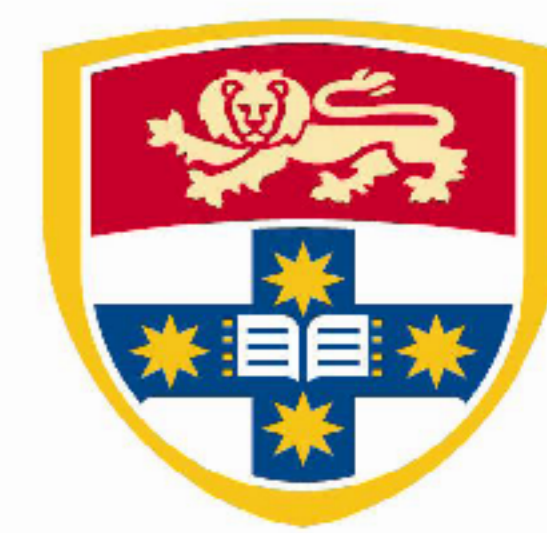


The meaning and implications of haemodialysis vascular access from the patients' perspective: thematic synthesis of qualitative studies



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Background

Vascular access complications are associated with increased mortality and contribute to 20% of hospitalisations in patients on haemodialysis. While arteriovenous fistula (AVF) are associated with better clinical and quality of life outcomes compared with other access types, patient refusal is a key barrier to creating a mature AVF. Also, concerns about vascular access are a major treatment-related stressor for patients.

Aim

To describe patients' experiences and perspectives on vascular access initiation and maintenance in haemodialysis.

Methods

- MEDLINE, Embase, PsycINFO, CINAHL, references lists, PhD dissertations were searched to December 2013
- Thematic synthesis

