manage the ever increasing needs of clients with chronic kidney disease. The impact of the changes on renal services, further service expansion and future needs are identified. Throughout these changes, we have encouraged consumer interest and participation. This presentation shares our experience of the challenges the service has encountered on its journey to move into the future.

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Hunter New England Health,
Australia
Karen Cairney,
Australia
Karissa Freestone,
Australia

Introduction:

Occupational Health and Safety (OH&S) is governed by legislation and policy. In health care, emphasis is placed on infection control, sharps safety and injury prevention. This translates to nursing staff and patients. During review of home dialysis training program, a number of patients revealed they, or their carer, had received a needle stick injury.

This raised questions regarding safety of home patients and carer/s in relation to sharps safety. What is our duty of care in relation to patients and carers' safety and should we be concerned with OH&S issues in the patients' home?

Method:

As a quality initiative in the continuous quality improvement of self management training, an evaluation of the current training method was required, as well as the patients and carers current practices with needle stick safety. This information would ensure that a central element in keeping patients safe at home is reflected in the training and education we deliver.

Results:

Evaluation of patients and carers current status in relation to needle safety revealed:

- A prevalence of needle stick injuries
- Poor knowledge in relation to medical care after receiving a needle stick and in relation to risk

Conclusion: Our current training and education requires enhancement to include further education on needle stick safety and other OH and S concerns. Knowing the past and potential future danger to the patient and carer, training must embrace principles of OH and S and infection control to keep them safe, even outside the clinical setting.

Dialysis in the Aged Patient – Appropriateness and Specific Considerations: 252

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Australia

The population of aged people requiring Renal Replacement Therapy (RRT) is increasing rapidly both in Australia and worldwide. It is reported that nearly fifty percent of all patients requiring RRT are aged sixty-five years or older. The appropriateness of renal replacement therapy in the elderly is often controversial, with many health care professionals believing it is unethical to offer dialysis to elderly patients who are at a greater risk of serious complications and a diminished quality of life.

Care of the aged patient with renal dysfunction is challenging, as these patients tend to have increased co-morbidities and do not tolerate rapid changes in fluid and electrolytes, and often have an impaired response to drugs, stress, illness and changes in diet and mobility. Increased age, multiple co-morbidities and level of dependency should be considered prior to initiating dialysis, as these factors can influence survival and quality of life.

This poster will evaluate the appropriateness of RRT in the aged population by reviewing RRT options and their advantages and disadvantages. Additionally, the poster will outline specialised nursing care specific to this patient cohort.

A Holistic Look at Healthcare for the Haemodialysis Patient: 253

Yvonne C King,
Caloundra Private Hospital
- Ramsay Health,
Australia

As a remedial massage therapist as well as dialysis nurse, I was interested in the benefits that could be evidenced from other modalities besides those of conventional medicine for the patient undergoing haemodialysis. Whilst there have been a number of papers on massage there have not been any specific to how massage can benefit patients by relieving the signs and symptoms of uraemia. Eighteen months ago a foot and leg care programme was commenced at Caloundra Private Hospital Renal Unit. Most patients have been on this programme since its conception and the feedback received has been positive. I surveyed patients to find out how effective the programme is, with the view to developing it further. It would provide me with qualitative evidence to back my hypothesis, rather than just anecdotal feedback. I put forty questions to twelve patients based on areas that included: general health and well being, mobility, exercise, massage, skin care, foot care, physical pain and support received. From a therapist's point of view I see many benefits to the programme, including improved skin care and increased mobility. The programme promotes preventative health care. Regular visits to the podiatrist are encouraged. Wounds and health issues are remedied before they cause concern. Patients are encouraged to voice any worries they may have. I can demonstrate how through using such a simple programme the basic quality of life of most patients can be improved both physically and emotionally.

Are Primary Care Nurse Summaries useful in improving patient outcomes?: 254

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Haemodialysis Unit,
Australia
Cindy L Cooper,
Mildura Base Hospital
Haemodialysis Unit,
Australia

Each staff member in the haemodialysis unit at Mildura Base Hospital is allocated a number of patients to be their primary nurse.

The dialysis staff have created a Primary nurse summary which is designed to capture relevant information regarding their renal disease and other medical conditions.

Purposes of the Primary Care Nurse summary;

- To establish clear communication between the patient, physician and other members of the health care team
- Give other nursing staff a care plan to follow when the primary nurse is absent
- As a systemic patient assessment tool it identifies problems, then allows evaluation of any interventions implemented in the care plan
- Can be a quality indicator for dialysis adequacy, BP control, bone disease, vascular access function, anaemia and nutrition.
- Staff and patients work together to achieve optimal outcomes regarding their care and health options
- Provides a thorough summary for the nephrologist when the patient is to be reviewed on a monthly basis

The effectiveness of the Primary Care Nurse Summary will be evaluated by monitoring blood results and dialysis adequacy. It is expected that these results will be maintained within levels recommended by the CARL guidelines and the consulting nephrologist at MBH, therefore improving the patients overall well being.

Drug trials ‘knowledge for the future’: 255

Kathleen ME McNamara,
Prince of Wales Hospital,
Australia

Drug therapy is essential in treating patients throughout various stages of renal disease. Drugs are used in many ways, such as to slow progression in early renal disease, maintain stable blood levels throughout the stages of chronic renal failure and to prevent rejection in transplant patients. In order to produce a drug that can be used as a routine medication, the drug has to go through very thorough testing/drug trials, often taking years, leading to a drug which is safe and suitable for use.

Many renal units in Australia and New Zealand have a person (often a nurse) who coordinates clinical drug trials. Other renal staff are often unsure what this job entails, just knowing that they have to take extra blood samples or do extra observations in a very particular way or at a specific time. However, these staff are participating in a clinical drug trial that may be very helpful for patients in the future.

This presentation will discuss how a drug proceeds through the phases from being tested on animals to being routinely used by renal patients. The role of the trial nurse/coordinator will also be discussed including data collection and ethical procedures which help ensure patient safety.

In keeping with this conference's theme, drug trials from the past and present, provide knowledge and safe medication for the future.

Team building - Diaverum style: 256

Jane Trew,
Lindfield Dialysis Clinic,
Australia
Sue Champion,
Lindfield Dialysis Clinic,
Australia

Diaverum's Lindfield Dialysis Clinic has always enjoyed a strong, stable and committed group of employees. We aim to build and maintain strong interpersonal relationships and rostering allows for flexibility and encourages a healthy work/home life balance. Personal confidence, job satisfaction and productivity are all increased when a team is supported and happy in the workplace. We are always looking for occasions when we can come together as a group, enjoy each others company and enable active communication which is often difficult in a busy workplace. An idea was born when Dragonsabreast were planning a Corporate/Community Dragonboat Challenge in Darling Harbour during October, Breast Cancer Awareness Month. Dragonsabreast offers the opportunity to get fit and have a lot of fun with those who have also travelled the journey with breast cancer.

Lindfield employees and patients took to this challenge with great enthusiasm and quickly put together a team of 22. The \$2000 entry fee was raised selling chocolates, keyrings and gaining sponsorship. The Mavericks team provided training on Sundays to enable all team members to attend.

The result was an experience everyone described as awesome, an even stronger team and some employees and patients who have decided to continue the sport. The bonus was the pleasure in being able to contribute to the wonderful organisation of Dragonsabreast.

Introduction of an “Exercise Buddy Programme” into an in-centre Haemodialysis Unit utilising the Hospital Volunteer Organisation a Hospital Renal Dialysis Setting: 257

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University of South Australia,
Australia
Helena Motlagh,
University of South Australia,
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Objective:

to introduce a non-funded, self-sustaining model of delivery of an intra-dialytic progressive resisted exercise (PRE) programme for haemodialysis patients.

