Nurturing and Complexity – Threshold Concepts in Geriatric Medicine

Iain Wilkinson
Consultant Geriatrician Surrey and Sussex Healthcare NHS Trust, United Kingdom
Honorary Senior Lecturer Brighton and Sussex Medical School, United Kingdom

Abstract

Older adults make up the largest proportion of patients in UK hospitals. This will increase further over the next twenty years. To manage unwell older adults requires specific skills – yet many are looked after by non-specialists (be they doctors, nursing staff or therapists). Threshold Concepts (TCs) represent a means of examining the changes which take place in doctors in becoming 'a geriatrician', and thus may identify the key concepts to focus education on about the care of older patients. This article presents a qualitative study of trainers (consultants, the educational supervisors of junior doctors) and trainees (the junior doctors themselves). Twelve semi-structured interviews were analysed using a concept mapping technique in combination with a traditional qualitative analysis to identify TCs, which were then explored in more detail with a structured questionnaire delivered to trainees. The study shows that whilst there are a number of troublesome areas in geriatric medicine training, two concepts stood out as TCs. Appreciation of the '*complexity of medical care'* of older patients and what that entails, and a new concept of '*nurturing-care'* (focused on the wider care issues for the patient) – are proposed as TCs in geriatric medicine. Both have large degrees of tacit knowledge, and rely on a networked model of thinking. Identification of these TCs in geriatric medicine can allow a focused analysis of postgraduate medical curriculums to ensure they are covered by doctors of all grades to improve the standard of care of older patients in the UK health service.

Keywords: care, complexity, geriatric medicine, medical training, threshold concepts

Introduction

Older people make up the largest proportion of patients admitted to hospitals with sixty per cent of all hospital beds being used by patients over the age of 65. This proportion is likely to continue growing as the population of the UK ages over the next twenty years (Cracknell 2010). The ageing population will increase pressure on health and social care services. To manage older people requires a specific skill set, and an ability to work in multi-professional teams to deliver comprehensive geriatric assessments (CGA) (Ellis *et al.* 2011). Many older hospital inpatients however are looked after by non-specialists in the area (be they doctors, nursing staff or therapists). Recent controversies have shown that, at times, the care older patients receive can be lacking (Francis 2010) and that NHS systems need to change to prevent this (Francis 2013).

Threshold concepts are an educational theory in which key (threshold) concepts when learnt lead to a shift in the identity of the learner. They are associated with troublesome knowledge initially, are transformative in nature, are likely irreversible, and may by bounded within the relevant field of specialist knowledge. When using concept maps to examine knowledge structures (Novak and Caňas 2006), it has been suggested that threshold concepts are the concepts that need a networked mode of thinking – linking other concepts together in a web pattern – rather than a chain of concepts, one leading to the next (Kinchin, Cabot and Hay 2010).

The identification of the threshold concepts (TCs) (Meyer and Land 2003) encountered during higher specialist training to become a geriatrician may provide an insight into *why* and *how* these lapses of care occur, and may make suggestions to counter them. This is particularly pertinent as the UK '*Shape of Training*' review recognised that:

> patients and the public need more doctors who are capable of providing general care in broad specialties across a range of different settings. This is being driven by a growing number of people with multiple co-morbidities, an ageing population, health inequalities and increasing patient expectations. (General Medical Council 2013)

This article will explore the TCs crossed by junior doctors in training to become a geriatrician with a qualitative study of trainers (consultants, the educational supervisors of junior doctors), and trainees (the junior doctors).

Background

Medical doctors are first medical students, and work has been done to examine and explore their experiences with the care of older people. More work is still needed, though, to increase the amount of teaching time devoted to ageing, to allow them exposure to the domains used in the CGA process (Gordon *et al.* 2014). As doctors progress in their training to become consultant geriatricians, they become foundation doctors, then core medial trainees, and then finally for 5 years are higher specialist trainees in geriatric medicine. With each progression, the level of expertise increases, and with it the level of responsibility and management involvement. It is this post-graduate specialisation that will be the focus of this article.

Threshold concepts have been identified via two main methodologies. Firstly, a criterion-based method (Cousin 2009) where 'troublesome' areas for students are found through discussions with educators. These are then examined for the other characteristics of threshold concepts. Secondly, via a concept mapping technique (Kinchin, Cabot and Hay 2010). Concept maps (Novak and Caňas 2006) are a means of visualising knowledge structures (Kinchin 2016). There is a distinction between *chains of practice* (more basic knowledge) and *networks of understanding* (deeper, expert, learning) (Kinchin, Cabot and Hay 2010). Chains are evidence of procedural knowledge and therefore are goal-directed (for example, the ABC [Airway,

Breathing, and Circulation] approach in emergency situations), whereas networks are evidence of more integrated and holistic learning (for example, the coordination of a complex discharge planning process). It is suggested that much of the learning (and teaching) at university is along chains of practice, whereas the ongoing expert practitioner is operating within a networked approach (Kinchin *et al.* 2011). The transition from one to another is, in itself, inherently troublesome as it requires a reformation of the internal (learnt) knowledge structures. Concepts that require this transition from *chains of practice* to *networks of understanding* to be understood and fully grasped are probable TCs (Kinchin 2010).

