**Item S1: Search terms for PubMed, Embase, and Academic Science Premier**

**PubMed:**
renal replacement therapy OR kidney disease OR chronic kidney disease OR kidney failure OR chronic kidney failure OR mild renal impairment OR stage 1 kidney disease OR moderate renal impairment OR severe renal impairment OR end stage renal disease OR kidney transplantation OR hemodialysis OR haemodialysis OR hemofiltration OR haemofiltration OR hemodiafiltration OR haemodiafiltration OR dialysis OR Renal disease OR Renal failure OR Predialysis OR Pre-dialysis OR Kidney graft OR Renal graft OR Kidney allograft OR Renal allograft OR RRT OR Peritoneal dialysis OR HD
AND
Telehealth OR Telemedicine OR e-health OR ehealth OR m-health OR mhealth OR Remote consultation OR Remote care OR Video consultation OR Telephone consultation OR mobile device OR mobile application
AND
Attitudes OR Perspectives OR Experiences OR Perception OR Opinions OR Thoughts OR Feelings OR Beliefs OR viewpoints OR outlook

**Embase:**

Search Terms

(renal-replacement-therapy OR kidney-disease OR chronic-kidney-disease OR kidney-failure OR chronic-kidney-failure OR mild-renal-impairment OR stage-1-kidney-disease OR moderate-renal-impairment OR severe-renal-impairment OR end-stage-renal-disease OR kidney-transplantation OR hemodialysis OR haemodialysis OR hemofiltration OR haemofiltration OR hemodiafiltration OR haemodiafiltration OR dialysis OR Renal-disease OR Renal-failure OR Predialysis OR Pre-dialysis OR Kidney-graft OR Renal-graft OR Kidney-allograft OR Renal-allograft OR RRT OR Peritoneal-dialysis OR HD)
AND
(Telehealth OR Telemedicine OR e-health OR ehealth OR m-health OR mhealth OR Remote-consultation OR Remote-care OR Video-consultation OR Telephone-consultation OR mobile-device OR mobile-application)
AND
(Attitudes OR Perspectives OR Experiences OR Perception OR Opinions OR Thoughts OR Feelings OR Beliefs OR viewpoints OR outlook)

**Academic Search Premier:**

Search Terms:
renal replacement therapy OR kidney disease OR chronic kidney disease OR kidney failure OR chronic kidney failure OR mild renal impairment OR stage 1 kidney disease OR moderate renal impairment OR severe renal impairment OR end stage renal disease OR kidney transplantation OR hemodialysis OR haemodialysis OR hemofiltration OR haemofiltration OR hemodiafiltration OR haemodiafiltration OR dialysis OR Renal disease OR Renal failure OR Predialysis OR Pre-dialysis OR Kidney graft OR Renal graft OR Kidney allograft OR Renal allograft OR RRT OR Peritoneal dialysis OR HD
Manko et al, Kidney Med, “Telemedicine in Advanced Kidney Disease and Kidney Transplant: A Qualitative Meta-Analysis of Studies of Patient Perspectives”

AND
Telehealth OR Telemedicine OR e-health OR ehealth OR m-health OR mhealth OR Remote consultation OR Remote care OR Video consultation OR Telephone consultation OR mobile device OR mobile application
AND
Attitudes OR Perspectives OR Experiences OR Perception OR Opinions OR Thoughts OR Feelings OR Beliefs OR viewpoints OR outlook
A Quantitative and Qualitative Study on Patient and Physician Perceptions of Nephrology Telephone Consultation During COVID-19

### Research design

- **Qualitative**
  - Narrative, Phenomenology, Ethnography, Grounded theory, Narrative case study, 
  - Thematic analysis
- **Descriptive, Exploratory, Observational**
  - A. Cross-sectional, Longitudinal, Retrospective, Prospective, Correlational, Predictive
  - B. Cohort, Case-control, Survey

### Variables and analysis

| Intervention(s), Treatment(s), Exposure(s) | Outcome(s), Output(s), Predictor(s), Measure(s) | Data analysis method(s) |
|------------------------------------------|-----------------------------------------------|-------------------------|
| survey                                   | patient and provider views on telephone consultations | descriptive statistics and content analysis |

### Sampling

| Total size | Group 1 | Group 2 | Group 3 | Group 4 | Control |
|------------|---------|---------|---------|---------|---------|
| 246        | 235     | 11      |         |         |         |

Population, sample, setting: 235 patients and 11 physicians completed the survey

### Data collection

| Audit/Review | Observation | a) Primary | Secondary | ... |
|--------------|-------------|------------|-----------|-----|
| a) Primary   | a) Participant | Formal | Informal | ... |
| b) Authoritative | b) Structured | Interview | b) Structured | ... |
| c) Literature  | c) Covert | c) One-on-one | Group | Multiple | Self-administered | ... |
| Systematic   | Semi-structured | Unstructured | Unstructured | ... |

| Scores |
|--------|
| Preliminaries | 5 | Design | 3 | Data Collection | 5 |
| Introduction | 5 | Sampling | 4 | Ethical Matters | 3 |
| Results | 5 | Discussion | 5 | Total [%] | 87.5 |
| Total [%] | 35 | |

### General notes
| Category        | Item describers | Description | Score |
|-----------------|-----------------|-------------|-------|
| 1. Preliminaries| Title           | 1. Includes study aims ✔ and design ✔ | Preliminaries [5] 5 |
|                 | Abstract (assess last) | 1. Key information ✔ and informative ✔ |  |
|                 | Text (assess last) | 1. Sufficient details could reproduce ✔ 2. Clear/concise writing ✔, table(s), diagram(s), figure(s) |  |
| 2. Introduction | Background | 1. Summary of current knowledge ✔ 2. Specific problem(s) addressed ✔ and reason(s) for addressing ✔ | Introduction [5] 5 |
|                 | Objective | 1. Primary objective(s), hypothesis(es), or aim(s) ✔ 2. Secondary question(s) |  |
| 3. Design       | Research design | 1. Research design(s) chosen ✔ and why ✔ 2. Suitability of research design(s) ✔ |  |
|                 | Intervention, Treatment, Exposure | 1. Intervention(s)/treatment(s)/exposure(s) chosen ✔ and why ✔ 2. Precise details of the intervention(s)/treatment(s)/exposure(s) ✔ each group ✔ 3. Intervention(s)/treatment(s)/exposure(s) valid ✔ and reliable ✔ |  |
|                 | Outcome, Output, Predictor, Measure | 1. Outcome(s)/output(s)/predictor(s)/measure(s) chosen ✔ and why ✔ 2. Clearly define outcome(s)/output(s)/predictor(s)/measure(s) ✔ 3. Outcome(s)/output(s)/predictor(s)/measure(s) valid ✔ and reliable ✔ |  |
|                 | Bias, etc | 1. Potential bias ✔, confounding variable(s) ✔, effect modifiers ✔, interaction(s) ✔ 2. Sequence generation ✔, group allocation ✔, group balance ✔, and by whom ✔ 3. Equivalent treatment of participants/cases/groups ✗ |  |
| 4. Sampling     | Sampling method | 1. Sampling method(s) chosen ✔ and why ✗ 2. Suitability of sampling method ✗ | Design [5] 3 |
|                 | Sample size | 1. Sample size ✔, how chosen ✔ and why ✗ 2. Suitability of sample size ✔ |  |
|                 | Sampling protocol | 1. Target/actual/sample population(s): description ✔ and suitability ✔ 2. Participants/cases/groups: inclusion ✔ and exclusion ✗ criteria 3. Recruitment of participants/cases/groups ✔ |  |
| 5. Data collection | Collection method | 1. Collection method(s) chosen ✔ and why ✗ 2. Suitability of collection method(s) ✔ | Data collection [5] 5 |
|                 | Collection protocol | 1. Include date(s), location(s), setting(s), personnel ✔, materials ✔, process ✔ 2. Method(s) to ensure/enhance quality of measurement/instrumentation ✔ 3. Manage non-participation ✗, withdrawal(s), incomplete/lost data ✗ |  |
| 6. Ethical matters | Participant ethics | 1. Informed consent ✗, equity ✔ 2. Privacy ✔, confidentiality/anonymity ✔ | Ethical matters [5] 3 |
|                 | Researcher ethics | 1. Ethical approval ✔, funding ✔, conflict(s) of interest ✔ 2. Subjectivities ✔, relationship(s) with participants/cases ✗ | only implied consent for nephrologists; mentioned follow-up study but didn’t specify what this included |
| 7. Results      | Analysis, Integration, Interpretation method | 1. A.I.I. method(s) for primary outcome(s)/output(s)/predictor(s) chosen ✔ and why ✗ 2. Additional A.I.I. methods (e.g. subgroup analysis) chosen ✔ why ✗ 3. Suitability of analysis/integration/interpretation method(s) ✔ | Results [5] 5 |
|                 | Essential analysis | 1. Flow of participants/cases/groups through each stage of research ✔ 2. Demographic and other characteristics of participants/cases/groups ✔ 3. Analyse raw data ✔, response rate ✔, non-participation/withdrawal incomplete/lost data ✔ | data reported in percentages, but does not explain differences in completion of survey questions |
|                 | Outcome, Output, Predictor analysis | 1. Summary of result(s) and precision ✔ for each outcome/output/predictor/measure ✔ 2. Consideration of benefits/harms ✗, unexpected results ✗, problems/failures ✗ 3. Description of outlying data (e.g. diverse cases, adverse effects, minor themes) ✗ |  |
| 8. Discussion   | Interpretation | 1. Interpretation of results in the context of current evidence ✔ and objectives ✔ 2. Draw inferences consistent with the strength of the data ✔ 3. Consideration of alternative explanations for observed results ✔ 4. Account for bias ✗, confounding/effect modifiers/interactions/imprecision ✗ |  |
|                 | Generalisation | 1. Consideration of overall practical usefulness of the study ✔ 2. Description of generalisability (external validity) of the study ✔ |  |
|                 | Concluding remarks | 1. Highlight study’s particular strengths ✗ 2. Suggest steps that may improve future results (e.g. limitations) ✔ 3. Suggest further studies ✗ | Discussion [5] 5 |
| 9. Total        | | Total score | 40 |  |
# Kidney transplant recipient perspectives on telehealth during the COVID-19 pandemic