Model:

It is well established in the literature that an exercise programme for ESRD patients has positive effects on the quality of life of this high-risk population (Cheema et al. 2006). In order to provide patients the opportunity to participate in exercise, a PRE programme was developed using the “Exercise Buddy” recruited from the Hospital Volunteer Organisation. Following medical and individual consent, patients were educated on the programme by interested nursing staff. Educational aids such as DVD, posters and hand outs were also developed to help the volunteers undertake their role as the “Exercise Buddy.” Patients were taught the programme and received educational information on exercise and step by step instructions with accompanying photos to aid them in undertaking the programme.

Results:

Whilst still in the pilot stage the exercise programme has been enthusiastically welcomed and engaged by the in-centre haemodialysis patient population. The utilisation of the Exercise Buddy has been critical in achieving this as other attempts at introducing the programme with the aid of nursing staff had failed.

Conclusion:

A hospital Volunteer service is an excellent resource which can be utilised to support an exercise programme where funding for physiotherapy or exercise physiologists is not available. The role of the Exercise Buddy must be carefully specified and limits defined to not exceed the competencies of a hospital volunteer and also respecting of the role of other professions.

Lanthanum carbonate is an effective hypophosphatemic agent for patients displaying G-I intolerance to sevelamer chloride: 258

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Karen Rounsley,
United Kingdom

Lanthanum carbonate has proven safe and effective as a first line phosphate binding agent. In particular, a low incidence of gastro-intestinal side effects is a potential advantage over other hypophosphatemic medications.

In this study, 50 patients on haemodialysis (60% male; 81% Caucasian; age: 57 ± 15 years; time on dialysis: 4.3 ± 2.6 years;) were studied. All had been treated with sevelamer chloride but displayed significant G-I side effects ($n=42$) or inability to tolerate “pill burden” ($n=8$). 17 patients admitted non-concordance. Sevelamer was ceased and lanthanum commenced at a starting dose of 730 ± 124 mg thrice daily. Baseline biochemical data was collected, and repeated 3 months following lanthanum commencement.

A significant and clinically relevant fall in serum phosphate levels was seen between baseline and 3 months (2.20 ± 0.55 versus 1.83 ± 0.52 mmol/l; $p=0.004$), an effect unrelated to dietary adherence or dialysis adequacy (assessed by urea kinetic modelling). Percentage of patients with phosphate levels within the range defined by UK Renal Association (RA) standards ($1.1-1.8$ mmol/l) rose from 26% to 60% ($p=0.003$). Ca-PO₄ product fell from 5.24 ± 1.31 to 4.44 ± 1.16 mmol²/l² ($p=0.015$), and the percentage within RA standard (<4.8 mmol²/l²) rose from 42% to 64% ($p=0.05$). Phosphate binding pill burden fell from 7.1 ± 2.6 to 4.2 ± 1.9 tablets daily ($p=0.001$).

Serum bicarbonate rose from 22.8 ± 3.1 to 23.5 ± 2.9 mmol/l ($p=0.04$). No change in serum calcium or PTH was seen. No change in calcium-containing phosphate binder or vitamin D analogue dose was undertaken, and calcimimetics were not used.

In summary, lanthanum is an effective hypophosphatemic agent in a clinically challenging group of patients with intolerance and non-concordance to sevelamer.

Timing of Access placement in patients with advanced Chronic Kidney Disease – Improving Patient Outcomes: 259

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Australia

Mandy Norris,
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Dwarakanathan Ranganathan,
Australia

Aim:

To review the outcome of access created early in patients with Chronic Kidney Disease (CKD) stage 4 & 5.

Background:

Timing of placement of access for dialysis in patients with CKD is uncertain, with most of the guidelines being opinion based.

Methods:

Data was collected from prevalent pre-dialysis patients, and followed up via CKD clinic. Monitoring included eGFR at the time of referral, access type, access complications/interventions and eGFR at last visit. Access referral was based on consensus, when the eGFR was below 20 ml/min or dialysis initiation was anticipated within a year.

Results:

36 out of 196 patient population had an access created: 23 with Arterio-Venous Fistula (AVF) and 13 with a Tenckhoff catheter (TK). 3 patients had both created. The average eGFR prior to referral was 15.6 ml/min. The average follow up period for AVF and TK groups was 24.4 (7-38) and 22 (5-40) months respectively.

On follow up, 15 (65%) patients with AVF had complications (6 clotted, 7 stenosis, 2 required ligation of tributaries). Only 8 (34%) were working without complication at the last follow up. Similarly, 6 (46%) TK catheters were blocked and were removed following unsuccessful revisions.

Conclusion:

Early creation of access in CKD patients, though historically desirable, is associated with significant morbidity and futility. The results of this review influenced the access management of our CKD population, with both improved timing of surgical referrals and improved waiting times for access formation.

BK Virus in Renal Transplantation: a case presentation and overview: 260

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BK virus nephropathy (BKN) has become increasingly recognized as a cause of renal dysfunction and loss of transplant kidney function. The current prevalence of BKN in different transplant centres varies between 1.5% and 4.5% and has a major impact on graft function and survival with a graft failure rate of 45%.

The case presentation will highlight the clinical profile, diagnosis and management strategies, including the Gold Standard of diagnosis: Renal biopsy.

Our poster also provides an overview of the virus, including epidemiology, pathogenesis and risk factors, clinical features, histology and diagnosis.

A review of clinical management will be detailed, including immunosuppression and anti-viral medications, and highlights the complexity inherent in the management of BK virus nephropathy.

Currently, the best therapeutic approach to overcome viral nephropathy is to lower baseline immunosuppression in the hope that the host immune system will then clear the virus. A prerequisite for this approach is the absence of rejection.

In conclusion, the ultimate clinical goal in BKN management is early detection (before interstitial fibrosis and tubular atrophy have occurred), and highlights the need for systematic patient screening that will limit risk and improve treatment outcomes.

Standing Orders: A Necessity for Renal Satellite Units?: 261

Ewan J Reid,
Werribee Mercy Hospital,
Australia

Delivery of effective dialysis treatment is paramount within dialysis units. Our protocols set a minimum standard for us to deliver care.

Working in a Satellite Renal Unit where we do not have Renal Residents working with us, places us in a position that allows us to be autonomous in the delivery of dialysis treatment.

We have to initiate changes to treatment regimes on a frequent basis. Altering Heparin doses, Dialysate strengths and administering IV fluid boluses where clinically indicated is a common occurrence.

Despite having protocols from our parent unit, St. Vincents Hospital, the Pharmaceutical Advisory Committee at Werribee Mercy Hospital (WMH) deemed it necessary to have a standing order to coincide with hospital protocol.

The WMH generic format was used to generate standing orders for Dialysate, Heparin and Normal Saline treatments initiated by Renal trained nurses.

Current practise and protocols were used as a basis for review and adapted as a tool for the Standing Orders. During the process, a Renal Treatment Order chart was reviewed and guidelines documented for dialysis treatments.

A Renal Replacement Therapy chart is completed with current treatment and altered with every change made to treatment, signed by nurses and countersigned by the Consultant Nephrologist during regular meetings within the unit.

In conclusion, for those working in a Satellite Unit, the use of Standing Orders is a useful tool. It allows us as Renal Nurses to optimise patient's dialysis treatments within set guidelines and endorses autonomy and safe practise.

Renal Transplantation: Past to Present. A Nursing Perspective: 262

Stephanie M Swasbrick,
Monash Medical Centre,
Australia

Susan N Seakins,
Monash Medical Centre,
Australia

Following the first renal transplant performed in Australia in 1956, many treatment modifications have developed, some minor, others significant. These modifications have aimed to provide the best possible care to our transplant patients.

With the continued escalation of diagnosed chronic kidney disease (CKD) in both Australia and New Zealand, the need for available renal replacement therapy (RRT) is increased. Almost certainly, the most appropriate and popular choice of RRT is transplantation. Transplantation offers suitable patients a positive alternative to their previously known lifestyle.

Southern Health Clayton is a major suburban hospital in south-east Melbourne specialising in both renal and simultaneous pancreas and kidney transplantation. Because of this specialisation, the need to implement and further develop policies and protocols is ongoing. Treatment protocols developed in the past continue to be used in the present. Sharing knowledge from the past helps to refine renal nursing practice, ensuring effective and patient friendly treatment. Variations in surgical, medical and nursing treatment, as well as changes to medications and transplantation criteria have been well demonstrated since transplantation began at Southern Health.

