

Open Research Online

The Open University's repository of research publications and other research outputs

Recovery From Heart Attack, Biomedicalization, and the Production of a Contingent Health Citizenship

Journal Item

How to cite:

Langdrige, Darren (2017). Recovery From Heart Attack, Biomedicalization, and the Production of a Contingent Health Citizenship. *Qualitative Health Research*, 27(9) pp. 1391–1401.

For guidance on citations see [FAQs](#).

© 2016 The Author

Version: Accepted Manuscript

Link(s) to article on publisher's website:

<http://dx.doi.org/doi:10.1177/1049732316668818>

Copyright and Moral Rights for the articles on this site are retained by the individual authors and/or other copyright owners. For more information on Open Research Online's data [policy](#) on reuse of materials please consult the policies page.

oro.open.ac.uk

Recovery from heart attack, biomedicalisation and the production of a contingent health citizenship

Abstract

In this article I explore the experience of recovery from a heart attack through an analytic autoethnography. I discuss the tensions inherent in biomedical subjectivities of health and ill health during cardiac recovery through three key themes: (1) the transfer of responsibility and becoming a subject 'at risk', (2) technologies of biomedicine and the disciplining of subjectivities, and (3) the transformation of a body towards a new pharmaceuticalized bodily normal. Through an analysis driven by the biomedicalization thesis of Clarke, alongside work on biopower and the governmentality of health by Foucault, Rose and Rabinow, I seek to provide new insights into the process of cardiac recovery and the relationship between individual experience and broader socio-political processes. Key to this analysis is a focus on the contingent subjectivities brought into being through biomedicalisation that constitute a new form of health citizenship that is otherwise not accounted for in narratives of recovery.

Keywords: heart attack recovery; biomedicalisation; health citizenship; subjectivities of health and illness.

Abstract word count: 150

Main body word count: 7069 (excluding references)

Recovery from heart attack, biomedicalisation and the production of a contingent health citizenship

Introduction

I carry so many memories from my time on the cardiac ward but no coherent narrative. Instead, I am left with images and sensations of people and procedures, moments laden with emotion and vague flickers of the unknown and unknowable. I remember conversations with another man on the ward who became my most frequent interlocutor, probably because he was the closest in age though still some years my senior. We spoke of very little that was meaningful as that was the norm on the Ward but every exchange we had was laden with fear and anxiety. I could see it in his eyes, as he could in mine. Talk of the practicalities of when we might be able to leave and return to work became code for asking when – if ever – we would return to normal, when we would feel normal. I felt he knew, like me, that it was likely that neither of us would ever feel quite the same again. We were now different people, changed by our experience of a heart attack, always at risk whilst now apparently well once again¹.

¹ Inspired by the work of Frank (2013), and as suggested by one of the anonymous reviewers, I interrupt the academic narrative here and elsewhere with excerpts (in italics) from my autoethnographic journal in which I sought to describe my experience of recovering from a heart attack. I hope this (relatively minor) deviation from the traditional academic style of writing will serve to bring the academic and personal (autoethnographic) closer together and the topics being discussed into sharper focus.

Heart disease remains one of the major causes of death in the industrialised world, and continues to account for just under half of all deaths in the European Union (Nicols et al., 2013), in spite of repeated campaigns to reduce the incidence. Following the perceived difficulties of effecting meaningful lifestyle change in the general population, the focus has turned to secondary prevention amongst populations with a known risk (Wiles, 1998). An obvious and important indicator of risk is a cardiac event itself, with secondary prevention of heart disease following a heart attack an important worldwide strategy for public health (Wiles, 1998; Astin, Horrocks & Closs, 2014). It is, therefore, crucial to continue efforts to gain a better understanding of the everyday experience of recovery from a heart attack if we hope to maximise the efficacy of this particular preventative strategy.

There is a growing body of qualitative research that has sought to gain a better understanding of the process of recovery (see Astin, Horrocks & Closs, 2014, for a recent review). This includes sociological research on patients' perceptions and 'lay' epidemiology by Wiles (1998), work on embodiment and gender (e.g. Evans & Crust, 2015; Robertson, Sheikh & Moore, 2010), alongside the body of work from nursing and physiotherapy on a variety of therapeutic aspects of cardiac recovery care (e.g. Hanssen, Nordrehaug, Eide & Hanestad, 2009; O'Driscoll, Shave, Cushion, 2007; Salminen-Tuomaala, Astedt-Kurki, Rekiaro & Paavillainen, 2012). Astin et al. (2014) provides an excellent overview through their meta-ethnography of qualitative research on peoples' experiences from 27 studies with over 500 participants (see also Galick, D'Arrigo-Patrick & Knudson-Martin, 2015, for a similar review focused

on women's experiences of heart disease). They identify a number of key constructs about the experience of recovery from a cardiac event including: finding new limits and a life worth living; finding support for self; and finding a new normal. All participants experienced a change in their identity, moving from a sense of being in 'familiar' terrain to the 'unfamiliar', and all participants (as reported anyway) experienced a desire to get back to 'normal'.