**Citation**

Kidney transplant recipient perspectives on telehealth during the COVID-19 pandemic

**Year**

2021

| Research design (add if not listed) |
|-------------------------------------|
| Not research | Article | Editorial | Report | Opinion | Guideline | Pamphlet | ... |
| Historical | ... |
| **✓ Qualitative** | Narrative | Phenomenology | Ethnography | Grounded theory | Narrative case study | ... |
| Descriptive, Exploratory, Observational |
| A. Cross-sectional | Longitudinal | Retrospective | Prospective | Correlational | Predictive | ... |
| B. Cohort | Case-control | Survey | Developmental | Normative | Case study | ... |
| Experimental | True experiment | Pre-test/post-test control group | Solomon four-group | Post-test only control group | Randomised two-factor | Placebo controlled trial | ... |
| Quasi-experiment | Post-test only | Non-equivalent control group | Counter balanced (cross-over) | Multiple time series | ... |
| Separate sample pre-test post-test | [no Control] | [Control] | ... |
| Single system | One-shot experimental (case study) | Simple time series | One group pre-test/post-test | Interactive | Multiple baseline | ... |
| Within subjects | Equivalent time, repeated measures, multiple treatment | ... |
| Mixed Methods | Action research | Sequential | Concurrent | Transformative | ... |

| Variables and analysis |
|-------------------------|
| Intervention(s), Treatment(s), Exposure(s) | Outcome(s), Output(s), Predictor(s), Measure(s) | Data analysis method(s) |
| Focus groups | kidney transplant perspectives | thematic analysis |

| Sampling |
|----------|
| Total size | 34 |
| Group 1 | Group 2 | Group 3 | Group 4 | Control |

| Data collection (add if not listed) |
|-------------------------------------|
| a) Primary | Secondary | ... |
| Audit/Review | a) Formal | Informal | ... |
| b) Authoritative | Partisan | Antagonist | ... |
| c) Literature | Systematic | ... |
| Observation | a) Standardised | Norm-ref | Criterion-ref | Ipsative | ... |
| a) Participant | Non-participant | ... |
| b) Structured | Semi-structured | Unstructured | ... |
| c) Covert | Candid | ... |

| Scores |
|---------|
| Preliminaries | 5 | Design | 4 | Data Collection | 4 | Results | 5 | Total [40] | 38 |
| Introduction | 5 | Sampling | 5 | Ethical Matters | 5 | Discussion | 5 | Total [%] | 95 |

| General notes |
### Crowe Critical Appraisal Tool (CCAT) Form (v4)

**Category:** Preliminaries, Design, Sampling, Data Collection, Ethical Matters, Results, Discussion

#### Preliminaries [5]

| Item | Description | Score |
|------|-------------|-------|
| Title | 1. Includes study aims and design | 5 |
| Abstract (assess last) | 1. Key information, 2. Balanced and informative |  |
| Text (assess last) | 1. Sufficient detail others could reproduce, 2. Clear/concise writing, tables, diagram, figure |  |

#### Design [5]

| Subcategory | Description | Score |
|-------------|-------------|-------|
| Research design | 1. Research design(s) chosen, 2. Suitability of research design(s) |  |
| Intervention, Treatment, Exposure | 1. Intervention(s)/treatment(s)/exposure(s) chosen, 2. Precise details of the intervention(s)/treatment(s)/exposure(s) for each group, 3. Intervention(s)/treatment(s)/exposure(s) valid and reliable |  |
| Outcome, Output, Predictor, Measure | 1. Outcome(s)/output(s)/predictor(s)/measure(s) chosen, 2. Clearly define outcome(s)/output(s)/predictor(s)/measure(s), 3. Outcome(s)/output(s)/predictor(s)/measure(s) valid and reliable |  |
| Bias, etc | 1. Potential bias, confounding variable(s), effect modifier(s), interaction(s), 2. Sequence generation, group allocation, group balance, and by whom, 3. Equivalent treatment of participants/cases/groups |  |

#### Sampling [5]

| Subcategory | Description | Score |
|-------------|-------------|-------|
| Sampling method | 1. Sampling method(s) chosen, 2. Suitability of sampling method |  |
| Sample size | 1. Sample size, how chosen, why, 2. Suitability of sample size |  |
| Sampling protocol | 1. Target/actual/sample population(s): description and suitability, 2. Participants/cases/groups: inclusion and exclusion criteria, 3. Recruitment of participants/cases/groups |  |

#### Data Collection [5]

| Subcategory | Description | Score |
|-------------|-------------|-------|
| Collection method | 1. Collection method(s) chosen, 2. Suitability of collection method(s) |  |
| Collection protocol | 1. Include date(s), location(s), setting(s), personnel, materials, process, 2. Method(s) to ensure/enhance quality of measurements/instrumentation, 3. Manage non-participation, withdrawal, incomplete/lost data |  |

#### Ethical Matters [5]

| Subcategory | Description | Score |
|-------------|-------------|-------|
| Participant ethics | 1. Informed consent, equity, 2. Privacy, confidentiality/and anonymity |  |
| Researcher ethics | 1. Ethical approval, funding, conflict(s) of interest, 2. Subjectivities, relationship(s) with participants/cases |  |