This presentation displays some of the changes and improvements in the transplant program at Southern Health, as well as showing some methods that have remained constant throughout the years. Passing this information from one nursing generation to the next raises awareness of the importance of challenging contemporary practice as transplantation continues to move further into the future.

Megan A Kimpton,
St Vincent's Hospital
Melbourne,
Australia
Judy F Foster,
St Vincent's Hospital
Melbourne,
Australia
Julia Shao,
St Vincent's Hospital
Melbourne,
Australia
Emmet O'Flahaerty,
St Vincent's Hospital
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Maria Tentes,
St Vincent's Hospital
Melbourne,
Australia

Patient education is one of the most important roles and responsibilities of the Peritoneal Dialysis Nurse. Education involves being able to communicate with the learner and providing information that meets the cognitive, cultural and social needs of the patient and their families. Ultimately, the goal of the Peritoneal Dialysis nurse is to provide the patient with sufficient knowledge and tools for them to manage the ongoing care of their dialysis treatment, independently and safely, in their own home.

In 2007, an elderly non-English speaking woman presented to St Vincent's Hospital Melbourne requiring urgent treatment for her end stage renal impairment. Peritoneal dialysis access was established and dialysis was commenced immediately.

Consequently, due to the inability to plan, the challenges that the Peritoneal Dialysis nurses faced included; accessing medical interpreter services, obtaining appropriate training materials and implementing "unconventional" teaching techniques to meet this patient's unique learning needs.

This poster will also look at how we were able to measure the success of our education and explore future training options to ensure the equity in treatment and care of non-English speaking Peritoneal Dialysis patients.

"Putting Out Fires" Reducing Burnout in Self Care Haemodialysis: 264

Patrice J Latcham,
Toowoomba Base Hospital,
Queensland,
Australia
Kristen F Spain,
Toowoomba Base Hospital,
Queensland,
Australia

The potential for burnout and acopia amongst home haemodialysis patients and carers is a real issue in the haemodialysis settings. In an attempt to alleviate potential stressors, Toowoomba Home Haemodialysis Nurses have implemented strategies to acknowledge and celebrate the achievements of ordinary people achieving technical skills to perform haemodialysis safely and independently in the self care/home haemodialysis setting.

Our holistic and multidisciplinary approach in supporting our patients and families has assisted in:

- The Transitional training period of home haemodialysis
- Raising TLC levels
- Improving self esteem, confidence, independence
- In order to identify and alleviate potential stressors, the Toowoomba Home Haemodialysis Nurses have implemented the following:
- Quarterly home visits are conducted and if necessary more frequent visits implemented to patients when required
- Fortnightly phone calls between visits for the opportunity to express concerns and stress triggers
- Quarterly catered luncheon for patients and biannually luncheon for carers
- Acknowledgement of patient birthdays via phone and card
- Respite sessions at Toowoomba Base Hospital for rural patients in collaboration with Red Cross accommodation
- A 12 month calendar has been produced for the first time in celebration of patient and carers achievements in managing self care haemodialysis

The implementation of these events and opportunities has assisted in social networking and support amongst patients and families and assisting in the reduction of burn out and stress. Feedback received from patients and carers has been positive and uplifting and continuing such events and opportunities will improve quality outcomes for all.

The Increasing Demands on our Renal Rover Nurse: 265

Ramesh Patel,
Princess Alexandra Hospital,
Brisbane, Qld,
Australia

In 2006 the need for a Renal Nursing Rover was established on ward 4BR at the Princess Alexandra Hospital, Brisbane, Queensland, Australia, to meet the spiralling demands and exponential increase in the care workload of renal patients that were located outside of our unit eg 'the Renal Outlies'.

Its 2008 and the world of the renal rover has been 'reloaded' due to a marked increase in renal patients. This is a result of an aging population, increased standards of medical care, reduced hospital places in the unit, Infections due to Multi resistant micro-organisms and the increasing associated multifaceted care structures. This has necessitated the expansion of the Renal Rover role at the Princess Alexandra Hospital.

With a multidisciplinary team consisting of a Nephrology Consultant, Nephrology Registrar, Nephrology Resident and the Nephrology Pharmacist the Renal Nursing Rover and its role has evolved into a position that will continue to be instrumental and responsible for the present and future care of Renal Outlie patients and their dynamic and intricate models of care.

The evaluation of the Renal Rover Role proved the position to be invaluable. The introduction of the Renal Rover Role has helped reduce the average length of stay and reduced the occupied bed days of these outlied Renal Patients.

Sink or Swim: 301

Sue M Goddard,
Waikato Regional Dialysis Service.
Hamilton,
New Zealand
Trish M Valentine,
Waikato Regional Dialysis Service.
Hamilton,
New Zealand

Background:

Currently the Waikato Regional Dialysis Service supports a total of 210 peritoneal dialysis patients. It is the largest PD unit in Australasia. Due to the overwhelming increase in patients requiring dialysis, many patients come to peritoneal dialysis following late presentation, acute haemodialysis and are in a sub-optimal state of health. At least 50% of these patients have type two diabetes and sixty six percent are Maori. It has become increasingly apparent that by the time these patients are ready to start PD, constipation is a problem resulting in approximately 1/3 of patients having initial drainage problems.

Aim:

To identify constipation as a cause of poor drainage

in new peritoneal dialysis patients in the Waikato Regional Dialysis Service.

Method:

A thorough assessment of the patient carried out by Speciality Clinical PD nurses includes general wellness, medication, prior medical interventions, dietary and bowel habits. If drainage problems are encountered, consideration is given to fibrin, mal-positioned catheter, omental wrap and constipation as causative factors. Heparin is used routinely to combat post-operative fibrin, xylocaine for omental wrap and x-ray for diagnosis of constipation and catheter placement.

Results:

Constipation results in poor drainage of peritoneal dialysis patients +/- mal-positioned catheter as confirmed by x-ray of patient's abdomen.

Conclusion:

The inclusion of appropriate bowel management pre and post theatre is essential in the management of new PD patients. If the diagnosis of constipation is made it is vital to initiate vigorous treatment to ensure good drainage of PD fluid.

A comparative study of treatment outcomes on model of care for peritoneal dialysis: 302

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Hobart, Tasmania,
Australia
Jane Creighton,
Royal Hobart Hospital,
Hobart, Tasmania,
Australia
Bronwyn Guc,
Royal Hobart Hospital,
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Kirsten Black,
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Stephen Harris,
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Hobart, Tasmania,
Australia
David Lauder,
Royal Hobart Hospital,
Hobart, Tasmania,
Australia
Matthew Jose,
Royal Hobart Hospital,
Hobart, Tasmania,
Australia

Background:

The model used in the Peritoneal Dialysis (PD) unit at the Royal Hobart Hospital (RHH) is predominately a home-based model, where all education, training, ongoing support and care, including treatment of peritonitis (where appropriate) is undertaken in the home. We contend that training in a patient's home with intensive follow up support is a safe, cost effective treatment option with improved patient outcomes in comparison to a hospital-based model.

Method:

We reviewed results for people under the care of the PD unit between 1/1/07 and 31/7/08 comparing them with another Dialysis Hospital (DH) that uses a more centrally based model of care.

Results:

During this time period, RHH had 60 patients, 40 episodes of peritonitis, (20.5/pt month), of which 22.5% required admission to hospital. In comparison, the DH had 27 patients, 13 episodes of peritonitis (36.6/pt month) and 100% admission rate. Total admitted bed days were less than half for RHH (1.3 days/patient) compared with DH (3.7 days/patient). Total training days were DH 52 days(3-4 days per new patient), and for RHH 152 days (3.8 days per new patient). There were no discernable differences between age, gender and diabetes, though the DH had no patients with cancer and RHH had 5 patients. Both RHH and DH had 40% of patients completely well, 24 patients and 11 patients respectively.

Conclusion:

With intensive support in the initial stages, and treating patients as much as possible in the home, we believe we have developed a safe and cost effective alternative model of care.