The concept of 'care' is core in healthcare education – although this is often assumed and little curriculum time is devoted to the analysis of what constitutes 'good care'. The concept of care as a TC itself is explored by Clouder (2005), and may require a clinician to move from a chain of practice to a more networked (and holistic) conception of their patients' position (Kinchin and Wilkinson 2016). Clouder (2005) draws on Tronto's framework for understanding the concept of care (Tronto 1993), identifying four aspects to care: *caring about*, *taking care of*, *care-giving,* and *care receiving*. The first two of these areas, interestingly, may be associated with a potential detachment by practitioners. Care requires a relationship to be built up with a patient, and Tanner (Tanner 2011) suggests that the understanding of establishing a close relationship with a client (someone to 'work with' rather than 'do to') was difficult for students. 'Care giving' is much more hands-on, and the majority of students enter their professions to actually *give* care (Crossley and Mubarik 2002). Novice professionals however are regularly confronted with attitudes and/or policies that seem counter to this (Clouder 2005) which is troublesome.

Method

This qualitative study used an interpretive phenomenological approach (ipa) to look for the threshold concepts in the post-graduate training of geriatricians. The study was completed in two parts and using both of the TC identification methods described above.

Part 1 – Interviews and concept maps with trainers

Semi-structured interviews – constructed following the principles laid out in Lofland and Lofland (1995) – with the aim of exploring troublesome areas. The core questions were:

1) What do you try to teach trainees about geriatric medicine?
2) What are the changes you see in trainees as they gain experience in geriatric medicine?
3) What do you feel trainees find difficult about geriatric medicine?
4) What do you feel makes a good geriatrician / what skills or attributes does a good geriatrician need?

The interviews were completed with consultant geriatricians who had an interest in the training of junior doctors. None of the interviewees had prior knowledge of the idea of TCs, and a brief description of the theory and framework was included in the invitation letter. Interviews were recorded on a digital Dictaphone, and all data stored in an encrypted manner. Interviews were transcribed verbatim, and then analysed in detail line-by-line, looking for troublesome areas. Every part of every interview was coded. This process generated many codes. Codes were combined, divided, and reworded in an iterative manner leading to the generation of themes and subthemes. One of the interviews was coded separately by a second, experienced, qualitative researcher to ensure concordance and to increase the rigour of the data analysis.

The interviews where then re-analysed, and each interview summarised into concept maps, drawn by the researcher. These were based solely on the clear links in concepts mentioned in the interviews, and each map started with 'what makes a geriatrician' as the key concept at the head of each map. Each interview was summarised into one concept map, and the maps were

then interrogated to look for areas of deeper knowledge structures (the concepts that linked chains into networks).

Part 2: Questionnaire with trainees

A questionnaire was constructed that looked at each of the troublesome areas identified in Part 1, in a series of detailed clinical scenarios with short-answer questions that allowed respondents to answer in prose. The planned questions, scenarios, and troublesome areas were emailed to the trainers involved in the first part of the study to ensure they covered: a) areas they felt relevant, and b) were reflective of the troublesome areas identified. Questions were added to a 'Google form', and the link for this was distributed to all specialist trainees in geriatric medicine in South West London and to junior doctors at a district general hospital and a large London teaching hospital.

The initial feedback was that the questionnaire was taking too long to complete. Therefore, when the reminder email was sent out one month later, the questionnaire was split into two halves. One half was sent to each half of the junior doctors contacted. The results from the completed questionnaires were then analysed in a qualitative manner.

Ethical approval was granted by the Institute of Education ethical board and also the regional NHS Research Ethics Service.

Results

Twelve interviews were conducted with the educational supervisors of junior doctors in geriatric medicine. There was an equal male/female ratio in the interviewees, and a range of years as a supervisor. Mean interview length was 45 minutes (range 29 to 71 minutes). Interview transcriptions generated 184 codes with 1,338 individual code applications (with a range from 50 to 234 for the total in individual interviews). There was variety in the frequency with which each individual code was used: from 1 to 54 times. Data analysis was suggesting saturation of concepts after the initial 12 interviews, and so no further interviews were planned.

Thematic analysis of the codes generated from the interviews identified a number of troublesome concepts (Table 1) for trainees. These were divided into clinical and non-clinical topics.