#### Results [5]

| Subcategory | Description | Score |
|-------------|-------------|-------|
| Analysis, Integration, Interpretation method | 1. A.I.I. method(s) for primary outcome(s)/output(s)/predictor(s) chosen, 2. Additional A.I.I. method(s) (e.g. subgroup analysis) chosen, 3. Suitability of analysis/integration/interpretation method(s) |  |
| Essential analysis | 1. Flow of participants/cases/groups through each stage of research, 2. Demographic and other characteristics of participants/cases/groups, 3. Analyse raw data, response rate, non-participation/withdrawal/incomplete/lost data |  |
| Outcome, Output, Predictor analysis | 1. Summary of results and precision for each outcome/output/predictor/measure, 2. Consideration of benefits/harms, unexpected results, problems/failures, 3. Description of outlying data (e.g. diverse cases, adverse effects, minor themes) |  |

#### Discussion [5]

| Subcategory | Description | Score |
|-------------|-------------|-------|
| Interpretation | 1. Interpretation of results in the context of current evidence and objectives, 2. Draw inferences consistent with the strength of the data, 3. Consideration of alternative explanations for observed results, 4. Account for bias, confounding, effect modifiers/interactions/imprecision |  |
| Generalisation | 1. Consideration of overall practical usefulness of the study, 2. Description of generalisability (external validity) of the study |  |
| Concluding remarks | 1. Highlight study’s particular strengths, 2. Suggest steps that may improve future results (e.g. limitations), 3. Suggest further studies |  |

#### Total [5]

Total score: 25
Scores

| Preliminaries | Design | Data Collection | Results | Total [40] |
|---------------|--------|-----------------|---------|------------|
| 5             | 4      | 5               | 5       | 38         |

Introduction

| Sampling | 5 | Ethical Matters | 4 | Discussion | 5 | Total [%] |
|----------|---|-----------------|---|------------|---|-----------|
| 5        |   | 5               |   | 5          |   | 95        |

General notes
| Category | Item | Item descriptors | Description | Score |
|----------|------|-----------------|-------------|-------|
| 1. Preliminaries | | | | |
| Title | 1. Includes study aim and design ✓ | | Preliminaries [5] | 5 |
| Abstract (assess last) | 1. Key information ✓ 2. Balanced and informative ✓ | | | |
| Text (assess last) | 1. Sufficient details others could reproduce 2. Clear/concise writing ✓ tables ✓, diagram ✓, figure ✓ | | | |
| 2. Introduction | | | | |
| Background | 1. Summary of current knowledge ✓ 2. Specific problem(s) addressed and reason(s) for addressing ✓ | | Introduction [5] | 5 |
| Objective | 1. Primary objective(s), hypothesis(es), or aim(s) ✓ 2. Secondary question(s) • | | | |
| 3. Design | | | | |
| Research design | 1. Research design(s) chose ✓ and why ✓ 2. Suitability of research design(s) ✓ | | Design [5] | 4 |
| Intervention, Treatment, Exposure | 1. Intervention(s)/treatment(s)/exposure(s) chose ✓ and why ✓ 3. Intervention(s)/treatment(s)/exposure(s) valid ✓ and reliable ✓ | | | |
| Outcome, Output, Predictor, Measure | 1. Outcome(s)/output(s)/predictor(s)/measure(s) chose ✓ and why ✓ 2. Precise details of the intervention(s)/treatment(s)/exposure(s) for each group ✓ 3. Intervention(s)/treatment(s)/exposure(s) valid ✓ and reliable ✓ | | | |
| Bias, etc | 1. Potential bias ✓, confounding variables ✓, effect modifiers ✓, interaction ✓ 2. Sequence generation ✓, allocation ✓, group balance ✓, and by whom ✓ 3. Equivalent treatment of participants/cases/groups • | | | |
| 4. Sampling | | | | |
| Sampling method | 1. Sampling method(s) chose ✓ and why ✓ 2. Suitability of sampling method ✓ | | Sampling [5] | 5 |
| Sample size | 1. Sample size ✓, how chosen ✓ and why ✓ 2. Suitability of sample size ✓ | | | |
| Sampling protocol | 1. Target/actual/sample population(s) description ✓ and suitability ✓ 2. Participants/cases/groups inclusion ✓ and exclusion criteria ✓ 3. Recruitment of participants/cases/groups ✓ | | | |
| 5. Data collection | | | | |
| Collection method | 1. Collection method(s) chose ✓ and why ✓ 2. Suitability of collection method(s) ✓ | | Data collection [5] | 5 |
| Collection protocol | 1. Include date(s), location(s), setting(s), personnel(s), material(s), process(es) ✓ 2. Method(s) to ensure/enhance quality of measurements/instrumentation ✓ 3. Manage non-participation ✓, withdrawal ✓, incomplete ✓, lost data ✓ | | | |
| 6. Ethical matters | | | | |
| Participant ethics | 1. Informed consent ✓, equipoise ✓ 2. Privacy ✓, confidentiality/anonymity ✓ | | Ethical matters [5] | 4 |
| Researcher ethics | 1. Ethical approval ✓, funding ✓, conflict(s) of interest ✓ 2. Subjectivities ✓, relationship(s) with participants/cases ✓ | | | |
| 7. Results | | | | |
| Analysis, Interpretation, Integration method | 1. A.I.I. method(s) for primary outcome(s)/output(s)/predictor(s) chose ✓ and why ✓ 2. Additional A.I.I. methods (e.g. subgroup analysis) chose ✓ and why ✓ 3. Suitability of analysis/integration/intepretation method(s) | | Results [5] | 5 |
| Essential analysis | 1. Flow of participants/cases/groups through each stage of research ✓ 2. Demographic and other characteristics of participants/cases/groups ✓ 3. Analyse raw data ✓ response rate ✓ non-participation ✓ withdrawal ✓, incomplete ✓, lost data ✓ | | | |
| Outcome, Output, Predictor analysis | 1. Summary of results ✓ and precision ✓for each outcome/output/predictor/measure(s) 2. Consideration of benefits/harms ✓, unexpected results ✓, problems/failures ✓ 3. Description of outlying data (e.g. diverse cases, adverse effects, minor themes) ✓ | | | |
| 8. Discussion | | | | |
| Interpretation | 1. Interpretation of results in the context of current evidence ✓ and objectives ✓ 2. Draw inferences consistent with the strength of the data ✓ 3. Consideration of alternative explanations for observed results ✓ 4. Account for bias ✓, confounding ✓, effect modifiers/interactions/imprecision ✓ | | Discussion [5] | 5 |
| Generalisation | 1. Consideration of overall practical usefulness of the study ✓ 2. Description of generalisability (external validity) of the study ✓ | | | |
| Concluding remarks | 1. Highlight study’s particular strengths ✓ 2. Suggest steps that may improve future results (e.g. limitations) ✓ 3. Suggest further studies ✓ | | | |
| 9. Total | | | | |
| | | | |
### Scores

| Preliminaries | Design | Data Collection | Results | Total [%] |
|---------------|--------|-----------------|---------|-----------|
| 4             | 4      | 4               | 5       | 36        |
| Introduction  | 5      | Sampling        | 4       | 49        |
| 4             | 5      | Ethical Matters | 4       | 36        |
|               |        | Discussion      | 5       | 45        |
|               |        |                 |         | 90        |