Home Training a Sign of the Future for Peritoneal Dialysis: 303

Sue M Curry,
Midcentral Hospital,
New Zealand
Helen K Mumby,
Midcentral Hospital,
New Zealand

Although Peritoneal Dialysis (PD) is a home based therapy traditionally patients have been trained in the hospital environment. With the growth of renal disease putting pressure on existing resources changes needed to be made. When our Hospital changed its PD supplier, retraining of patients was required we thought it was time to revisit how the PD unit had been run and how we could change things for a better future and health outcomes for our patients and families.

Following referral from the Pre Dialysis Nurse we arrange to see the patient in their home. There we introduce ourselves, give education and assess their ability to perform PD. Training is carried out in the patients home eliminating the transition from hospital to home. As this is the environment the patient lives in we feel it is the best place for them to learn, it also eliminates the need for patients to travel, reducing fatigue. Ideally we would like all PD nurse related care in the patients home. All patients are visited at least three monthly, more often as required.

We have developed strong professional relationships with our patients and their families, and have a better understanding of the challenges patients face in their daily lives. We have also noticed an improvement in our peritonitis rates.

We have now been training and visiting patients in their homes for two years and feel it is the way of the future. Enabling our patients to take control of their dialysis and experience true Home Therapy.

The creation of the Transplant Case Manager role: 304

Robin J Henry,
Royal Brisbane and Women's Hospital,
Australia

The creation of the Transplant Case Manager role can dramatically affect a renal unit by adding a new dimension to the focus of care. Similarly to the creation of the Chronic Kidney Disease Nurse roles, the establishment of a Transplant Case Manager role can raise the profile of Transplant as a renal replacement therapy. At the Royal Brisbane and Women's Hospital, the focus has shifted from one of Chronic Kidney Disease and the options of peritoneal dialysis and haemodialysis to a more holistic approach embracing renal transplantation. This has resulted in a dramatic rise by over 80% in number of patients transplanted as well as the number of patients active on the transplant waiting list being over tripled within 12 months.

The role also encompasses the case management of post transplant patients to ensure their care is more coordinated with the eventual aim of better graft and patient survival. The scope of the role is constantly under review with the establishment of Key Performance Indicators and the inclusion of transplant research. Creation of the Transplant Case Manager positions improves the patients access to transplantation in a timely manner and assists in raising the profile of transplantation and ensuring that it is kept in the forefront of the minds of both the medical and nursing staff in the renal unit.

People in glass houses should not throw stones: 305

Graeme Turner,
North Coast Area Health Service,
Australia

Chronic kidney disease (CKD) is a growing epidemic worldwide. Approximately 1 in 7 or 3 million Australians have clinical signs of CKD. An increasing amount of evidence is emerging demonstrating that early identification and management of CKD can slow the progression of CKD and improve morbidity and mortality outcomes. Despite this evidence:

1. CKD remains largely undiagnosed.
2. The number of prevalent patients progressing to End Stage Renal Failure (ESRF) continues to increase from 96 per million of population in 2002 to 115 per million of population in 2006 in Australia.

Due to CKD being largely asymptomatic through stages 1-4 identifying appropriate people to manage and slow progression of CKD is challenging.

During the course of this conference I will perform kidney health checks on consenting conference delegates providing a snap shot of CKD prevalence and risk factors amongst this group.

I will present findings from this survey to:

1. Highlight CKD prevalence within this population and compliment previous studies in CKD prevalence.
2. Increase awareness of CKD amongst kidney health professionals
3. Demonstrate nursing research in action.

Following the conference results from the survey will be written up for publication.

Anne T Blong,
The Townsville Hospital,
Australia

Palm Island is a beautiful tropical island located 65km from Townsville, North Queensland. This indigenous community, established in 1918, is home to approximately 3000 Aboriginal and/or Torres Strait Islanders.

This group is at increased risk of many chronic diseases, especially diabetes, hypertension and chronic kidney disease (CKD). Smoking, low activity, low fruit and vegetable consumption and obesity are also more prevalent in Indigenous communities.

Only a small percentage of Palm Islanders have had a creatinine level taken since eGFR reporting was introduced in August 2005. From this group, we identified only 79 people with eGFR <60ml/min/1.73m². (2.6%)

Townsville Health Service District multidisciplinary CKD team has monthly clinics on Palm Island, consisting of NPC, dietitian, social worker and nephrologist (second monthly).

This presentation will discuss measured outcomes over two years based on glycaemic control, blood pressure, prescription of reno-protective medications, bone mineralisation, metabolic acidosis and anaemia correction in the Palm Island CKD population.

It will also discuss means of increasing detection and early management and control of chronic diseases and their co-morbidities.

Are you ready for a change and can big brother help you?: 307

Michaela MB Kelleher,
Prince of Wales,
Australia
Sheemol G Barrett,
Prince of Wales,
Australia

Essentials of care (EOC) is an evaluation and improvement framework underpinned by the principles of practice development. The framework was established to appraise and build on the essential components of care through the participation of clinicians at Unit level using reflective and critical inquiry processes. The aim is to improve the quality of nursing care delivery at Unit level.

The nine global domains of care identified by the project are: personal care, documentation and communication, promoting self care, medication / IV products, preventing risk and promoting safety, clinical monitoring, clinical interventions, privacy /dignity and learning and development. Care outcomes and benchmarking indices for each domain are linked to the Renal Society of Australasia competencies and clinical practice standards, enabling integration of evidence into nursing practice.

EOC was introduced into the Renal Unit at Prince of Wales Hospital in August 2008. This involved an initial period of observation of the clinical environment and detailed audit. A collaborative analysis of both the quantitative and qualitative data was undertaken with all nursing staff for the purpose of theming the data and developing actions to improve aspects of caring for patients with kidney disease. Some of the themes which have emerged from the data are infection control practices, clinical assessment, patient education and clinical handover.

This framework provides an iterative process for improving the quality of care provision at unit level involving all staff. The purpose of this paper is to outline the processes undertaken and discuss the progress of action planning and evaluation.

Home Haemodialysis Training: A New Model of Care: 308

Cheryl D Hyde,
Sydney Dialysis Centre,
Royal North Shore Hospital,
Australia

Louise Jordan,
Sutherland Hospital,
Australia

Jo Kemp,
Gosford Hospital,
Australia

Jenny Pollard,
Gosford Hospital,
Australia

Liza Quines,
St George Hospital,
Australia

Patients who choose the option of home haemodialysis (HHD) attend a training program where they learn the skill of dialysis in a supported environment. Until recently patients managed by St George and Gosford Hospitals were required to travel to the Sydney Dialysis Centre (SDC), located in Edgecliff for this training. This was a disincentive for patients to choose this home modality.

St George, Gosford and SDC have entered into collaborative agreements to change this model of care. Home training nurses have been appointed at both hospitals. These nurses report operationally to the Nurse Unit Manager at their employing hospital and professionally to the Nurse Manager at SDC. The training manuals and procedures used are consistent with the SDC home training program.

Patients attend home training at their parent hospital until they are competent with the management of their own dialysis therapy. They then transfer to SDC to complete their training in a graduation room. At this time they are able to practice their skills in a simulated homelike environment, including the management of troubleshooting by telephone. On discharge home their follow-up care is provided by SDC.

This collaborative approach offers the best option to patients as they are able to attend training with minimal travel, whilst being supported by expert nursing staff. The success of this program is largely due to close collaboration and communication between the three units.

This paper will discuss the challenges in setting up and managing this exciting new approach to HHD training.

Multiple Myeloma: The Impact of Free Light Chain Removal by High Cut Off Therapy: 309

Elizabeth N Dator,
Australia

Concord Repatriation General Hospital is the first dialysis unit in Sydney acclaimed to treat patient using Free Light Chain Removal (FLCR) by High Cut Therapy – using HCO1100.

A conservative approach to treat patient with Multiple Myeloma leading to Acute Renal Failure is challenging. The aim of the treatment provided with this case is to prevent the worsening of renal function and further complications related to chemotherapy treatment.