Table 1: Troublesome areas identified from interviews with trainers

Clinical	Non-Clinical
Dealing with an uncertain diagnosis	Discharge planning
Pragmatic investigation	Management responsibility
Mental capacity	Leadership
Importance of attention to detail	Confidence in one's own decision
Complexity of older people (including frailty, ageing physiology, etc.).	

The concept maps created from the interviews consisted mostly of a series of chains, with a small number of concepts linking two or more chains to make a networked pattern. These concepts tended to attach to troublesome concepts.

The questionnaire to trainees received 17 responses (13 from Round 1 of invitations, and 4 from Round 2), and confirmed a range of expertise in these areas. They also provided triangulation of the results generated from the interview concept maps and qualitative analysis.

The two main themes were drawn from all three methods of analysis, and included some of the troublesome concepts. These were: an understanding of frailty / complexity in both physiology and the management and investigation of older people (termed 'complexity of medical care'), and that of a caring persona interested in the wider wellbeing of the patient (termed 'nurturing-care'). The troublesome areas blend into both of these broad themes.

Theme 1 – Complexity of medical care

Looking after older patients is medically complex and this was the first theme to emerge from the analysis. Older patients often have interlinked medical conditions and treatments – on a background of a deteriorating physiological function – giving a number of potential variables to be managed by a multi-professional team. The key concepts identified from interviews and the questionnaires of: Frailty, MDT working, Person-centred care, and Inquisitiveness, all relate to this theme which focuses on the role of the doctor in delivering the 'medical' care to this group of patients.

Key Concepts:

Frailty

Frailty is "a clinically recognizable state of increased vulnerability, resulting from aging-associated decline in reserve and function across multiple physiologic systems such that the ability to cope with everyday or acute stressors is compromised" (Xue 2011: 1). It is different to chronological age. A true understanding of frailty was viewed as troublesome by consultants, and frailty was a concept that linked chains of concepts. In <u>Figure 1</u>, frailty links the linear chains of physiological change (tied to ageing and pharmacology) to that of decision-making in discharge planning.

Knowledge of frailty would enable a trainee to link these two concepts, and would affect their decision-making in discharge planning. Frailty, therefore, impacts upon the risk evaluation in the discharge-planning process, as suggested in Interview 3.

> There's different levels of uncertainty in medicine. I think in acute medicine one of the biggest areas is discharging your patient, because if you've got a frail elderly patient.[and planning discharge] that's a very helpful thing in medicine, to be able to say, "I know that I know enough about the condition and I know I've done what I need to do but I don't need to know everything." (Interview 3)

Multi-Disciplinary Team (MDT) working

Outside of direct clinical work, the role of the geriatrician within the MDT is a key element in ten of the concept maps. Often, this MDT input was associated with discharge planning but also the geriatrician's role in delivering care in a number of care settings – reflecting the breadth of the speciality (<u>Figure 2</u>).

In none of the concept maps, though, did MDT working link chains of concepts. It was linked to the 'troublesome' area of leadership, and also to the potential blurring of roles within an MDT which was felt to be transformative for junior doctors (i.e. the idea that X or Y is not a doctor's or nurse or therapists role specifically).

> And I think that perhaps you just get it at some point, don't you, you just suddenly realise…I think when you're a junior doctor you think about, can they walk… someone tells you it's important to ask if they've got stairs or not… to ask the physio if they're fit for discharge… You know the OT might have some tricks to get them out of hospital quicker… And I think it's when you get registrars who've been in the job for maybe a year, maybe a year and a bit, and the way you know they've learnt it is that they become different people in multidisciplinary meetings. (Interview 3)