### General notes
| Category          | Item                              | Item descriptors | Description | Score |
|-------------------|-----------------------------------|------------------|-------------|-------|
| 1. Preliminaries  | Title                             | 1. Includes study aims and design✓ | Preliminaries [5] | 4     |
|                   | Abstract (assess last)            | 1. Key information✓ 2. Balanced and informative✓ |             |       |
|                   | Text (assess last)                | 1. Sufficient details others could reproduce✓ 2. Clear/concise writing✓, table✓, diagram✓, figure✓ |             |       |
| 2. Introduction   | Background                        | 1. Summary of current knowledge✓ 2. Specific problem(s) addressed and reason(s) for addressing✓ | Introduction [5] | 5     |
|                   | Objective                         | 1. Primary objective(s), hypothesis(es), or aim(s)✓ 2. Secondary question(s) ● |             |       |
| 3. Design         | Research design                   | 1. Research design(s) chosen✓ and why✓ | Design [5] | 4     |
|                   | Intervention, Treatment, Exposure | 1. Intervention(s)/treatment(s)/exposure(s) chosen✓ and why✓ 2. Precise details of the intervention(s)/treatment(s)/exposure(s)✓ for each group✓ 3. Intervention(s)/treatment(s)/exposure(s) valid✓ and reliable✓ |             |       |
|                   | Outcome, Output, Predictor, Measure | 1. Outcome(s)/output(s)/predictor(s)/measure(s) chosen✓ and why✓ 2. Clearly define outcome(s)/output(s)/predictor(s)/measure(s)✓ 3. Outcome(s)/output(s)/predictor(s)/measure(s) valid✓ and reliable✓ |             |       |
|                   | Bias, etc                         | 1. Potential bias✓, confounding variables✓, effect modifiers✓, interactions✓ 2. Sequence generation✓, group allocation✓, group balance✓ and by whom✓ |             |       |
| 4. Sampling       | Sampling method                   | 1. Sample method(s) chosen✓ and why✓ 2. Suitability of sample method✓ | Sampling [5] | 5     |
|                   | Sample size                       | 1. Sample size✓, how chosen✓ and why✓ 2. Suitability of sample size✓ |             |       |
|                   | Sampling protocol                 | 1. Target/actual/sample population(s): description✓ and suitability✓ 2. Participants/cases/groups: inclusion✓ and exclusion✓ criteria✓ 3. Recruitment of participants/cases/groups✓ |             |       |
| 5. Data collection| Collection method                 | 1. Collection method(s) chosen✓ and why✓ 2. Suitability of collection method✓ | Data collection [5] | 4     |
|                   | Collection protocol               | 1. Include date✓, location✓, setting✓, person✓, material✓, processes✓ 2. Method(s) to ensure/enhance quality of measurement/instrumentation✓ 3. Manage non-participation✓, withdraw✓, incomplete/lost data✓ |             |       |
| 6. Ethical matters| Participant ethics                | 1. Informed consent✓, equity✓ 2. Privacy✓, confidentiality/anonymity✓ 3. Each group has their own interview | Ethical matters [5] | 4     |
|                   | Researcher ethics                 | 1. Ethical approval✓, funding✓, conflicts of interest✓ 2. Subjectivities✓, relationship(s) with participants/cases✓ 3. Uncertain what relationship between researchers and clinicians is |             |       |
| 7. Results        | Analysis, Integration, Interpretation method | 1. A.I.I. method(s) for primary outcome(s)/output(s)/predictor(s) chosen✓ and why✓ 2. Additional A.I.I. methods (e.g. subgroup analysis✓) and why✓ 3. Suitability of analysis/integration/interpretation method(s)✓ | Results [5] | 5     |
|                   | Essential analysis                | 1. Flow of participants/cases/groups through each stage of research✓ 2. Demographic and other characteristics of participants/cases/groups✓ 3. Analyse raw data✓, response rate✓, non-participation/withdrawal/incomplete/lost data✓ 4. Consideration of benefits/harm✓, unexpected results✓, problems/failures✓ 5. Description of outlying data (e.g. diverse cases, adverse effects, minor themes)✓ |             |       |
|                   | Outcome, Output, Predictor analysis | 1. Summary of results✓ and precision✓ for each outcome/output/predictor/measure✓ 2. Consideration of benefits/harm✓, unexpected results✓, problems/failures✓ 3. Description of outlying data (e.g. diverse cases, adverse effects, minor themes)✓ |             |       |
| 8. Discussion     | Interpretation                    | 1. Interpretation of results in the context of current evidence✓ and objectives✓ 2. Draw inferences consistent with the strength of the data✓ 3. Consideration of alternative explanations for observed results✓ 4. Account for bias✓, confounding/effect modifiers/interactions/imprecision✓ | Discussion [5] | 5     |
|                   | Generalisation                    | 1. Consideration of overall practical usefulness of the study✓ 2. Description of generalisability (external validity)✓ of the study✓ |             |       |
|                   | Concluding remarks                | 1. Highlight study’s particular strengths✓ 2. Suggest steps that may improve future results (e.g. limitations)✓ 3. Suggest further studies✓ |             |       |
| 9. Total          |                                    |                  |             |       |
|                   | Total score                       |                  |             |       |
**Research design (add if not listed)**

Not research | Article | Editorial | Report | Opinion | Guideline | Pamphlet | ...
--- | --- | --- | --- | --- | --- | --- | ---
√ Qualitative | Narrative | Phenomenology | Ethnography | Grounded theory | Narrative case study | ... | thematic analysis
Descriptive, Exploratory, Observational | A. Cross-sectional | Longitudinal | Retrospective | Prospective | Correlational | Predictive | ...
--- | --- | --- | --- | --- | --- | --- | ---
B. Cohort | Case-control | Survey | Developmental | Normative | Case study | ... | ...

**Experimental**

True experiment | Pre-test/post-test control group | Solomon four-group | Post-test only control group | Randomised two-factor | Placebo controlled trial | ...
--- | --- | --- | --- | --- | --- | --- | ---
Quasi-experiment | Post-test only | Non-equivalent control group | Counter balanced (cross-over) | Multiple time series | Separate sample pre-test post-test | [no Control] | [Control] | ...
--- | --- | --- | --- | --- | --- | --- | ---
Single system | One-shot experimental (case study) | Simple time series | One group pre-test/post-test | Interactive | Multiple baseline | Within subjects | (Equivalent time, repeated measures, multiple treatment) | ...

**Mixed Methods**

Action research | Sequential | Concurrent | Transformative | ...

**Synthesis**

Systematic review | Critical review | Thematic synthesis | Meta-ethnography | Narrative synthesis | ...

**Other**

...

### Variables and analysis

| Intervention(s), Treatment(s), Exposure(s) | Outcome(s), Output(s), Predictor(s), Measure(s) | Data analysis method(s) |
|---|---|---|
| telehealth intervention | patient and provider perspectives | semi-structured interviews |

### Sampling

| Total size | Group 1 | Group 2 | Group 3 | Group 4 | Control |
|---|---|---|---|---|---|
| 36 | 16 | 20 | | | |

| Population, sample, setting | |
|---|---|
| 16 patients and 20 healthcare professionals |

### Data collection (add if not listed)

| Audit/Review | a) Primary | Secondary | ...
|---|---|---|---
| b) Authoritative | Partisan | Antagonist | ...
| c) Literature | Systematic | ...
| Observation | a) Participant | Non-participant | ...
|---|---|---|---
| b) Structured | Semi-structured | Unstructured | ...
| c) Covert | Candid | ...

| a) Formal | Informal | ...
|---|---|---
| b) Structured | Semi-structured | Unstructured | ...
| c) One-on-one | Group | Multiple | Self-administered | ...

| a) Standardised | Norm-ref | Criterion-ref | Ipsative | ...
|---|---|---|---|---
| b) Objective | Subjective | ...
| c) One-on-one | Group | Self-administered | ...