Patient received 6 hours of haemodialysis for the first treatment followed by 8 hours of haemodialysis treatment for 11 consecutive days except during chemotherapy treatment. Due to low Phosphate Level, Fleet Enema was added on the dialysate bath and additional potassium is also added. Rigid monitoring of electrolytes is considerably taken into account.

For the success of the treatment, health providers are committed to provide extra ordinary treatment to patients suffering from Multiple Myeloma. However, a positive attitude and full cooperation from the patient and his family members is highly regarded for effective treatment.

Embracing a new model of care: 310

Carolyn G Wilson,
Waikato Hospital,
New Zealand

We are a 16-bed renal ward at a tertiary hospital servicing a wide geographical area. Our ward has been described as an 'emergency department for renal patients'.

For many years the ward has operated using a patient allocation model which is loosely based on the primary nursing model. Our ward is one of three chosen to participate in a pilot programme commissioned by the director of nursing and midwifery to explore new ways of working. The goal of the project is to devise a collaborative/shared care nursing model that releases nurses to care and takes into account the unique needs of our client group. The nursing research and development unit is providing us with expert guidance and support.

This presentation will outline the design, implementation and evaluation of our own ward model of care, and what we have learned along the way.

Sydney West Area Health service, CKD model of care - Towards better detection and management: 311

Emelia Atais,
Renal department at
Westmead hospital,
Australia
Catharine Death,
Australia
Richard KS Phoon,
Australia

Chronic kidney disease (CKD) is a major health and economic burden to the Australian community. It is estimated that around 2 million Australians have CKD, many of whom are undiagnosed and/or under-treated. Strategies which are likely to improve CKD care include increasing CKD awareness and education among patients and general practitioners (GPs), early detection and timely intervention. To address this issue, we have developed a CKD model of care targeted at patients with early CKD (stages 1-3). A renal medicine referral form is required for all new patients referred to our renal service by GPs. This provides: (1) information regarding CKD risk factors, urinary abnormalities (proteinuria, haematuria) and renal imaging, (2) the ability to triage and direct patients into the appropriate clinical setting, and (3) a mechanism for providing GP education. Appropriate patients are referred to a CKD clinic which is run by a clinical nurse consultant according to a defined clinical pathway (aligned with accepted local guidelines, such as CARI and National Heart Foundation) and in collaboration with a consultant nephrologist. Patients are also identified using a urinalysis screening program of outpatients who are at high risk of developing CKD (cardiology and diabetes clinics). Of the 480 patients who were screened in the first 12 months, 25% were found to have proteinuria > 30 mg/dL (57% of whom were followed up in the CKD clinic). Patient and GP education is critical and is facilitated using a CKD Action Plan which clearly outlines clinical issues, treatment targets and suggested interventions.

Assessing sexual functioning among renal failure patients undergoing dialysis in Auckland District Board (ADHB) using modified Arizona Sexual Experience Scale (ASEX) questionnaire: 312

Fredric Susil Doss,
Auckland City Hospital,
New Zealand,

All patients (N=380) over the age of 18 years having dialysis in the Auckland Renal Service, who had not been hospitalized in the preceding month, were invited to participate in the study.

89 people (23%), 68 males and 21 females completed the questionnaire. The average age of the respondents was 58.6 years (range 24 to 86 years) with average time on dialysis of 4 year (range 6 weeks to 27 years and were similar to the local and national population in terms of the cause of renal failure and ethnicity.

The ASEX Scale a short self completed questionnaire, was used in this study to determine sexual function. A total of 69 (78%) participants were classified as having some degree of sexual dysfunction (SD) (71% men & 68% women). Although 78% of participants had some degree of SD it did not have the same impact on everyone. 60% of those with SD reported they were concerned about this and 42% reported that it had a negative impact on their intimate relationships. Interestingly sexual function did not appear to be related to anaemia, the length of time on dialysis or markers of inflammation.

In summary, for Auckland patients on dialysis, as in dialysis patients internationally, sexual dysfunction is common. This study suggests to use the two additional questions be used to screen patients (i.e. concern about sexual functioning and impact on relationships) and only after ascertaining that they have a problem, then full diagnostic screen such as ASEX be used.

Joanne M Jones,
Royal Children's Hospital,
Brisbane,
Australia

Objective:

In 2005 the first paediatric haemodialysis unit for Queensland opened at the Royal Children's Hospital (RCH), Brisbane, Australia. March 2006 the first haemodialysis patient required Arterio Venous Fistula (AVF) cannulation. A daunting prospect with only one experienced senior nurse. The most suitable technique for cannulation was sought for the adolescent patient group at this fledgling unit.

Method:

After an extensive review of the literature, it became evident that the buttonhole cannulation technique would be beneficial to the patient group and the model of nursing care. The nursing standards were written for the buttonhole cannulation and education of the dialysis team commenced. The only senior haemodialysis nurse created the buttonhole tracks.

Results:

Two adolescents have used the buttonhole cannulation technique.

The first a 14-year-old male had 21 patient months without incident before transplantation. The second, a 15-year-old female, commenced using the buttonhole technique in April 2007. This patient was identified as a great candidate for self-cannulating and future home training. She was subsequently transferred to an adult unit and in 2008 she commenced haemodialysis at home. Each case experienced no infections or failures from the cannulation technique.

Conclusion:

The buttonhole cannulation method is worthy of consideration for adolescent patients with AVF. The main patient benefit appears to be a manageable cannulation experience. The procedure also enables nurses with limited cannulation skills to conduct dialysis sessions. The technique has also enabled us to empower our patients by giving them the option of taking over the cannulation procedure.

Central venous dressing literature review: Implications for haemodialysis in the tropics: 314

Joleen McArdle,
The Townsville Hospital,
Australia

Objectives:

Review the literature on best dressing practice in reducing incidence of catheter-related infections in patients receiving haemodialysis, and explore the evidence specifically related to tropical climates.

Methods:

Electronic database searches were conducted [MD Consult, Blackwell, Cochrane, Ovid, Medline, CINAHL] in relation to central venous catheters (CVC), with the specific search terms: central venous catheter; haemodialysis; tropics; exit site; dressing; transparent; primapore, IV3000; sepsis.

Results:

152 articles were initially retrieved. Of these, only 12 review and 9 research articles were relevant to the topic objective as most were based on CVC care generally, and did not specifically relate to exit site dressings. Exit site dressing articles predominantly compared gauze to transparent dressings. The evidence of a causal relationship between transparent dressings and risk of catheter-related bloodstream infections is inconclusive. Transparent dressings increase the risk of catheter tip colonisation and promote moisture and bacterial proliferation on peripheral cannulation sites. No articles addressed CVC management in the tropical context.

Conclusions:

There is some evidence to suggest infection rates are higher using transparent compared to gauze dressings, although insufficient information is available regards using gauze dressings on CVC sites. Strict aseptic techniques are warranted in the placement and care of CVC sites. No studies were found that investigated the effectiveness of either dressing type, or an appropriate dressing protocol, for the tropics.

Recommendations:

Further investigation is required in the tropics to determine the most effective dressing type and dressing protocol for use on haemodialysis central venous exit sites.

Ironing out the Haemoglobin Bumps – Hb Variability in a Nurse Practitioner -Led Anaemia Management Program: 315

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St. Vincent's Health,
Australia
Margaret J Morris,
St. Vincent's Health,
Australia
Suet Wan Choy,
St. Vincent's Health,
Australia
Hilton Gock,
St. Vincent's Health,
Australia

Haemoglobin (Hb) variation amongst people receiving haemodialysis is associated with higher mortality. The St. Vincent's Health anaemia management model consists of initial dosing by nephrologists, monthly nurse practitioner (NP) adjustment using clinical practice guidelines, and 3 monthly nephrologist reviews. We examined the Hb range in our in-centre haemodialysis (ICHHD) patients during 2007.

Patients treated with epoetin, on haemodialysis for > 6 months and under NP care were included (n=43). Hb was measured monthly and the annual range determined. A nurse-initiated iron protocol was used. Serum ferritin was monitored 1-2 monthly. Blood transfusion histories were analysed. The Renal Anaemia Management Database was used.