Other work has focused on the implications of a heart attack for psychological issues, such as depression and anxiety, that themselves have an impact on long-term recovery, and health and well-being (Rosman, Whited, Lampert, Mosesso, Lawless & Sears, 2015). For instance, there is strong evidence for a higher incidence of anxiety and depression following a heart attack than amongst the general population (Wachelder, Moulaert, Van Heugten, Verbunt, Bekkers & Wade, 2009). Younger age, heart murmur, history of implantable cardioverter defibrillator (ICD) shock, and generalised anxiety all predict greater cardiac anxiety post cardiac arrest (Rosman et al. 2015) and may well be similarly predictive for people who have had a heart attack without arrest. The onset of depression and anxiety are not only problematic themselves for patients but are also predictive of poorer recovery and higher longer term risks for heart disease (Januzzi, Stern, Pasternak & DeSanctis, 2000).

An image strikes me months later and returns me to my hospital bed. The image is of the catheter in my arm and the clear plastic patch over the incision made in my groin. Both featured heavily in my sense of connection to the machinery of the ward at the time. The catheter was actually mostly unnecessary and only remained

because the nursing staff were too busy to notice it was no longer needed. But it reassured me, offering instant access to my veins, and I missed it when it was removed. The clear patch that I was told to check for any hardening due to a blood clot acted to mobilise me as an agent of the hospital machine, responsible for my own care. I disliked this intensely as I wanted to be cared for, to be looked after by the expert hands of nurse and doctor, rather than needing to worry about my own health. I checked it repeatedly, in spite of nothing changing, with a continual and growing sense of health anxiety that endured long after leaving the hospital.

Biomedicalisation

A particularly valuable sociological framework within which to view recovery from heart attack experience is *biomedicalisation* (Clarke et al., 2003).

Biomedicalisation refers to the continuing expansion of medicalization into new terrain as a result of relatively recent technoscientific change. This is not formulated as a simple replacement of medicalization with a new ideological system but as a contingent process in which ‘...workers and people as patients and as providers/health system workers are responding to and negotiating biomedicalization processes, attempting to shape new technoscientific innovations and organizational forms to meet their own needs.’ (Clarke et al., 2003: 166). Clarke et al., (2003) argue that this socio-cultural shift involves five key (overlapping) processes: (1) growth of the *Biomedical Technoservice Complex, Inc.*; (2) a focus on health as much as

illness; (3) the increasingly technological nature of biomedicine; (4) transformation of information and distribution of knowledges; (5) transformation of bodies and identities. In brief, these are as follows.

The first process draws on the notion of the 'medical industrial complex' to emphasise the power of the corporatized and privatized industry that is biomedicine. The second process involves the biomedicalization of health itself. As such, health has become an individual goal and site of moral responsibility that requires routine biomedical intervention. A consequence of this move is the growth of new risk and surveillance practices. The third process concerns the enormous growth in the technoscientific nature of biomedicine. This involves three overlapping areas '(1) Computerization and data banking; (2) molecularization and geneticization of biomedicine and drug design; and (3) medical technology, design, development and distribution.' (Ibid: 173). The fourth process concerns the growth and diversification of information about medical knowledges. The impact of the Internet here is well known, alongside other media reporting, but the outcomes are not simply the democratization of medical and health knowledges but something much more complex. The fifth and final process concerns the transformation of bodies themselves with a move from normalization to customization and the growth of new technoscientific identities that are grounded in a biomedicalized body.

Within the context of biomedicalisation (Clarke et al., 2003; see also Flowers et al., 2013) there is, therefore, the production of new subjectivities concerned with health as much as illness. As such, new regimes of surveillance revolve

around discourses of prevention rather than cure, something that is central within discourses of heart attack recovery and secondary prevention.

Biomedicalization involves no need for symptoms, as everyone is implicated in the process of eventually 'becoming ill'. In other words, we all now occupy a liminal space between health and illness within a broader context of an individual moral obligation to resist illness through lifestyle and (sometimes) medical interventions. I argue below that this is particularly acute in the context of the 'aggressive secondary prevention' of heart disease that follows a heart attack, even when there is relatively little permanent damage to the heart. The maintenance of our health has become a new and highly intrusive 'moral obligation' with a number of potentially unintended consequences, most notably health anxiety.