### Scores

| Preliminaries | 4 | Design | 4 | Data Collection | 5 | Results | 5 | Total [/40] | 34 |
|---|---|---|---|---|---|---|---|---|---|
| Introduction | 5 | Sampling | 4 | Ethical Matters | 3 | Discussion | 4 | Total [%] | 85 |

### General notes
| Category | Item | Item descriptors | Description | Score |
|----------|------|------------------|-------------|-------|
| 1. Preliminaries | Title | 1. Includes study aim and design | Preliminaries [5] | 4 |
| | Abstract (assess last) | 1. Key information | | |
| | | 2. Balanced and informative | | |
| | Text (assess last) | 1. Sufficient details others could reproduce | | |
| | | 2. Clear/concise writing, table(s), diagram(s), figure(s) | | |
| 2. Introduction | Background | 1. Summary of current knowledge | Introduction [5] | 5 |
| | Objective | 1. Primary objective(s), hypothesis(es), or aim(s) | | |
| | | 2. Secondary question(s) | | |
| 3. Design | Research design | 1. Research design(s) chosen and why | | |
| | Intervention, Treatment, Exposure | 1. Intervention(s)/treatment(s)/exposure(s) chosen and why | | |
| | | 2. Precise details of the intervention(s)/treatment(s)/exposure(s) for each group | | |
| | | 3. Intervention(s)/treatment(s)/exposure(s) valid and reliable | | |
| | Outcome, Output, Predictor, Measure | 1. Outcome(s)/output(s)/predictor(s)/outcome(s)/output(s)/predictor(s)/measure(s) chosen and why | | |
| | | 2. Clearly define outcome(s)/output(s)/predictor(s)/measure(s) | | |
| | | 3. Outcome(s)/output(s)/predictor(s)/measure(s) valid and reliable | | |
| | Bias, etc | 1. Potential bias/confounding variables | | |
| | | 2. Sequence generation, group allocation, group balance, and by whom | | |
| | | 3. Equivalent treatment of participants/cases/groups | | |
| 4. Sampling | Sampling method | 1. Sampling method(s) chosen and why | | |
| | Sample size | 1. Sample size, how chosen, and why | | |
| | | 2. Suitability of sample size | | |
| | Sampling protocol | 1. Target/actual/sample population(s) description and suitability | | |
| | | 2. Participants/cases/groups: inclusion and exclusion criteria | | |
| | | 3. Recruitment of participants/cases/groups | | |
| 5. Data collection | Collection method | 1. Collection method(s) chosen and why | | |
| | Collection protocol | 1. Include date(s), location(s), settings(s), personnel(s), material(s), process(s) | | |
| | | 2. Method(s) to ensure/enhance quality of measurement/instrumentation | | |
| | | 3. Manage non-participation, withdrawal, incomplete/lost data | | |
| 6. Ethical matters | Participant ethics | 1. Informed consent, equity | | |
| | | 2. Privacy, confidentiality/anonymous | | |
| | Researcher ethics | 1. Ethical approval, funding, conflict(s) of interest | | |
| | | 2. Subjectivities, relationship(s) with participants/cases | | |
| 7. Results | Analysis, Integration, Interpretation method | 1. A.I.I. method(s) for primary outcome(s)/output(s)/predictor(s) chosen and why | | |
| | Essential analysis | 1. Flow of participants/cases/groups through each stage of research | | |
| | | 2. Demographic and other characteristics of participants/cases/groups | | |
| | | 3. Analyse raw data, response rate, non-participation, withdrawal, incomplete/lost data | | |
| | Outcome, Output, Predictor analysis | 1. Summary of result(s) and precision for each outcome/output/predictor/measure | | |
| | | 2. Consideration of benefits/harms, unexpected results, problems/failures | | |
| | | 3. Description of outlying data (e.g. diverse cases, adverse effects, minor themes) | | |
| 8. Discussion | Interpretation | 1. Interpretation of results in the context of current evidence and objectives | | |
| | | 2. Draw inferences consistent with the strength of the data | | |
| | | 3. Consideration of alternative explanations for observed results | | |
| | | 4. Account for bias, confounding, effect modifiers, interactions/imprecision | | |
| | Generalisation | 1. Consideration of overall practical usefulness of the study | | |
| | | 2. Description of generalisability (external validity) of the study | | |
| | Concluding remarks | 1. Highlight study’s particular strengths | | |
| | | 2. Suggest steps that may improve future results (e.g. limitations) | | |
| | | 3. Suggest further studies | | |
| 9. Total | | | | |
Crowe Critical Appraisal Tool (CCAT) Form (v1.4)

Using videoconsultations to deliver dietary advice to children with chronic kidney disease; a qualitative study of parent and child perspectives.

Year

2020

Research design (add if not listed)

Not research  Article | Editorial | Report | Opinion | Guideline | Pamphlet | …

Historical  …

✓ Qualitative  Narrative | Phenomenology | Ethnography | Grounded theory | Narrative case study | … thematic analysis

Descriptive, Exploratory, Observational

A. Cross-sectional | Longitudinal | Retrospective | Prospective | Correlational | Predictive | …

B. Cohort | Case-control | Survey | Developmental | Normative | Case study | …

Experimental

True experiment  Pre-test/post-test control group | Solomon four-group | Post-test only control group | Randomised two-factor | Placebo controlled trial | …

Quasi-experiment  Post-test only | Non-equivalent control group | Counter balanced (cross-over) | Multiple time series | Separate sample pre-test post-test [no Control] | [Control] | …

Single system  One-shot experimental (case study) | Simple time series | One group pre-test/post-test | Interactive | Multiple baseline | Within subjects (Equivalent time, repeated measures, multiple treatment) | …

Mixed Methods  Action research | Sequential | Concurrent | Transformative | …

Synthesis  Systematic review | Critical review | Thematic synthesis | Meta-ethnography | Narrative synthesis | …

Other  …

Variables and analysis

Intervention(s), Treatment(s), Exposure(s)  virtual consultation

Outcome(s), Output(s), Predictor(s), Measure(s)  patient perspectives

Data analysis method(s)  transcription of interviews verbatim, coding and charting of data, and thematic synthesis

Sampling

Total size 20 | Group 1 | 13 | Group 2 | 5 | Group 3 | 2 | Group 4 | Control

Population, sample, setting

Group 1 - 13 parents

Group 2 - 5 children

Group 3 - 2 dietitians

Data collection (add if not listed)

Audit/Review  a) Primary | Secondary | …

b) Authoritative | Partisan | Antagonist | …

c) Literature | Systematic | …

Observation  a) Participant | Non-participant | …

b) Structured | Semi-structured | Unstructured | …

c) Covert | Candid | …

a) Formal | Informal | …

b) Interview | Semi-structured | Unstructured | …

c) One-on-one | Group | Multiple | Self-administered | …

Testing  a) Standardised | Norm-ref | Criterion-ref | Ipsative | …

b) Objective | Subjective | …

c) One-on-one | Group | Self-administered | …

Scores

Preliminaries  5 | Design  5 | Data Collection  4 | Results  4 | Total [40]  35

Introduction  5 | Sampling  4 | Ethical Matters  3 | Discussion  5 | Total [%]  87.5

General notes
## 1. Preliminaries

| Item | Item descriptors | Description | Score |
|------|------------------|-------------|-------|
| Title | 1. Includes study aims and design | Preliminaries [5] | 5 |
| Abstract | 1. Key information | | |
| | 2. Balanced and informative | | |
| Text | 1. Sufficient detail others could reproduce | | |
| | 2. Clear/concise with table(s), diagram(s) | | |

## 2. Introduction

### Background

1. Summary of current knowledge
2. Specific problem(s) addressed and reasons for addressing

### Objective

1. Primary objective(s), hypothesis(es), or aim(s)
2. Secondary question(s)

Is it worth continuing? Introduction [5] 5

## 3. Design

### Research design

1. Research design(s) chosen and why
2. Suitability of research design(s)

### Intervention, Treatment, Exposure

1. Intervention(s)/treatment(s)/exposure(s) chosen and why
2. Precise details of the intervention(s)/treatment(s)/exposure(s) for each group
3. Intervention(s)/treatment(s)/exposure(s) valid and reliable