Three distinct groups were identified according to Hb ranges where variability was categorised as 'Low' (<20g/L, n=14), 'Intermediate' (20-30g/L, n=11) or 'High' (≥30g/L, n=18). The respective mean Hb for each group was 117, 112 and 111g/L (p=0.131) - all group averages within CARI recommendations. 56% of patients in the 'high' group had blood transfusions compared to one patient (7%, p=0.008) in the 'low' group and two patients (18%, p=0.04) in the 'intermediate' group. Ferritin targets were achieved in 96% of the 'low' & 'intermediate' groups and 72% in the 'high' group (p=0.05). There were no differences with regards to gender or ESA-type.

We conclude that NP care can achieve 'low' or 'intermediate' Hb variability in ICHHD patients. A monthly CPG used for the haemodialysis population is very useful and may contribute to lower Hb variability. Furthermore, low variability is difficult to achieve if there are ongoing co-morbid conditions and hospital admissions.

Reaction to synthetic haemodialysis membrane?: 316

Brenton J Shanahan,
Gold Coast Hospital,
Australia

Aim:

To report on a dialyser reaction suspected to be caused by synthetic dialyser membranes

Background:

Dialyser reactions are infrequent complications of dialysis of which a number of causative factors can be identified. Severe reactions present as anaphylaxis, whereas, milder symptoms can present as dyspnoea, flushing, itching, urticaria, back pain, watery eyes, sneezing and gastrointestinal disturbances such as abdominal cramps and diarrhoea.

Methods:

The following is a case report of Mr C, a 51 year old gentleman who presented to the Gold Coast Hospital's Renal Ward following transfer from intensive care at another tertiary hospital with acute on chronic renal failure secondary to hypertensive nephropathy.

On initiation of dialysis and during subsequent treatments Mr C exhibited symptoms of dialyser reaction such as flushing, dyspnoea, itching and back pain within 5 minutes of initiation and up to an hour into treatment.

Causative agents considered and systematically discounted were: blood transfusions, ethylene oxide, heparin, contaminated dialysate and finally the polysulfone (Fresenius FX 80) and polyarylethersulfone polyvinylpyrrolidone polyamide (Gambro 210H) membranes being used for dialysis.

Mr C was trialled on an acrylonitrile sodium methallyl sulfonate copolymer (Nephral AN69ST) dialyser and continues treatment with this dialyser with no further symptoms.

Of note is that Mr C is on an angiotensin converting enzyme inhibitor, which in the past has had a strong association with dialyser reactions and this type of membrane.

Conclusion:

This case highlights the need to consider the possibility, although rare, that reactions to synthetic, biocompatible dialysis membranes can occur.

Management of haemodialysis patients with cardiac related illness in the Ballarat Dialysis Unit with the introduction of telemetry: 317

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Australia
Leila M Higham,
Ballarat Health Services,
Australia

Cardiovascular disease in chronic renal failure is the most common cause of death, and is highly prevalent in the existing haemodialysis patient population. The number of Dialysis patients with known cardiovascular disease is approximately 40% with a mortality rate being 10-20% greater than the general population.

An increasing number of patients requiring haemodialysis are being admitted to Ballarat Health Services with acute episodes of cardiac related illness. This was placing a significant strain on the available human resources to provide haemodialysis treatment on those patients requiring cardiac monitoring. Cardiac monitoring facilities were not available in the Ballarat Dialysis Unit prior to 2007. These patients were required to be dialysed in an alternative setting, primarily the Intensive Care Unit.

The introduction of a cardiac telemetry monitoring service within the Ballarat Health Services Dialysis Unit took place in 2007. Since its implementation, twenty six patients with cardiac related illness have required cardiac monitoring. These patients have been dialysed safely within the dialysis unit. In addition, a more efficient utilisation of trained staff, without the extra costs of dialysing patients in an off site environment with cardiac monitoring facilities, has been achieved.

High Dependency Discharge into the Community: 351

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Brisbane, Queensland,
Australia
Caroline Drewe,
Princess Alexandra Hospital,
Brisbane, Queensland,
Australia

Traditionally the high dependency patients needs have been managed in hospitals and nursing homes. With increasing demands upon our health and aged care facilities sending clients home with high care needs is becoming a necessity.

Some families choose to care for their loved ones at home. This case study is of a high dependency peritoneal dialysis patient who was an inpatient for several months and opted to go home where her aging husband was happy to care for her. This patient had numerous co-morbidities including t2dm on insulin, a left arm amputation and right leg amputation, necrotic left breast, all requiring complex dressings.

Strategies were put in place so this could be achieved safely. A multi-disciplinary approach was initiated. Liaising with medical and nursing staff, social workers and occupational therapist to ensure that appropriate follow up could be maintained in this rural district was achieved. Bariatric equipment including hoist, shower chair, hospital bed, lounge chair and the necessary modifications to the home were made.

The husband was educated to use the equipment and manage automated peritoneal dialysis. Domiciliary nursing care was established to assist with hygiene cares and complex dressings. Community links were established and the Discharge was a success.

How many kidney transplants are too many?: 352

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RMH, Australia
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Australia
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RMH, Australia

The Nephrology Ward at RMH is the leading kidney transplantation unit in the state of Victoria, which incorporates Tasmanian patients. Since 2005, with the advent of ABO incompatible kidney transplantation these figures have steadily increased. We describe our experience coping with seven cadaveric transplants over the space of one weekend.

As a unit of the public sector that runs at greater than 95% bed occupancy, allocating beds required concise communication and co-operation with many departments within the hospital. Efficient discharge planning was implemented to ensure bed availability for all recipients was assured.

Transplant patients are cared for on a one-to-one basis immediately post-operatively as per protocol. The arrival of seven transplant recipients posed a unique challenge with staff skill mix and newly rotated medical team. These issues were easily overcome with the availability of well embedded and frequently updated ward policies regarding transplantation

Locating current information for interstate patients in a short period of time proved difficult. This highlighted an existing deficiency in the organisation of such information, and has given us the impetus to find solutions.

Despite these hurdles all seven transplants patients went ahead successfully. This was largely due to the experience of the nursing staff and the fabulous support provided by allied health and medical staff. As the ward staff have been integral in developing ABO transplant and related policy, has created a level of cohesion within the team, and gave us the level of expertise required to provide a higher level of service to our patients.

Pain Management and the Renal Patient: 353

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Pain is the 5th vital sign and because it is subjective may often be ignored by staff. Pain may be acute, chronic or acute on chronic. It may arise from the disease processes, peri-operative wounds to name a few.

Nurses on 4BR the in-patient unit at Princess Alexandra Hospital (PAH) work as a multidisciplinary team together with medical staff, Acute Pain Services and the palliative care team (if required,) as well as inclusion of client and family in the management of pain.

Pain relief may be managed via several routes being oral, subcutaneous, IV, IM, topical, sublingual and Intrathecal. It is important that pain is identified and relieved.

On 4BR nurses are trained in managing and delivering pain relief using Patient Controlled Analgesia (PCA) machines – both as bolus deliveries and with a background infusion if necessary. Applying and monitoring topical patches, Graseby syringe drivers and intrathecal devices such as epidural.

The most important factor in good pain control is listening to the client and ensuring that they feel that their pain is being managed.

Building Bridges: Opening a new Home Dialysis Unit: 354

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As we know, opening a new unit from scratch can hold many challenges. In July 2008, we successfully opened the Home Therapies Unit at Western Health, based at the Sunshine Hospital in Victoria incorporating both home haemodialysis and peritoneal dialysis support services. As one would imagine, we encountered a few barriers, both expected and unexpected as we assisted established patients with the change process, and commenced training and support for our first few new patients.

Currently in Victoria, there is a push towards patient self management, not only in the world of renal but also general care. In order to be successful, these patients need continuous commitment and support from their unit. This is a particular challenge during a period of change management. We sought to maximise our patient's self care abilities, independence, and participation in health related decision making as well orientating them to a new service in order to achieve optimal health outcomes. From past lessons learnt, we were able to start aiming for a truly patient focused Home Unit at Western Health.