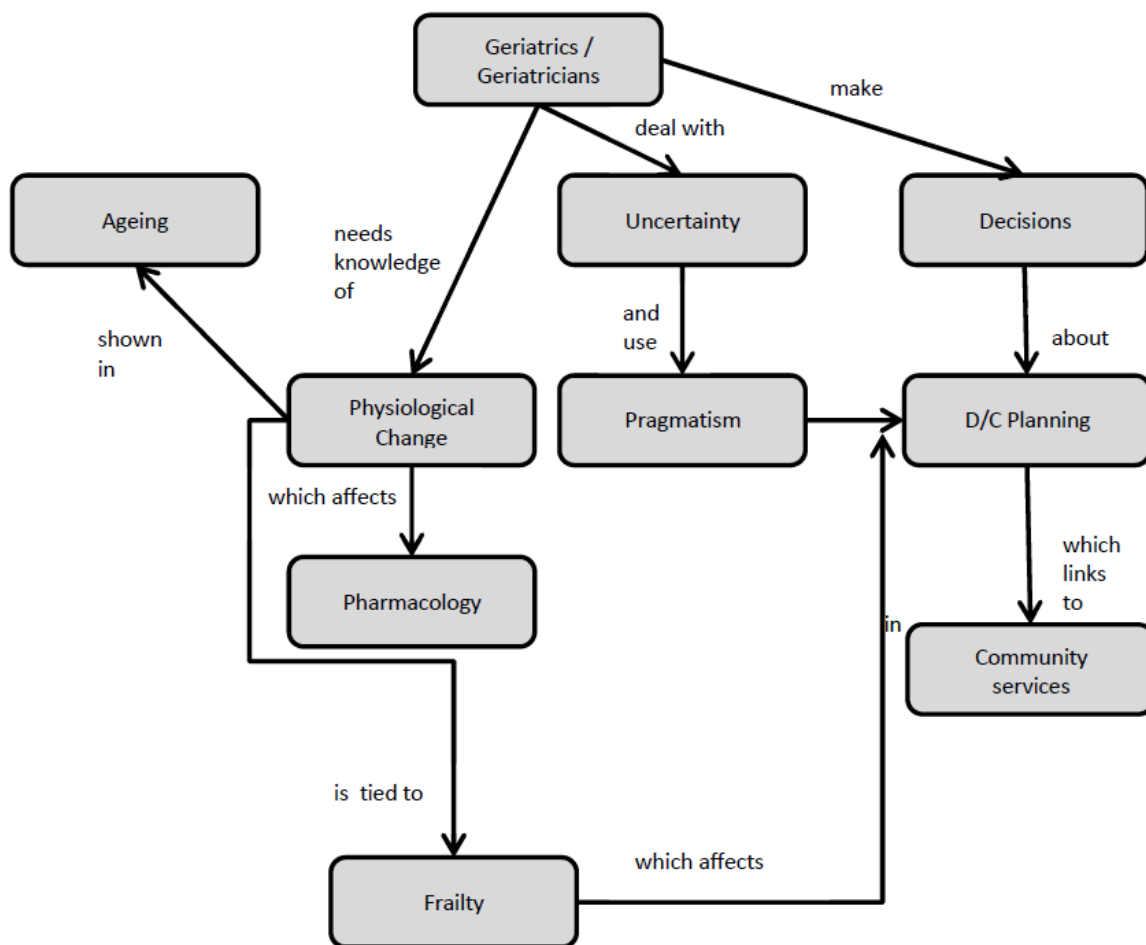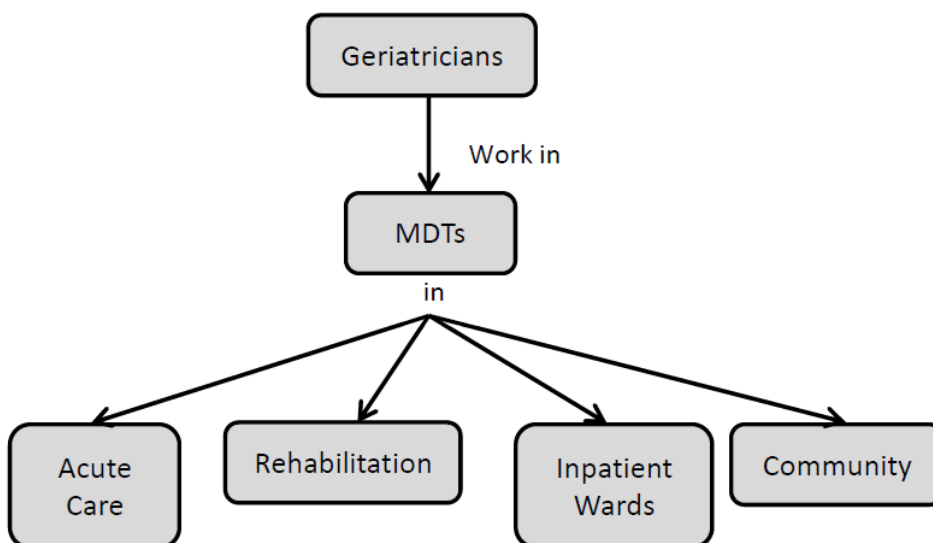**Figure 1: Extract from Interview 3, concept map**

Figure 2: Extract from Interview 5 concept map

Person-centred care

Geriatric medicine, by its nature, represents general medicine, and this is represented in the concept maps; more than this, though, the care for the patient in a person-centred way is important. Seeing the patient as a whole is important (see Figure 3) and is linked with frailty again.