### Outcome, Output, Predictor, Measure

1. Outcome(s)/output(s)/predictor(s)/measure(s) chosen and why
2. Clearly define outcome(s)/output(s)/predictor(s)/measure(s)
3. Outcome(s)/output(s)/predictor(s)/measure(s) valid and reliable

### Bias, etc

1. Potential bias/confounding variable
2. Sequence generation, group allocation, group balance, and by whom
3. Equivalent treatment of participants/cases/groups

Is it worth continuing? Design [5] 5

## 4. Sampling

### Sampling method

1. Sampling method(s) chosen and why
2. Suitability of sampling method

### Sample size

1. Sample size, how chosen, and why
2. Suitability of sample size

### Sampling protocol

1. Target/actual/sample population(s): description and suitability
2. Participants/cases/groups: inclusion and exclusion criteria
3. Recruitment of participants/cases/groups

Is it worth continuing? Sampling [5] 4

## 5. Data collection

### Collection method

1. Collection method(s) chosen and why
2. Suitability of collection method(s)

### Collection protocol

1. Include date(s), location(s), setting(s), personnel(s), material(s), process
2. Method(s) to ensure/enhance quality of measurements/instrumentation
3. Manage non-participation, withdrawal, incomplete/lost data

Is it worth continuing? Data collection [5] 4

## 6. Ethical matters

### Participant ethics

1. Informed consent
2. Privacy, confidentiality/privacy

### Researcher ethics

1. Ethical approval
2. Funding, conflict(s) of interest
3. Subjectivities, relationship(s) with participants/cases

Is it worth continuing? Ethical matters [5] 3

## 7. Results

### Analysis, Integration, Interpretation method

1. A.I.I. method(s) for primary outcome(s)/output(s)/predictor(s) chosen and why
2. Additional A.I.I. methods (e.g. subgroup analysis) chosen and why
3. Suitability of analysis/integration/interpretation method(s)

### Essential analysis

1. Flow of participants/cases/groups through each stage of research
2. Demographic and other characteristics of participants/cases/groups
3. Analyse raw data, response rate, non-participation, withdrawal, incomplete/lost data

### Outcome, Output, Predictor analysis

1. Summary of results and precision for each outcome/output/predictor/measure
2. Consideration of benefits/harms, unexpected results, problems/failures
3. Description of outlying data (e.g. diverse cases, adverse effects, minor themes)

Is it worth continuing? Results [5] 4

## 8. Discussion

### Interpretation

1. Interpretation of results in the context of current evidence and objectives
2. Draw inferences consistent with the strength of the data
3. Consideration of alternative explanations for observed results
4. Account for bias/confounding/effect modifiers/interactions/imprecision

### Generalisation

1. Consideration of overall practical usefulness of the study
2. Description of generalisability (external validity) of the study

### Concluding remarks

1. Highlight study’s particular strengths
2. Suggest steps that may improve future results (e.g. limitations)
3. Suggest further studies

Is it worth continuing? Discussion [5] 5

## 9. Total

Total score
**Citation**

Video as an alternative to in-person consultations in outpatient renal transplant recipient follow-up: a qualitative study

**Research design (add if not listed)**

| Qualitative | Narrative | Phenomenology | Ethnography | Grounded theory | Narrative case study | Thematic analysis |
|--------------|-----------|----------------|-------------|-----------------|---------------------|------------------|
| Descriptive, Exploratory, Observational | A. Cross-sectional | Longitudinal | Retrospective | Prospective | Correlational | Predictive |
| Experimental | True experiment | Pre-test/post-test control group | Solomon four-group | Post-test only control group | Randomised two-factor | Placebo controlled trial |

**Variables and analysis**

| Intervention(s), Treatment(s), Exposure(s) | Outcome(s), Output(s), Predictor(s), Measure(s) | Data analysis method(s) |
|------------------------------------------|-------------------------------------------------|------------------------|
| Patients using telemedicine vs in-person visits | patient perspectives on telemedicine compared to in-person | semistructured interviews and thematic analysis of transcripts |

**Sampling**

| Total size | Group 1 | Group 2 | Group 3 | Group 4 | Control |
|------------|---------|---------|---------|---------|---------|
| 21         | 15      | 3       | 3       |         |         |

Population, sample, setting

21 Participants were enrolled, with 15 patients (which I classify here as group 1), 3 providers (group 2), and 3 that did not participate in the post-study interviews (group 3).

**Data collection (add if not listed)**

| Audit/Review | Observation | a) Formal | Informal | b) Structured | Semi-structured | Unstructured | c) One-on-one | Group | Multiple | Self-administered |
|--------------|-------------|-----------|----------|---------------|-----------------|--------------|-------------|-------|---------|-------------------|
| Primary | Non-participant | Interview | b) Objective | Subjective | c) One-on-one | Group | Self-administered |
| Secondary | Structured | Semi-structured | Unstructured | Testing | Subjective |
| a) Participant | c) Covert | | | |

**Scores**

| Preliminaries | Design | Data Collection | Results | Total [40] | 36 |
|---------------|--------|-----------------|---------|-------------|----|
| Introduction  | 5      | Sampling        | Ethical Matters | Discussion | 5 | Total [%] | 90 |