A change is as good as a holiday - But a holiday is better: 355

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Australia

An illustration of a rural satellite unit catering for holidaying haemodialysis patients.

Staff in dialysis units understand the importance of providing various activities their patients may undertake in an attempt to relieve the monotonous routine of weekly haemodialysis. Units endeavour to supply such diversions as television, reading material, art/craft, music, events and volunteer visitors as a way in which to assist their patients pass the time. It is with this presentation that we will promote the providing of a place for patients and their families to holiday at, a break away from their very structured everyday lives, as a most worthy and beneficial of diversional therapies.

Yarrowonga a pretty boarder town on the banks of the Murray River. This once small retirement-focused community is now a thriving tourist destination for many travelers including those who must undergo haemodialysis whilst enjoying their vacation. Yarrowonga unit opened it's doors back in 1984 with one patient. Then in 1988 the town's attributes were recognized by the Dialysis and Transplant Association of Victoria who built and opened DATA Holiday House. To this day DATA house provides affordable accommodation for patients and their families whether they require the services of our unit or home dialysis within the house.

Over the past twenty years Yarrowonga has grown and having identified the need for holiday dialysis through patient positive feedback and continual bookings we receive, our unit is committed to providing this beneficial service, even as the demand for treatment and permanent places for haemodialysis patients increases.

The Evolution of a Haemodialysis Primary Nursing Model to improve patient outcomes: 356

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Australia

Objective:

A Primary Nursing Care (PNC) Model was introduced at Lismore Base Hospital (LBH) Renal Unit May 2007. The Haemodialysis Nurses sought a proactive role in the management of outpatients plus education to empower them to make changes required to improve patient outcomes.

Methods:

Nursing staff identified areas in their practice that required improvement through a survey of Key Performance Indicators (KPI's) and developed strategies to initiate changes in delivery of care. Implementation of the PNC model was staged over several months. There was no system to routinely review blood results and only minimal input in altering dialysis prescriptions. To enhance knowledge an in-service calendar targeting biochemistry markers, interpretation of results, application and effect on dialysis prescription commenced June 2007. Baseline audits of monthly biochemistry results showed several out of range result. Nursing staff knowledge was assessed with pre and post tests surrounding the in-services. With Nephrologists support standardised dialysis prescription guidelines were developed during the in-service process and implemented December 2007.

Results:

Continued auditing of patients' monthly biochemistry results indicates reduced number of out of range results. Nursing staff have a pivotal role in the management of patients, are confident to engage in health promotion, directly transfer knowledge and encourage patient self management of their Chronic Disease.

Conclusion:

The prescription guidelines allow nurses to utilise their knowledge and initiate alterations to dialysis prescriptions. Improved staff retention plus a satisfying work culture is a benefit. These strategies enable nursing staff to make evidence based changes and improve patient care.

What are the Transitional Challenges from Student to Registered Nurse and How Does a Graduate Nurse Program Assist?: 357

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Alfred Health,
Australia

The Alfred Hospital is one of the largest metropolitan healthcare facilities in Melbourne, Australia, and has increased the number of graduate nurse positions offered from 110 in 2007 to 145 in 2008. This rapid rise in numbers provides a significant increase in the workforce but also intensifies pressure on available resources. Working as a clinician educator on an acute 34-bed inpatient ward with medical specialties my aim was to examine to what degree we are alleviating the challenges confronting our graduate nurses. After reviewing the literature it was necessary to critique the current Graduate Nurse Program at the Alfred. Four graduate nurses were interviewed after three months working in the unit to provide a snapshot of the reflections of our newest colleagues in the unit. New insights were disclosed in relation to relocation, increased consolidation, commencing full-time work and responsibility and accountability. Drawing on these insights recommendations to further improve graduate transition included surrounding preceptor selection/preparation, clinical support, expectations, structured planning, planned interviews and an option for rotation.

Ancient Remedies, Enemas and Hot Baths... through to modern day dialysis, Renal Transplantation and Stem Cell Research: 358

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Linda Smith,
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Up until the late 1960's the diagnosis of End Stage Renal Failure was a death sentence. The future has brought life sustaining modern technologies, discoveries, interventions and therapies.

Initially it was the ancient Greeks who described "dropsy", pale with extreme fatigue, they treated signs of fluid retention with specific plants that had diuretic effects and/or blood cleansing properties that lowered nitrogen.

Later came primitive forms of dialysis such as the practice of hot baths causing profuse sweating, freeing the body from any fluid, toxins or impurities via the pores. Enemas were another ancient practice to purge the body of impurities.

Today in 2008, End Stage Renal Failure can be prolonged for many years and sometimes never progressing from Stage 5 Chronic Kidney Disease(CKD), and never requiring dialysis and/or treated by having peritoneal dialysis or haemodialysis or by having a live or cadaveric renal transplant.

Now we have gone where no other has gone before. We are using the latest technology. We are leading the way in Renal Replacement Therapies and Kidney Transplantation. Permcaths, fistulas and tenckhoff catheters are a thing of the "Norm" amongst the Renal World.

You can now do Nocturnal Home Haemodialysis, Holiday Dialysis such as visit Egypt, or travel Europe, the Greek Isles.

Ultimately there is kidney transplantation, both live and cadaveric. Futuristically the current Stem Cell Research that is being undertaken should lead the way to Stem Cell kidney Transplantation, requiring nil immunotherapy. Futuristically the world would need "No Dialysis Machines".

Ascites paved the way to Peritoneal Dialysis: 359

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Australia,

In the 1700s it was the English who attempted to treat a woman with ascites firstly by removing the excess fluid and then using a leather tube infuse a solution of water and wine into her abdomen. She soon died.

In 1923 Ganter performed the first peritoneal dialysis for uremia. He infused a litre and a half of physiological solution, one with the same salt concentration as blood into the abdomen of a woman who suffered a blocked ureter. The treatment alleviated the symptoms temporarily, but the patient died a short time later.

It was not until 1924 and 1938 the US and Germany performed the first regularly repeated or intermittent – peritoneal dialysis treatments and proved the process could be a short term replacement for the kidneys natural function.

An American, Mr Henry Tenckhoff designed the first Flexible Tenckhoff Catheter in 1968 in order to achieve better drainage. These Flexible Tenckhoff Catheters are still being used today. The Tenckhoff also had one or two cuffs which could create a seal and be left insitu, rather than a rigid metal tube that was required to be reinserted every procedure.

We have come along way from then until now and we have perfected dialysis, various operations and procedures, treatments and therapies. The different Company Representatives have developed an ever growing variety of dialysates and dialysis machines, both peritoneal and haemodialysis. These latest technologies now days sustaining life for sometimes 34 years or greater.

Reducing Use of Potassium Dialysate Additives on Haemodialysis - A Multi-Disciplinary Approach: 360

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Objective:

The standard potassium(K) bath used at many haemodialysis units is K2 (no K added to dialysate). If a patient's serum K is too low, potassium is added to the dialysate to increase it to a K3. We aimed to reduce the use of potassium additives, without compromising the patients' potassium status.

Method:

In July 2008, 11 patients at our Renal Unit on K3 baths, were assessed for suitability to reduce their K bath. 9 patients were deemed clinically appropriate and were advised in a quantified manner by the dietitian, on increasing foods in their diet, that were moderate to high in potassium. K baths were then reduced from 3 to 2 and follow-up blood tests were performed to monitor the patients' serum K. If subsequent results were low, further dietetic review took place.

Results:

In 3 months, 7 of the original 9 patients included in the project, were stable on K2 baths. Patients were able to enjoy a wider variety of foods, which provide improved nutrition and enjoyment of food. A saving of \$3500 per annum for the Renal Unit was also achieved as each K additive costs \$3.20.