Figure 3: Extract from Interview 12, concept map
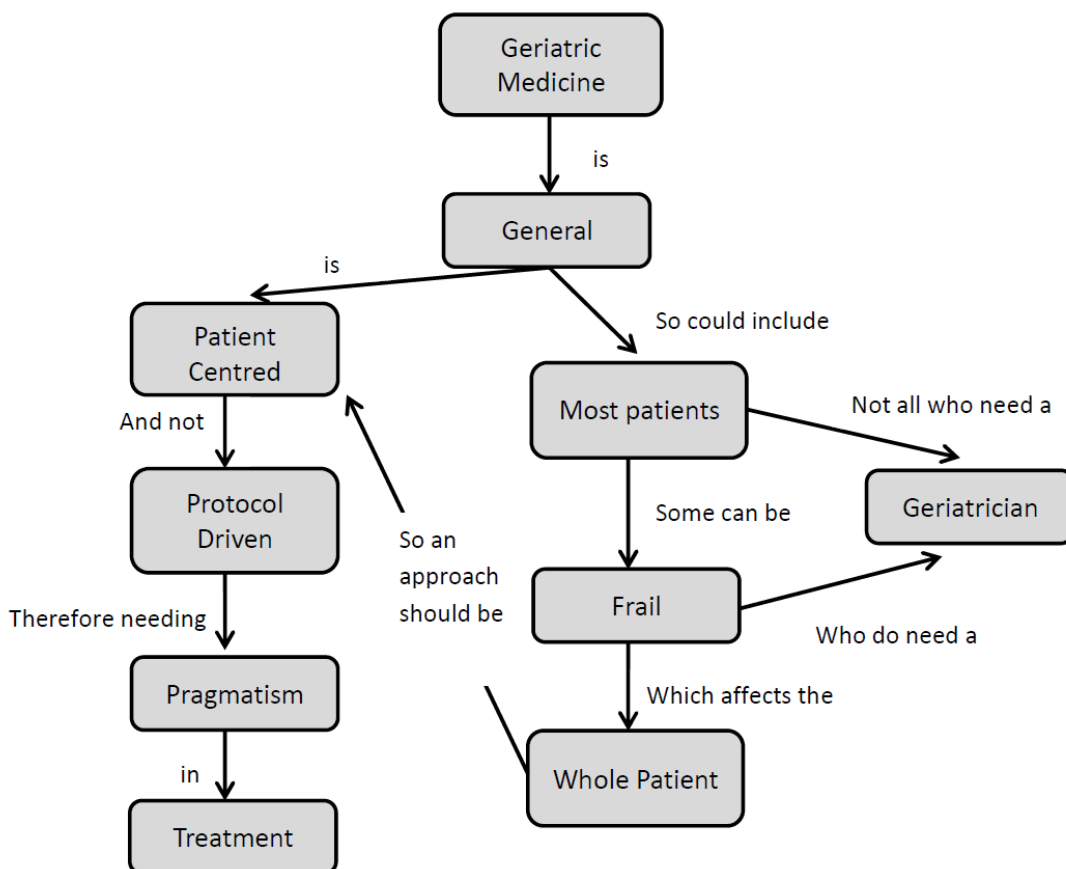
Inquisitive nature

The results suggest geriatricians are inquisitive people, and have an interest in the patient outside of their medical conditions. Getting detailed collateral information is part of the CGA. More than this though, geriatricians seem to need to be inquisitive in order to get the information they need to understand the complexity of the patient.

> I try to teach people to be what I would call detectives, because I often tell them that medicine is like being a detective, you've got to keep asking why. I always say that, repeatedly say, "You must ask why… Why are they on this medication? Why are they on this? Why has this happened?...Think about the causes of things rather than just the" …I try and teach them to have, you know… a broad view of things, so being thorough…Not just skimming over things, you have to examine everything. You have to know everything. (Interview 9)

The inquisitive aspect helps paint a picture as to what the patient is/was like at home which drives the process of delivering person-centred care.

> Well, I think there's generally an interest in things that are not directly medicine…I'll give you an example: I had one lady who was quite demented and who couldn't cook and who was having meals on wheels every day. But the meals on wheels service only provided hot meals Monday to Friday. So I was just interested in what she got on Saturday and Sunday and whether it was sandwiches and whether it was something like a tuna sandwich or chicken sandwich that could have gone off by Sunday if she hadn't put it in the fridge. (Interview 1)

Being concerned about patients is the starting of a concept of 'care' (Figure 4) and the delivery of care in practice, and not just in theoretical terms, and leads on to Theme 2.

