Evidence of life quality in CAPD patients and implications for nursing care: a systematic review
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Authors' objectives
To determine the present state of evidence available on the quality of life of CAPD (continuous ambulatory peritoneal dialysis) patients. In addition, the authors aimed to offer the evidence to nurse practitioners and to determine implications for practice and future research.

Searching
Electronic databases were searched: MEDLINE (1984 to 1998) and CINAHL (1982 to 1998). Primary search terms included 'peritoneal dialysis' and 'CAPD'. Secondary search terms included 'function', 'exercise', 'anxiety', 'depression', 'quality of life', 'mortality', 'coping', 'elderly', 'spouse', 'sexual function/dysfunction', and 'compliance'. These searches were supplemented with searches of the references identified in these primary searches and reviews.

Study selection
Study designs of evaluations included in the review
All designs of study were eligible for potential inclusion in the review. Five points were used to identify potentially suitable papers for inclusion in the review. Papers had to contain clear and unambiguous presentation of the information/findings. Objectives and methods of the study had to be clearly stated. There had to be a clear description of the research design explicitly stated. The results had to be comprehensively reported and discussed. All recommendations made had to be clear and concise and consistent with the study's stated objectives.

Specific interventions included in the review
CAPD, compared with haemodialysis at home, or in hospital, or transplant.

Participants included in the review
Patients with end-stage renal failure (ESRF) receiving CAPD.

Outcomes assessed in the review
Mortality and various 'Quality of Life' assessments, namely: dialysis, function (physical), adaptation of patient to dialysis, neurocognitive status, affective state, social support, recreation and work, coping, compliance.

How were decisions on the relevance of primary studies made?
The authors do not state how the papers were selected for the review, or how many of the reviewers performed the selection.

Assessment of study quality
The validity of the studies was not specifically addressed but the inclusion criteria were specific. The authors do not state how the papers were assessed for validity, or how many of the reviewers performed the validity assessment.

Data extraction
The authors do not state how the data were extracted for the review, or how many of the reviewers performed the data extraction. The categories of data included in the review were: study design, number of participants, treatment mode, measures and findings.

Methods of synthesis
How were the studies combined?
The studies were combined in a narrative.

How were differences between studies investigated?
Differences between the studies were not explored formally.

Results of the review
Eighty-five papers (n=3649) were extracted for the review.

CAPD does not appear to increase mortality, with 21% of all ESRF patients being on CAPD and mortality among CAPD patients accounting for 28% of all ESRF patients. Any link between dialysis adequacy and quality of life could not be detected due to a dearth of appropriate research. CAPD patients have a lower physical exercise level than that of matched healthy control populations. However, the mode of dialysis has not been found to be a key variable in determining the degree of functional disability in ESRF patients. Data suggest that kidney transplant patients appear to have a better quality of life than do either haemodialysis or CAPD patients, but clear data to differentiate between forms of dialysis are lacking. Adjustment to and acceptance of intrusive dialysis treatment is difficult, particularly in terms of its impact on physical well being, diet, work and finances. There is no evidence of clear difference between CAPD and haemodialysis in this. CAPD patients were found to have consistently higher levels of cognitive function than haemodialysis patients. The effect of CAPD on affective state is important. Some data indicate CAPD might be better on this than haemodialysis but results are not conclusive. Social support for CAPD patients is important as are hobbies and recreation and work. Some data suggests that CAPD patients are less able to work than haemodialysis or transplant patients. Coping was found to be more problematic in younger than older patients. Compliance is an important issue but methods for assessing compliance are not reliable.

Authors’ conclusions
Limitations of research designs and variety of measures used was highlighted. Caution in the interpretation of findings was necessary, the weight of evidence in most ‘quality of life issues can only be interpreted as trends. No CAPD quality of life research exists that enables nurses to introduce effective supportive intervention. Psychosocial factors such as depression, anxiety, and support are more likely to influence quality of life than physiological aspects of CAPD-like dialysis adequacy. Quality of life for significant others is generally good and probably influenced by severity of patient problems.

CRD commentary
This review addressed an appropriate question with adequately defined inclusion and exclusion criteria. The search strategy used was sufficiently comprehensive, although no effort was made to identify unpublished material. The criteria for selecting papers for inclusion in the review were clearly defined, although the number of reviewers involved in the process of paper selection, validity assessment and data extraction was not stated. Only limited details of the individual studies included in the review are presented, with only occasional reference to sample sizes or study design. The narrative synthesis of the available studies appears to be appropriate given the apparent lack of standard research methodologies used. The lack of detail provided on the studies doesn’t allow confirmation of this. The review provides a useful summary of the available information relating to the various aspects of quality of life for CAPD patients. The authors' conclusions do follow from the results, given the limitations mentioned above.

Implications of the review for practice and research
Practice: Nursing and nurses clearly have an important role in developing novel packages of care which incorporate best practice in concert with clinical outcome and improved quality of life in CAPD patients.

Research: The authors state that 'To assure the future well being of this population, a comprehensive and consistent evidence base is urgently required' and 'Standardised instruments are needed to determine mood, adaptation, coping and particularly quality of life for patients with CAPD'.
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Record Status
This is a critical abstract of a systematic review that meets the criteria for inclusion on DARE. Each critical abstract contains a brief summary of the review methods, results and conclusions followed by a detailed critical assessment on the reliability of the review and the conclusions drawn.