**General notes**
| Category | Item | Item descriptors | Description | Score |
|----------|------|------------------|-------------|-------|
| 1. Preliminaries | Title | 1. Includes study aims and design | Important information for each item | 5 |
| Abstract (assess last) | 1. Key information | 1. Comprehensive | 1 |
| | 2. Balanced and informative | 2. Coverage of all points | 1 |
| Text (assess last) | 1. Sufficient detail others could reproduce | 1. Reproducibility | 1 |
| | 2. Clear/concise writing | 2. Readability | 1 |
| | | table( ), diagram( ), figure( ) | 1 |
| Preliminaries | | | 5 |
| 2. Introduction | Background | 1. Summary of current knowledge | 1 |
| | 2. Specific problem(s) addressed and reason(s) for addressing | 2. Relevance | 1 |
| Objective | 1. Primary objective(s), hypothesis(es), or aim(s) | 1. Clarity | 1 |
| | 2. Secondary question(s) | 2. Succinctness | 1 |
| Is it worth continuing? | Yes | 5 |
| Introduction | | | 5 |
| 3. Design | Research design | 1. Research design(s) chosen and why | 1 |
| | 2. Suitability of research design(s) | 2. Relevance | 1 |
| Intervention, Treatment, Exposure | 1. Intervention(s)/treatment(s)/exposure(s) chosen and why | 1 |
| | 2. Precise details of the intervention(s)/treatment(s)/exposure(s) for each group | 2 |
| | 3. Intervention(s)/treatment(s)/exposure(s) valid and reliable | 3 |
| Outcome, Output, Predictor, Measure | 1. Outcome(s)/output(s)/predictor(s)/measure(s) chosen and why | 1 |
| | 2. Clearly define outcome(s)/output(s)/predictor(s)/measure(s) | 2 |
| | 3. Outcome(s)/output(s)/predictor(s)/measure(s) valid and reliable | 3 |
| Bias, etc | 1. Potential bias of confounding variables | 1 |
| | 2. Sequence generation, group allocation, group balance, and by whom | 2 |
| | 3. Equivalent treatment of participants/cases/groups | 3 |
| Is it worth continuing? | Design | 4 |
| 4. Sampling | Sampling method | 1. Sampling method(s) chosen and why | 1 |
| | 2. Suitability of sampling method | 2 |
| Sample size | 1. Sample size( ), how chosen( ), and why( ) | 1 |
| | 2. Suitability of sample size | 2 |
| Sampling protocol | 1. Target/actual/sample population(s): description and suitability | 1 |
| | 2. Participants/cases/groups: inclusion and exclusion criteria | 2 |
| | 3. Recruitment of participants/cases/groups | 3 |
| Is it worth continuing? | Sampling | 3 |
| 5. Data collection | Collection method | 1. Collection method(s) chosen and why | 1 |
| | 2. Suitability of collection method(s) | 2 |
| Collection protocol | 1. Include date( ), location( ), setting( ), personnel( ), materials( ), processes( ) | 1 |
| | 2. Method(s) to ensure/enhance quality of measurement/instrumentation | 2 |
| | 3. Manage non-participation( ), withdrawal( ), incomplete/lost data | 3 |
| Is it worth continuing? | Data collection | 5 |
| 6. Ethical matters | Participant ethics | 1. Informed consent( ), equity( ) | 1 |
| | 2. Privacy( ), confidentiality/anonymity( ) | 2 |
| Researcher ethics | 1. Ethical approval( ), funding( ), conflict(s) of interest( ) | 1 |
| | 2. Subjectivities( ), relationship(s) with participants/cases( ) | 2 |
| Is it worth continuing? | Ethical matters | 4 |
| 7. Results | Analysis, Integration, Interpretation method | 1. A.I.I. method(s) for primary outcome(s)/output(s)/predictor(s) chosen and why | 1 |
| | 2. Additional A.I.I. methods (e.g. subgroup analysis) chosen and why | 2 |
| | 3. Suitability of analysis/integration/interpretation method(s) | 3 |
| Essential analysis | 1. Flow of participants/cases/groups through each stage of research | 1 |
| | 2. Demographic and other characteristics of participants/cases/groups | 2 |
| | 3. Analyse raw data( ), response rate( ), non-participation/withdrawal/incomplete/lost data( ) | 3 |
| Outcome, Output, Predictor analysis | 1. Summary of results( ) and precision( ) for each outcome/output/predictor/measure | 1 |
| | 2. Consideration of benefits/harms( ), unexpected results( ), problems/failures( ) | 2 |
| | 3. Description of outlying data (e.g. diverse cases, adverse effects, minor themes( ) | 3 |
| Results | | | 5 |
| 8. Discussion | Interpretation | 1. Interpretation of results in the context of current evidence and objectives | 1 |
| | 2. Draw inferences consistent with the strength of the data | 2 |
| | 3. Consideration of alternative explanations for observed results | 3 |
| | 4. Account for bias( ), confounding/effector modifiers/interactions/imprecision | 4 |
| Generalisation | 1. Consideration of overall practical usefulness of the study | 1 |
| | 2. Description of generalisability (external validity) of the study | 2 |
| Concluding remarks | 1. Highlight study’s particular strengths | 1 |
| | 2. Suggest steps that may improve future results (e.g. limitations) | 2 |
| | 3. Suggest further studies | 3 |
| Discussion | | | 5 |
| 9. Total | | | 5 |
### Citation
Patients’ Experiences and Perspectives of Telehealth Coaching with a Dietitian to Improve Diet Quality in Chronic Kidney Disease: A Qualitative Interview Study

### Research design (add if not listed)
- **Qualitative**
  - Narrative | Phenomenology | Ethnography | Grounded theory | Narrative case study | ...  
  - A. Cross-sectional | Longitudinal | Retrospective | Prospective | Correlational | Predictive | ...  
  - B. Cohort | Case-control | Survey | Developmental | Normative | Case study | ...
- **Experimental**
  - True experiment | Pre-test/post-test control group | Solomon four-group | Post-test only control group | Randomised two-factor | Placebo controlled trial | ...
  - Quasi-experiment | Post-test only | Non-equivalent control group | Counter balanced (cross-over) | Multiple time series | Multiple time series | ...
  - Single system | One-shot experimental (case study) | Simple time series | One group pre-test/post-test | Interactive | Multiple baseline |...
- **Mixed Methods**
- **Synthesis**
  - Action research | Sequential | Concurrent | Transformative | ...
- **Systematic**
  - Systematic review | Critical review | Thematic synthesis | Meta-ethnography | Narrative synthesis | ...
- **Other**

### Variables and analysis
- **Intervention(s), Treatment(s), Exposure(s)**
  - Dietary telehealth using telephone calls and text messages
- **Outcome(s), Output(s), Predictor(s), Measure(s)**
  - Patient demographics and perspectives on intervention
- **Data analysis method(s)**
  - Transcription of the interviews which were then coded on HyperRESEARCH followed by theme development

### Sampling
- **Total size**: 21
- **Population, sample, setting**: patients aged 28-78 with stages 3-4 of chronic kidney disease

### Data collection (add if not listed)
- **Audit/Review**
  - a) Primary | Secondary | ...
  - b) Authoritative | Partisan | Antagonist | ...
  - c) Literature | Systematic | ...
- **Observation**
  - a) Participant | Non-participant | ...
  - b) Structured | Semi-structured | Unstructured | ...
  - c) Covert | Candid | ...

### Scores
| Preliminaries | 5 | Design | 4 | Data Collection | 5 | Results | 5 | Total [40] | 38 |
| Introduction | 5 | Sampling | 5 | Ethical Matters | 4 | Discussion | 5 | Total [%] | 95 |