Figure 4: Extract from Interview 4, concept map
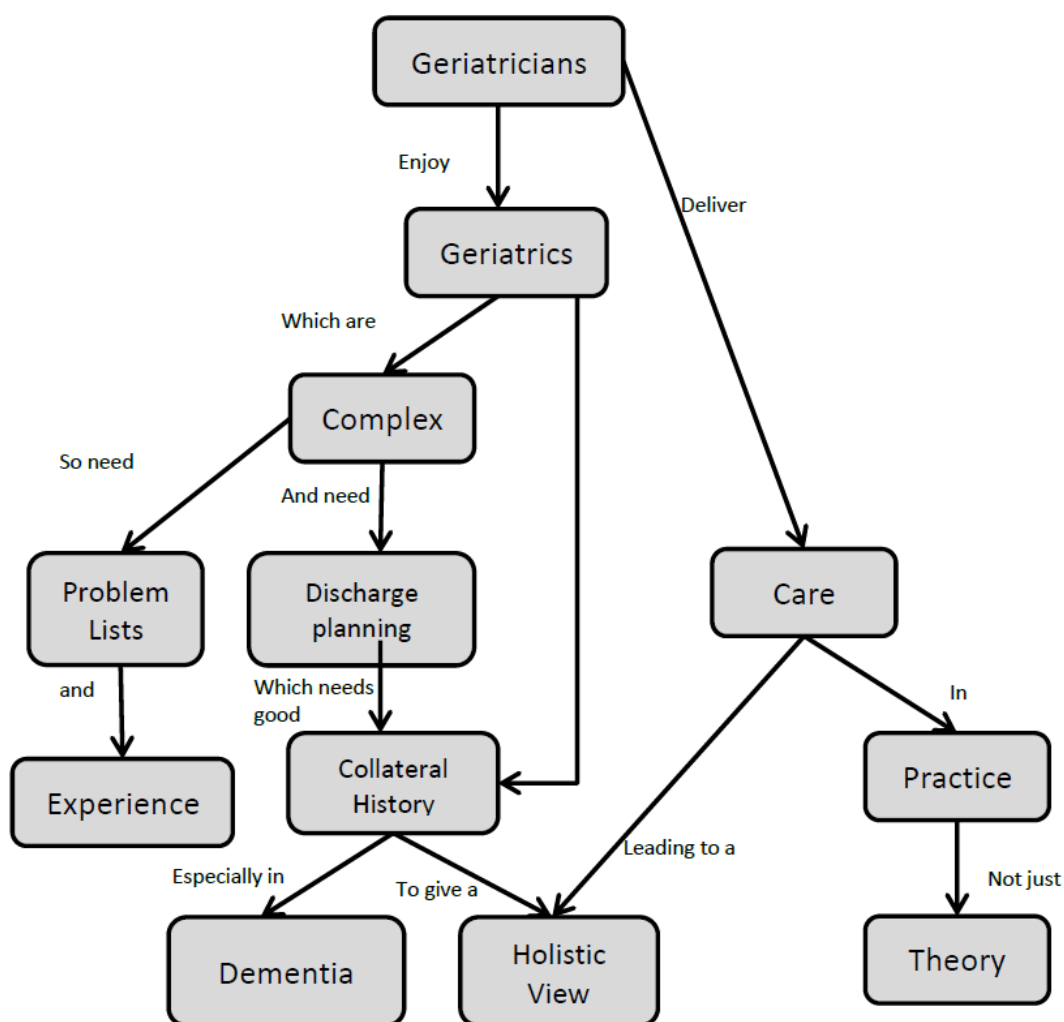
The understanding that the medical care of older patients is complex, is troublesome, transformative, and forms boundary to the speciality. By its nature, complexity is integrative (as seen in the concept maps), and I feel irreversible, and fulfils the criteria-based method as a TC.

Theme 2 – Nurturing-care

From the concept mapping exercise, it was clear that geriatricians think in a networked manner about their patients whom they viewed as a whole, and not just as their medical condition. During the analysis, an increasingly important concept emerged, based on seeing the patient as a *person*, providing *holistic* care, showing *empathy,* and seeing the '*bigger '*picture. This was felt to be different to the complexity theme (which centred on traditional, 'medical' care). It is termed 'nurturing-care', and is explored through the key concepts of: Mental capacity, Pragmatic investigation, Provision of care, and Seeing the wider picture.

Key concepts

Mental capacity

Capacity is the legal term for competence to make a decision (HM Government 2005). It has been proposed as a TC in itself (Wilkinson 2013). Within the questionnaires, trainees'; experience led to better assessments of capacity (particularly an understanding of 'retention' of information), but it is time within elderly care that identifies *when* a capacity assessment needs to be carried out (i.e. not just with discharge planning). This appreciation becomes an important and transformative moment in one's ability to deliver patient-centred care.

> [About capacity assessments] Time spent in geriatrics during training definitely helped. Often quite a satisfying part of medicine…and requires good and diverse communication skills and dynamic reassessment (Answer 4, Core Medical Trainee)

Pragmatic investigation

This was raised as a troublesome area in the interviews. It is clear from the questionnaires, that the concern for the patient over and above providing treatment is something that had developed in the higher trainees with the more senior trainees able to take a step back and view the wider situation. The questionnaire answers from more junior doctors are focused on 'fixing the problem' – very much a chain of thought.

