

# Needle phobia in home haemodialysis: The role of motivational interviewing

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## Background

Needle fear and phobia are common issues amongst patients training for home haemodialysis<sup>1-2</sup>. Fear of injections and transfusions is formally recognised as a "specific phobia" in the DSM-V: 300.29 (F40.231) Blood Injection Injury Type<sup>3</sup>. A validated method of identifying patient barriers and improving behavioural adherence is through the use of motivational interviewing (MI)<sup>4</sup>. MI is a skilful clinical style for eliciting from patients their own good motivations for making behaviour changes in the interest of their health<sup>5</sup>. The overall "spirit" of MI has been described as collaborative, evocative, and honouring of patients' autonomy<sup>6</sup>. The practice of MI has four key principles: express empathy for the challenges faced by patients; develop discrepancy; roll with resistance; and support self-efficacy<sup>6-8</sup>.

## Aim

This project compares the cases of two Eastern Health renal patients with complex needle phobia issues using the MI technique (Mr B, a 72 year old male, and Mrs T, a 57 year old female). Both patients presented with marked fear or anxiety about self-needling, and described their anticipatory distress, building the night before training sessions.

## Method

A multi-disciplinary home dialysis (HD) team comprising nurses, doctor, dietitians and psychologist were involved in the patients' training.

### Motivations:

At the commencement of home dialysis training, Mr B described "absolute revulsion" at the thought of injecting himself with the "telegraph pole" dialysis needles. His primary motivations for home dialysis were convenience (as he lived by the side), and to be able to travel more frequently, including in his caravan. Mrs T identified her greatest challenge to be the fear of pain when injecting herself. Her motivations for home dialysis were never particularly clear.

The goal of training was to teach, support and enable these patients to independently conduct haemodialysis at home.

### Challenges:

Both patients were impacted by external/social factors during the course of their training. These factors included caring for family members and changes in domestic living arrangements. There were also occasions when the patients perceived that they were not progressing with training.

**Figure 1: Vascular haemodialysis access**



### Interventions:

A range of interventions were used by the HD team with the patients. These included:

- MI techniques during clinical interviews with the patients to help determine their motivations for home dialysis, and to identify potential barriers.
- Training was separated into machine set-up and needling.
- Psycho-educational materials were explained and provided to the patients (e.g. "Overcoming your fear of needles"<sup>9</sup>).
- Establishing "exposure ladders" / desensitisation exercises with the patients (see Table 1)<sup>9</sup>.
- Peer support provided by previous HD patients with similar issues.

**Table 1: Sample patient exposure ladder**

Situations	Distress rating
Self-injecting the dialysis needles	10/10
Watching someone else have the dialysis needles injected into them	8/10
Thinking about/visualising the dialysis injections	7/10
Injecting into an inanimate object	6/10
Holding the dialysis needles	6/10
Touching the dialysis needles	5/10

## Results

Despite several occasions when he was ready to give up, Mr B successfully completed his home dialysis training and now needles independently. He has been performing home dialysis for over two years. By contrast, Mrs T struggled to progress with her home dialysis training and made the decision to transfer to satellite haemodialysis. This was due to a combination of ongoing needling problems and psychosocial issues that made her home environment unsuitable. Her wishes were respected and supported by the home dialysis team.

### Successful aspects of home training:

- Multi-disciplinary approach – consistent messaging by all of the team (medical, nursing and allied health staff) using MI principles.
- A slow and gradual approach to training – driven by the patients' ability and tolerance at the time.
- The use of checklists, and adequate opportunities to train and practice with supervision.
- Recognition and encouragement of individual strengths. E.g. Mr B was highly motivated and determined and was integral in determining patient-centred goals.
- Relapse management strategies (as per the "Stages of Change" model<sup>10</sup>).
- The inclusion of family supports in home training.

## Conclusion

In both of these cases the multi-disciplinary home dialysis team provided a consistent model of care, following the principles of MI, yet with different outcomes. The patient who identified his motivations overcame his barriers and is successfully dialysing independently, whereas the patient whose motivations were unclear chose not to progress with home dialysis.

Despite hospital KPI/cost incentives for patients to dialyse at home (versus centre-based dialysis), patients have the right to decide what they want to do. This aligns with both Eastern Health's Patients First value, "I place patients' needs and preferences at the centre of my work", and the MI tenet of "honouring patient autonomy".

## Limitations

Retrospective, small cohort review.

## References

References available upon request from the author.

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