### General notes
| Category       | Item                                                                 | Item descriptors [Present, Absent, Not applicable] | Description [Important information for each item] | Score |
|---------------|----------------------------------------------------------------------|---------------------------------------------------|-------------------------------------------------|-------|
| 1. Preliminaries | Title                                                              | 1. Includes study aims and design ✓                     |                                                 |       |
|               | Abstract (assess last)                                               | 1. Key information ✓ 2. Balanced and informative ✓ |                                                 |       |
|               | Text (assess last)                                                   | 1. Sufficient detail others could reproduce ✓ 2. Clear/concise writing ✓ tables ✓ diagrams ✓ figure ✓ |                                      | Preliminaries [5] 5 |
| 2. Introduction | Background                                                          | 1. Summary of current knowledge ✓ 2. Specific problem(s) addressed ✓ and reason(s) for addressing ✓ |                                      | Introduction [5] 5 |
|               | Objective                                                            | 1. Primary objective(s), hypothesis(es), or aim(s) ✓ 2. Secondary question(s) • |                                      |       |
|               | Is it worth continuing?                                             | Yes                                               |                                      |       |
| 3. Design      | Research design                                                     | 1. Research design(s) chose ✓ and why ✓ 2. Suitability of research design(s) ✓ |                                      |       |
|               | Intervention, Treatment, Exposure                                    | 1. Intervention(s)/treatment(s)/exposure(s) chose ✓ and why ✓ 2. Precise details of the intervention(s)/treatment(s)/exposure(s) for each group • 3. Intervention(s)/treatment(s)/exposure(s) valid ✓ and reliable ✓ | reason for intervention found at end of intro |       |
|               | Outcome, Output, Predictor, Measure                                  | 1. Outcome(s)/output(s)/predictor(s)/measurement(s) chose ✓ and why ✓ 2. Clearly define outcome(s)/output(s)/predictor(s)/measurement(s) ✓ 3. Outcome(s)/output(s)/predictor(s)/measurement(s) valid ✓ and reliable ✓ |                                      |       |
|               | Bias, etc                                                            | 1. Potential bias ✓ and confounding variables • effect modifiers • interaction • 2. Sequence generation • group allocation • group balance • and by whom • 3. Equivalent treatment of participants/cases/groups • | one participant had face-to-face interview whereas all others were by phone |       |
|               | Is it worth continuing?                                             | Yes                                               |                                      | Design [5] 4 |
| 4. Sampling    | Sampling method                                                      | 1. Sampling method(s) chose ✓ and why x 2. Suitability of sampling method ✓ |                                      |       |
|               | Sample size                                                         | 1. Sample size ✓ and why ✓ 2. Suitability of sample size ✓ |                                      |       |
|               | Sampling protocol                                                    | 1. Target/actual/sample population(s): description ✓ and suitability ✓ 2. Participants/cases/groups: inclusion ✓ and exclusion x criteria • 3. Recruitment of participants/cases/groups • | participants added until saturation |       |
|               | Is it worth continuing?                                             | Yes                                               |                                      | Sampling [5] 5 |
| 5. Data collection | Collection method                                                   | 1. Collection method(s) chose ✓ and why ✓ 2. Suitability of collection method(s) ✓ |                                      |       |
|               | Collection protocol                                                 | 1. Include date(s) ✓ location(s) ✓ settings ✓ person(s) ✓ material ✓ process ✓ 2. Method(s) to ensure/validate quality of measurements/instrumentation ✓ 3. Manage non-participation ✓ withdrawal ✓ incomplete/lost data ✓ | only 1 person approached did not agree and was not included in the study |       |
|               | Is it worth continuing?                                             | Yes                                               |                                      | Data collection [5] 5 |
| 6. Ethical matters | Participant ethics                                                  | 1. Informed consent ✓ equity ✓ 2. Privacy x confidentiality/ anonymity x |                                      |       |
|               | Researcher ethics                                                   | 1. Ethical approval ✓ funding ✓ conflict(s) of interest ✓ 2. Objectivities ✓ relationship(s) with participants/cases ✓ | privacy not explicitly mentioned |       |
|               | Is it worth continuing?                                             | Yes                                               |                                      | Ethical matters [5] 4 |
| 7. Results     | Analysis, Integration, Interpretation method                        | 1. A.I.I. method(s) for primary outcome(s)/output(s)/predictor(s) chosen ✓ and why ✓ 2. Additional A.I.I. methods (e.g. subgroup analysis) chose ✓ and why • 3. Suitability of analysis/interpretation method(s) ✓ |                                      |       |
|               | Essential analysis                                                  | 1. Flow of participants/cases/groups through each stage of research ✓ 2. Demographic and other characteristics of participants/cases/groups ✓ 3. Analyse raw data ✓ response rate ✓ non-participation with withdrawal/incomplete/lost data ✓ |                                      |       |
|               | Outcome, Output, Predictor analysis                                  | 1. Summary of results ✓ and precision ✓ for each outcome/output/predictor/measure • 2. Consideration of benefits/harm ✓ unexpected results ✓ problems/failures • 3. Description of outlying data (e.g. diverse cases, adverse effects, minor themes) ✓ |                                      |       |
|               | Is it worth continuing?                                             | Yes                                               |                                      | Results [5] 5 |
| 8. Discussion  | Interpretation                                                       | 1. Interpretation of results in the context of current evidence ✓ and objectives ✓ 2. Draw inferences consistent with the strength of the data ✓ 3. Consideration of alternative explanations for observed results • 4. Account for bias ✓ and confounding ✓ effect modifiers/interactions/imprecision x |                                      |       |
|               | Generalisation                                                      | 1. Consideration of overall practical usefulness of the study ✓ 2. Description of generalisability (external validity) of the study • |                                      |       |
|               | Concluding remarks                                                  | 1. Highlight study’s particular strengths ✓ 2. Suggest steps that may improve future results (e.g. limitations) ✓ 3. Suggest further studies ✓ |                                      |       |
|               | Is it worth continuing?                                             | Yes                                               |                                      | Discussion [5] 5 |
| 9. Total      |                                                                     |                                                   | Total score                                 |       |
### Item S3. ENTREQ Checklist

| The ENTREQ Checklist Item | Guide and description | Reported on page # |
|---------------------------|------------------------|-------------------|
| **Aim**                   | State the research question the synthesis addresses | Page 4 |
| **Synthesis methodology**| Identify the synthesis methodology or theoretical framework which underpins the synthesis, and describe the rationale for choice of methodology (e.g. meta-ethnography, thematic synthesis, critical interpretive synthesis, grounded theory synthesis, realist synthesis, meta-aggregation, meta-study, framework synthesis). | Pages 4 - 6 |
| **Approach to searching** | Indicate whether the search was pre-planned (comprehensive search strategies to seek all available studies) or iterative (to seek all available concepts until theoretical saturation is achieved). | Pages 4 - 5 and supplemental item 1 |
| **Inclusion criteria**    | Specify the inclusion/exclusion criteria (e.g. in terms of population, language, year limits, type of publication, study type). | Pages 4 - 5 |
| **Data sources**          | Describe the information sources used (e.g. electronic databases (MEDLINE, EMBASE, CINAHL, pschINFO, Econlit), grey literature databases (digital thesis, policy reports), relevant organisational websites, experts, information specialists, generic web searches (Google Scholar), | Page 4 |
| Hand searching, reference lists (and when the searches were conducted; provide the rationale for using the data sources). |
|---|
| **Electronic Search strategy** | Describe the literature search (e.g., provide electronic search strategies with population terms, clinical or health topic terms, experiential or social phenomena related terms, filters for qualitative research and search limits). |
| **Study screening methods** | Describe the process of study screening and sifting (e.g., title, abstract and full text review, number of independent reviewers who screened studies). |
| **Study characteristics** | Present the characteristics of the included studies (e.g., year of publication, country, population, number of participants, data collection, methodology, analysis, research questions). |
| **Study selection results** | Identify the number of studies screened and provide reasons for study exclusion (e.g., for comprehensive searching, provide numbers of studies screened and reasons for exclusion indicated in a figure/flowchart; for iterative searching describe reasons for study exclusion and inclusion based on modifications the research question and/or contribution to theory development). |
| **Rationale for appraisal** | Describe the rationale and approach used to appraise the included studies or selected findings (e.g., assessment of conduct (validity and robustness), }
| Item                      | Description                                                                 | Page/Item |
|---------------------------|-----------------------------------------------------------------------------|-----------|
| Assessment of reporting   | (transparency). Assessment of content and utility of the findings.          |           |
| Appraisal items           | State the tools, frameworks and criteria used to appraise the studies or    | Page 6 and supplemental item 2 |
|                           | selected findings.                                                          |           |
| Appraisal process         | Indicate whether the appraisal was conducted independently by more than one| Supplemental item 2          |
|                           | reviewer and if consensus was required.                                      |           |
| Appraisal results         | Present results of the quality assessment and indicate which articles, if   | Supplemental item 2          |
|                           | any, were weighted/excluded based on the assessment and give the rationale. |           |
| Data extraction           | Indicate which sections of the primary studies were analyzed and how were   | Pages 5 - 6                      |
|                           | the data extracted from the primary studies? (e.g. all text under the       |           |
|                           | headings “results/conclusions” were extracted electronically and entered     |           |
|                           | into a computer software).                                                 |           |
| Software                  | State the computer software used, if any.                                   | Page 5    |
| Number of reviewers       | Identify who was involved in coding and analysis.                           | Page 5    |
| Coding                    | Describe the process for coding of data (e.g. line by line coding to       | Page 5    |
|                           | search for concepts).                                                       |           |
| Study comparison | Describe how were comparisons made within and across studies (e.g. subsequent studies were coded into pre-existing concepts, and new concepts were created when deemed necessary). | Page 5 |
|------------------|-------------------------------------------------------------------------------------------------|--------|
| Derivation of themes | Explain whether the process of deriving the themes or constructs was inductive or deductive | Page 5 |
| Quotations | Provide quotations from the primary studies to illustrate themes/constructs, and identify whether the quotations were participant quotations of the author’s interpretation. | Table 2 |
| Synthesis output | Present rich, compelling and useful results that go beyond a summary of the primary studies (e.g. new interpretation, models of evidence, conceptual models, analytical framework, development of a new theory or construct). | Pages 9 - 13 |