> 1) ECG 2) Rpt blds 3) CXR 4) Check sats and consider ABG 5) Paracetamol 6) IV fluids (Answer 6, FY2)

Or

> I would assume that the patient is for ward-based care, and ask she is high risk of aspiration, I would treat her as an aspiration pneumonia. I would send blood cultures, insert a cannula and start fluids and IV abx. [Antibiotics] I would discuss with micro…I would request for a repeat CXR…I would ensure that the patient is NBM… I would also ask for a urine dip and MSU. (Answer 1, FY1)

The answers from higher trainees showed a more networked and pragmatic thought process.

> I would be wondering whether or not to actively treat this patient. Although there has been some progress, her quality of life may well be poor….Ensuring that she is comfortable would be my first priority. The patient is too unwell to discuss her care…so we would have to act in her best interests. I would therefore attempt to contact her NOK [next of kin], and discuss with the nursing staff as to what the best course of action would be. If the relatives are in agreement, then I think it would be reasonable to take a palliative approach. If they are requesting aggressive treatment then you could consider 24 hours of iv antibiotics, colloid, iv paracetamol and oxygen. If she was distressed by any of this, then I would be advising the relatives that we should take a palliative approach as it is likely that medical treatment would be futile. (Answer 14, ST Geriatric Medicine)

Provision of care

The active provision of hands-on care was something that came out very strongly when the trainees were asked about an example of when someone was 'acting like a geriatrician':

> Seeing a consultant give mouth care and bring water within reach of an elderly patient was the most useful example to me. (Answer 2, FY1)

And from the consultants themselves this was noted:

> You don't sit there and say that somebody else is going to do the job for you…
> (Interview 12)

Demonstrations of this are potential powerful learning experiences.

> I did have one ward round where a patient wasn't drinking very well just because he was…he was demented and forgot that he'd drunk. And somebody said, "Are we going to give him some IV fluids?" And I said, "Well, we'll just try something." And we kept going back to his bed in the course of the ward round and gave him five 200 ml cups of fluid and I showed them that in four hours we'd given him a litre of fluid… And so there can be some quite powerful demonstrations; if you can show people that it will reduce their work then they often will take to it a little bit better than potentially showing them something which they assumed was someone else's job which you're now giving them to do. (Interview 7)

Seeing the wider picture

Being able to see the patient as a whole, and not concentrating on one organ system at a time, is the domain of a geriatrician. Whilst being aware of all the various organ-specific guidelines, they also need to know *when* to put them into play. Dealing with this aspect of holistic care is noticed by trainees:

> Dr X on every ward round! -Taking time to speak to patients – patient communication in face of e.g. hearing difficulties or confusion – Seeing the whole patient rather than just their immediate problem – Holistic approach to what would be best for them overall, e.g. how is following guidelines and adding a beta blocker for their heart failure going to affect their postural hypotension – Attention to detail e.g. bladder and bowels, pressure areas. (Answer 3, FY1)

> We had a 75yr old come in on call with multiple problems including previous stroke and vascular dementia. The admitting problem was simple (cellulitis) but the admitting consultant went into depth around the social support that was going to be needed given the frailty of the patient and the previous multi-ethnic [sic] admissions. It was the holistic nature of the care and also the lack of disinterest which is often seen among some non-geriatricians which made the encounter stick out. (Answer 17, ST3+ Geriatrics)

Discussion

Within the analysis, there is an overarching theme of 'care' with two strands being 'what care' (complexity) and 'how is care delivered' (nurturing-care). 'Nurturing-care' is the combination of respecting the patient's autonomy, seeing them as a person in need of care, and being willing to *deliver* that care in an *active* manner. It is an active process, and draws on the principles of activism.

Activist professionals in medicine (Castellani and Hafferty 2006) are described as a focused group of individuals, working in the community or public heath settings, and providing care to minority or underserved groups. In education, activist professionals described by Sachs (2000) work together for a common goal in a bottom-up form of collaborative management.

When seeing a potential situation where someone needs care, a commitment is needed on behalf of the care-giver. The caring act will be balanced by tensions at the time (i.e. work load, other staff members being around, perception of job role, length of time / resources needed). Contemplation may also (and, critically for nurturing-care) focus on the best interests of the individual needing care. In terms of 'care', it may be better not to provide the help asked for. For example, when an older, confused, patient asks for help to sit back into bed just prior to lunch, true 'care' *may* be to talk to them, and persuade them to stay in the chair, knowing that sat out of bed they will not only improve their muscle strength but also eat more lunch and improve their nutritional status. 'Care' is not always doing what someone wants but may be about nurturing them through a difficult time. Ross (2002 [1930]) talks of *prima facie* duties, where the moral act is a balance of a number of potential events. I believe that doctors who deliver nurturing-care have an on-going thought process, balancing the pros and cons of any given action with the *constant* thought being for the patient, and their health and wellbeing, as the product of the equation.