Conclusion:

A multi-disciplinary approach can be taken to optimise potassium regulation in haemodialysis patients. At the commencement of haemodialysis or at any later period, dietary manipulation of potassium can be trialled, before altering potassium dialysate additives, to maintain a safe serum K in people undergoing haemodialysis, thereby allowing patients a less restrictive diet and reducing costs.

As the Population grows... Renal–Surgical Access Rates Soar: 361

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For every patient requiring dialysis they will also require Temporary and/or Permanent Renal Access. Those patients requiring peritoneal dialysis will require a permanent surgically placed tenckhoff catheter. Those patients requiring urgent haemodialysis will require Temporary Access such as the Insertion of a Permcath until Permanent Renal Access such as a Fistula can be created and matured. From 2003 our Renal Activity data demonstrate that Renal Access Rates are "soaring" at an alarming rate.

Our activity data demonstrates the top Radiological procedures performed on Ward 4BR, the Acute Renal Inpatient Unit at the Princess Alexandra Hospital, Brisbane, Queensland, Australia is the Insertion of the Permcath and the Rewiring of the Permcath. The Total Number of Insertion of Permcaths is increasing every year and can be clearly demonstrated from 2003 onwards.

Closely following are the top 3 Renal-Surgical procedures which our data demonstrates are Creation of Fistulas, Revision of fistulas and Insertion of Tenckhoff Catheters followed by Parathyroidectomies / Subtotal Parathyroidectomies and Amputations. This has been a very labour intensive process and our nursing staff have been collecting this data manually since 2002/2003 and continue to do so.

This is not encouraging when our hospitals are all ready at capacity and our Haemodialysis Units are already sending out "Haemodialysis Capacity Crisis Alerts" to South East Queensland daily.

Watching our Renal Patient Population Explode!!!: 362

Christine A Bond,
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Brisbane, Queensland,
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Ward 4BR, the Acute Renal Inpatient Unit, Princess Alexandra Hospital, Brisbane is struggling to meet Renal Inpatient bed capacity demands as Renal Patient Numbers continue to rise at an alarming rate. Data has been collected since 2002 which demonstrates the dramatic increase in all renal inpatient activities.

The Renal Rover Nurse was introduced in 2006 on the morning and afternoon shift to cope with the increased numbers of renal patients flooding the hospital. A business case was submitted and recurrent funding for these positions was approved.

Ward 4BR has access to the latest technology and equipment. Our 16 bed unit is 100% occupied at all times. We also run up to 18-33 renal patient outlies per day. Our Renal Patients are triaged into the inpatient unit on "the most sickest of the sick" basis and the most stable being outlied to an empty bed within the hospital.

Our patients vary from the most critical post ICU patients which may have a Christmas tree of lines requiring one is to one intensive "Special" Registered Nursing Care to post CCU, Renal-Surgical, Pre & Post procedural, Pre & Post Operative, ARF, CRF, ESRF and Palliative Care Patients. All of whom receive Holistic Patient Care due to the high acuity we are now constantly experiencing.

With our aging Renal patient population growing and the increasing numbers of people moving interstate to Brisbane and Queensland Coastal Regions to retire... Renal Inpatient beds are becoming a scarce commodity in South East Queensland, Australia.

Ward 4BR, Acute Renal Inpatient Units...Fantastic Orientation Program and Educational Opportunities Available: 363

Christine A Bond,
Princess Alexandra Hospital,
Brisbane, Queensland,
Australia

Ward 4BR, the Acute Renal Inpatient Unit is proud of our Renal Specific Orientation Program that has been developed to orientate new nursing staff to our Ward. Every new nurse is allocated a Preceptor/Buddy, who will provide support and help orientate them to the Hospital and Ward.

Hospital Wide Orientation is followed by a 2 week supernumerary period where a ward specific orientation is completed. A "seek and find" Check List, Multiple Renal Specific Competencies, Self Learning Packages, Renal Clinical Pathways, Renal Manuals, Renal Palliative Care Manual, Discharge Planning, etc have been developed.

The Renal Educator and Renal Clinical Facilitators are heavily utilised. These education positions were additions to our Renal Departments overall nursing establishment in 2005 and 2006.

Our nursing staff have access to all Hospital Wide Inservices and Ward Based Inservices. Three structured study days are incorporated into their roster during their first year. A Renal Education Day is run by the Renal Educator. A Renal Rotation Program or Hospital Orientation Program is available to New Graduate Nurses. Due to popularity a Renal Rotation Program for experienced renal nurses is currently being developed.

The Renal Transition Program is available, where a Masters of Nephrology can follow. Our Ward "home grows" our own Registered Nurses. We support Assistant in Nursing and Enrolled Nurses to become Registered Nurses by accomodating their rosters to enable them to achieve their studies.

Without this constant preceptoring provided by our staff, this Renal Specific Ward Orientation Program would not be possible.

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Meg L Hockley,
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Australia

Participation in International Multicentre Clinical Trials began at The Queen Elizabeth Hospital (TQEH) Renal Unit in 1992. From our first international immunosuppression clinical trial, the pivotal registration study for Mycophenolate Mofetil, with one staff member working one day a week, the unit is currently participating in 25 studies in 2008 requiring 4.5 full time equivalent staff members.

With the success of this initial study in 1992, both clinically and in accuracy of data collection, the reputation of the The Queen Elizabeth Renal Unit became well known. With the outcome of this success, the Renal Unit was approached to participate in more ground breaking international multicentre clinical trials branching out into pre dialysis/ chronic kidney disease, dialysis and transplantation studies.

This poster will give an overview of the evolution of clinical trials and the role they have played in the advancement in care of the renal patient.

Flexibly meeting paediatric therapy needs-Applying Trusted Principles-Using new Technology: 365

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As we strive to improve the outcomes for paediatric patients through the use of an ever increasing number of available dialysis based therapies, it is important to ensure that treatment can be tailored to meet the specific needs of each individual client.

This paper sights two recent experiences at the Women's and Children's Hospital (South Australia), where the knowledge and understanding of sound paediatric management and therapy principles have been applied using newly available technology to improve patient outcome.

A brief overview of the regimes used in both cases will be presented highlighting the ability to now perform

- Single Needle Haemodiafiltration in conjunction with Blood Volume Monitoring for paediatric patients in the Chronic Dialysis Setting.
- Combined Hemodialysis and Haemodiafiltration therapy over a 24 hour period using volumetric bicarbonate based technology for acute patients in the Intensive Care Setting.

Through these experiences we have shown that improved serum phosphate levels, ultrafiltration control and electrolyte normalisation can be achieved using novel approaches to paediatric hemodialysis therapy.

Clinicians should embrace the possible changes technology can support to the therapy they offer patients. This does not require a move away from the principles they trust just a reinvention of how these are applied to achieve a common goal.

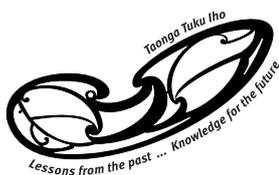
Introducing a novel patient-centred electronic clinical management platform (West Australian Nephrology Database WAND) for CKD management: 366

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Australia

In 2008, after a 2 year development, a comprehensive electronic renal management system was implemented at Royal Perth Hospital, allowing patient care for nearly two thousand CKD patients. The database includes areas for patient demographics, clinics, medications, medical history, transplant, dialysis, CKD education, renal access, haemodialysis and anaemia. Each specific area was developed with user derived input, then further evaluated and adjusted by the clinical staff after "road-testing."

A user survey was conducted prior to implementation, and after 8 months of use with positive feedback, suggesting the system was fulfilling its requirement to improve clinical care. Although the system is not fully complete, the survey confirmed a reduction in time allocated to the use of spreadsheets, medical records for data collection; and duplication of records

In addition to assisting clinical care and communication, the Renal Database has allowed the development of a reporting spreadsheet for the department, allowing us to effectively track our outcomes. The reporting tool facilitates tracking CKD patients for dialysis and transplant preparation, follow-up of testing schedules for dialysis, transplant and waitlist patients, creation of mail merges and patient lists. WAND won the Healthy WA Awards (Resources) in November; and a Business Case for its State-wide implementation to link all CKD patients and facilities is under review by the WA Health Department.



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