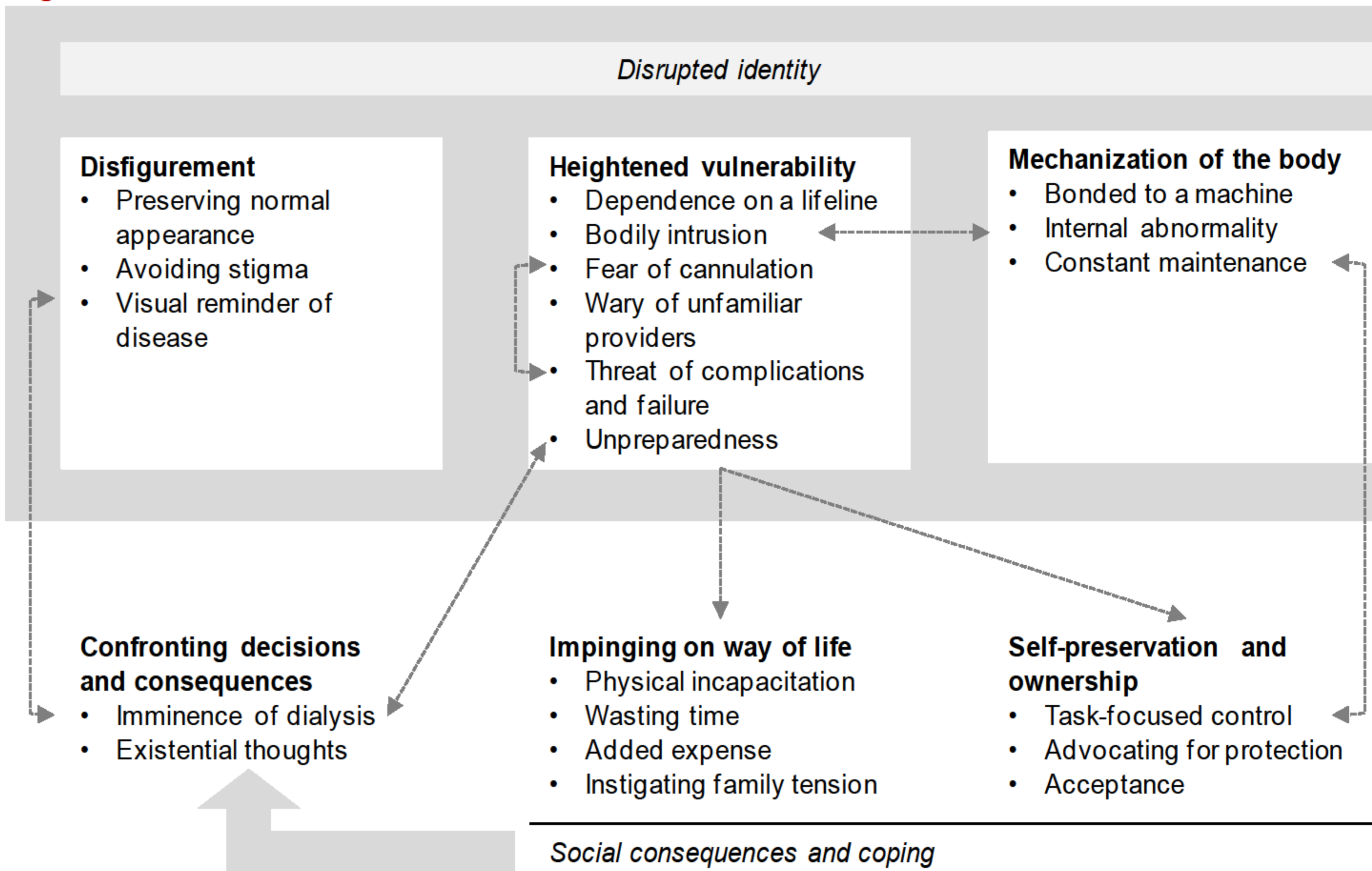
Results

- 46 studies (n ≥ 1034 patients), Table 1, Figure 1

Conclusion

Vascular access is more than a surgical intervention. Initiation of vascular access signifies kidney failure and imminent dialysis which is emotionally confronting. Patients strive to preserve their vascular access for survival; but at the same time describe it as an agonizing reminder of their body's failings and "abnormality" of being amalgamated with a machine disrupting their identity and lifestyle. Timely education and counselling about vascular access and building patients' trust in healthcare providers may improve the quality of dialysis and lead to better outcomes for patients with CKD requiring hemodialysis.

Figure 1. Thematic schema



Disfigurement, heightened vulnerability, and mechanization of the body contributed to the participants' sense of disrupted identity. The intrusiveness of vascular access was perceived as an abnormality in their body. Patients experienced emotional vulnerability due to the invasiveness of vascular access and risk of complications, which had debilitating social consequences, but also prompted them to devise strategies to cope with maintaining and accepting vascular access. The ability to negotiate social consequences and coping influenced the ways participants confronted treatment decisions and how they considered the value of life.

Table 1. Selected themes and illustrative quotations

Themes	Quotations
Heightened vulnerability	
Dependence on a lifeline	The fistula is like my second life. I take care of it carefully. (Chen 2007) [vascular access is the] Achilles heel of the process. (Richard 2008)
Fear of cannulation	I always dread being stuck. It hurts most of the time. (Gibson 1995)
Wary of unfamiliar providers	If I know that it's going to be someone who isn't good at it [cannulation], then, naturally I'll get all tense and wonder how it's going to end. (Hagren 2001)
Unpreparedness	I didn't even know what a line was until I had to put one in which was then a shock again. (Buck 2009)
Threat of complication and failure	My biggest fear is the clogging. (Richard 2008)
Bodily intrusion	Woke up [from surgery] and he [doctor] was like, your graft is up here now, I went WHAT, I was very, very upset, you didn't even talk to me about that possibility. (Richard 2008) They come in there and punch you like you'd punch a tire. (Whittaker 1996)
Disfigurement	
Preserving normal appearance	When she rolled the sleeves up on her blouse [to show fistula] ...I couldn't believe what I saw, that's not true. It was almost like watching a horror film. (Tweed 2005) Now I've got to walk around like Frankenstein. (Field 1996)
Avoiding stigma	People look at me like I'm a drug addict because I have so much tracks on my arm. (Field 1996)
Visual reminder of disease	I didn't want to see it every time I raised my arm, because other than that, I forget about it. (Richard 2008) I don't want to be a young person walking around with different scars on different limbs. (Tijerina 2000)
Mechanisation of the body	
Bonded to a machine	That thing going into my arm all the time—havin' to be shut off at a certain time, like a machine. (Field 1996)
Internal abnormality	My body, this part of my body has become a medical junkyard (Giles 2003)
Constant maintenance	I am constantly very conscious of doing things that won't clot my graft. (Bordelon 1997) But when you're starting dialysis and cranking up your pump speed you're watching these to see if you might have a blow. (Giles 2003)
Impinging on way of life	
Physical incapacitation	If you have this shunt in your arm, it appears to me that you would be restricted physically to a degree. I very much enjoy exercise. I wondered if that would make a difference. So I'm concerned. (Field 1996)
Wasting time	After dialysis, sometimes I have to stay longer, you know? Because the bleeding didn't stop. And sometimes I just come back because of bleeding. (Xi 2011)
Self-preservation and ownership	
Task-focussed control	I exercise my fistula by squeezing a coil instead of clenching a ball. It is really useful. (Chen 2007) I clean it twice a day...whole process takes just under 20 minutes... If I perspire when I teach, I come right home and clean the catheter, so I am pretty meticulous...I have never had an infection. (Richard 2008)
Advocating for protection	It is my body, my graft and you're not going to mess with me if you aren't capable of helping me. (Bordelon 1997) But this time I put my foot down. They're not allowed to take anything from my leg [to make graft], they have listened to that. I didn't give in on that one. (Hagren 2001)
Acceptance	I feel more satisfied with the perm catheter and that really, I've been doing fine with it. (Tijerina 2000)
Confronting decisions and consequences	
Imminence of dialysis	Mentally, I found it most distressing. I felt it was the end now. It's real. It's happening. (Kierans 2001) Initially, I was just rejecting it. I did not want to go for dialysis. I did not want to fix my fistula. (Lai 2012) I did not have the operation at that time because I told myself that I could resist [dialysis]. (Chen 2007)
Existential thoughts	I was gonna go in and get this graft done and it was like it was kind of overwhelming for me. And I kept thinking, 'But I don't want to do this, I don't want to live like this! (Tijerina 2000) If that [the fistula] gives up the ghost I'll call it a day. (Fetherstonhaugh 2007)



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