Nodding's (2013) thinks of care in terms of 'natural' and 'ethical' caring. In natural caring there is no thought process as such and care is delivered directly (an 'I **must'**), for example, a mother responding to a crying child. In ethical care, the contemplation process takes place and there is an 'obligation' to provide care (an 'I **ought'**). Providing regular ethical care (with feedback from the care receiver) will go on to adjust the balance and reduce the inhibitory tendencies existent to providing the care. Here is the transformative moment within nurturing-care for clinicians. Being exposed to an activist, caring doctor for some may be the catalyst that causes a change. Savin-Barden (2008) suggests that such a catalyst leads to an entering of the liminal space and, ultimately, the transformational learning experience. She also suggests that some will not enter a liminal space, instead avoiding, retreating from, or postponing dealing with, the troublesome knowledge. This is important for supervisors of junior doctors to be aware of, as it may manifest as 'trainees in difficulty' or trainees feeling 'stuck'.

If the culture of the environment in which the trainee is working is not conducive to allowing this change, then it will not happen. It is here that the role-modelling and encouragement from senior clinicians and healthcare professionals, is so important.

> …some people still like to pigeon-hole it: it's, kind of, not my job. I'm a doctor. And I would concur that it's not potentially a good use of an SHO's time to be getting a patient out of bed when, you know, a healthcare assistant or a nurse or a physio could do that but it is really important and it might be just that that is how that five minutes needs to be spent… and you'll see that they either pick it up or they still feel quite strongly that that isn't their job …I think perhaps I'm allowing them to demonstrate that that's what they would do and, kind of, giving them the opportunity to do something which they feel then very pleased to be able to do because they've perhaps felt, you know, that's not my role. (Interview 7)

Nurturing-care is a tacit phenomenon. It is not easy to explain to others, and does not come naturally to all. We can list a series of characteristic findings within a nurturing practitioner (respecting a patient's autonomy, patient centred care, empathy, aware of the patients capacity, striving for a better quality of life for the patient, etc.) but to become one, however, one needs these things to be felt from within, to be second nature, to be an 'I must'. Trainees are learning how to act in the 'community' that is geriatric medicine, and are 'becoming' geriatricians – they are changing. Simply explaining the concept in longer lines of text / words, does not aid understanding: it needs to be seen or felt. It is the 'tacitness' of the knowledge that allows it to join a number of chains of thinking, which makes it hidden in the curriculum, hard to learn, and to be transformative. Understanding the tacit elements gives entry into the culture of a

speciality. With regard to nurturing-care, and the importance of role-modelling to show others the way to act, Collins' (2010) description of a piece of tacit knowledge is apt:

> … certain explicable forms of tacit knowledge are so complex that the only practical way to transfer them from human to human is by the close personal contact that allows for guiding, showing, imitating, and so forth… (Collins 2010: 87)

By passing through the threshold into a nurturing-care practice, the geriatrician becomes the catalyst for others to enter the liminal space. Some will pass through and become nurturing-care practitioners also, others may mimic, and others will adopt the position of the defended learner (Cousin 2006).

> …They just don't want to be doing that and would like to be doing something different when they're doing geriatric medicine… And occasionally you'd get someone who made it absolutely clear this is not what they want to do and they're resistant to taking on these sorts of problems. (Interview 11)

Conclusion

Trainees encounter troublesome areas of knowledge all through their training but true transformational change is hard to ascertain. Nurturing-care is made up of a number of specific concepts, but the overall concept is tacit and is troublesome to a greater or lesser extent to trainees. What is clear is that rather than at a certain time (i.e. in Foundation year 2, or core training), trainees may pass though this threshold at different points in their careers. The evidence, thus far, is that passing though this threshold seems to be catalysed by experience of geriatric medicine by watching someone provide nurturing care.

The conceptualisation of these two threshold concepts of nurturing-care and complexity, places the field of geriatric medicine at the centre of a reformation of care. Junior doctors in medicine and surgery look after the most dependant population in hospital (other than the neonatal patients). They are a vulnerable group that need active care of their complex conditions and *people to care about their care*. To make this the norm, an expansive learning approach (Engeström 2001) is needed within the NHS as an organisation.

Care of older people is an active process, and the recognition of its complexity and the concept of nurturing-care are, I feel, needed. Trainees need to understand that they have the power to individually change patients' experiences and are agents for change (Winthrop, Wilkinson, and George 2013). Educational supervisors and curriculum writers need to be aware that nurturing-care and complexity may not be fully explored in the post-graduate curriculums their trainees are currently working towards.

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