As I eat my breakfast bran flakes a memory is triggered of my time recovering in the hospital ward. I recall my first breakfast in hospital vividly, with me hunting for the healthy option on the trolley of surprisingly unhealthy breakfast options. I remember my refusal of the sugar that was offered, which surprised the person serving me, and me gaining a liking for bran flakes stripped bare of any flavour, an attempt at healthy living that I clung to doggedly in the immediate aftermath of the heart attack. The experience of this breakfast continues to involve/evoke a curious blend of anxiety, control, fight, and sadness.

Biopower and the governmentality of health and well-being

An important theoretical strand underpinning the biomedicalisation framework comes from Foucault, notably his concept of biopower and its role in producing new forms of governmentality (Foucault, 1978, 2003). As is now well known, Foucault contrasts biopower with classical sovereign power over individual life and death. It concerns the administration and control of human bodies and particularly the processes that optimise life, such that there emerges a new biopolitics of the population. Dean (1999: 99) describes it as follows:

It is concerned with matters of life and death, with birth and propagation, with health and illness, both physical and mental, and with the processes that sustain or retard the optimisation of the life of the population. Bio-politics must then also concern the social, cultural, environmental, economic and geographical conditions under which humans live, procreate, become ill, maintain health or become healthy, and die.

A variety of agencies, not least the state, serve to deploy biopower in the service of a biopolitics, and draw on the work of population level sciences (demography, epidemiology) to this end. Key to strategies of governmental control over the population is the way in which members of a population work on themselves to improve their own health and well-being. A central element of the 'aggressive secondary prevention' strategies for heart disease concerns the way that the heart attack survivor becomes implicated in taking

responsibility for their own medication and health regime regardless of individual need, something discussed further below.

The work of Rose and Rabinow (Rabinow, 1996; Rose, 2001a, 2006; Rabinow and Rose, 2006; Rose and Novas, 2004) and the notions of 'molecularized biopower', and 'biosociality' that they developed are also relevant here. In general, Rose and Rabinow seek to move the focus from governmentality of the population towards a more molecular (genetic) level and where we see a decline in the influence of the state and the growth of new forms of biological citizenship. Biosociality (Rabinow, 1996) refers to the ways in which individuals and communities might usefully identify themselves through reference to their biology in order to effect political power. This might include anything from resistance to pernicious strategies of 'health' to a coming together of people to claim recognition and rights. Whilst these theoretical concepts seek to advance and deepen our understanding of contemporary processes of biomedicalisation they arguably reduce biopower too readily to the molecular, with the risk that we then ignore continuing population level activity (Raman & Tutton, 2010). That is, whilst some fields of study (e.g. the new genetics that have arisen from mapping the human genome) are clearly best understood in terms of molecular rather than population level processes, there remain topics in which the (unreconstructed) ideas of Foucault about biopower may provide greater analytic purchase.

This article aims to highlight key elements in the recovery from a heart attack that impact on health and well being over time. This aim includes discussion -

within the broader context of biomedicalisation - of the possible tensions that exist between subjectivities of health and ill-health amongst people with relatively minor heart damage that are encouraged to engage in 'aggressive secondary prevention'. Key to this work is the use of an analytic autoethnography as the means by which to interrogate the value of biomedicalisation, alongside notions of biopower, the governmentality of health and the molecularization of life, as an explanatory framework.

Methodology

Autoethnography

Autoethnography is gaining increased prominence as a method for gaining insight into the lived experience of health and illness. Autoethnography does, however, occupy a somewhat controversial place in the broader ethnographic tradition, particularly the *evocative* autoethnographic work following Ellis and Bochner (e.g. Ellis, 1991, 1995, 2004; Ellis & Bochner, 2000), and Denzin (1989, 1997). This work often appears as much like a literary text as mode of research, with a focus on 'the confessional' at the heart of the method. Within the context of the criticism of this approach to ethnographic research, Anderson (2006) sought to highlight a more *analytic* form of autoethnography that he argues naturally emerges from the long tradition of realist ethnography and contrasts in style and aim with the (predominantly postmodern) evocative autoethnography (see Denshire, 2014, for a recent overview of the field).

Anderson (2006) argues that analytic autoethnography refers to research where a researcher is: (1) a full member of the research group or setting; (2)

visible as such a member in published texts; (3) committed to developing theoretical understandings of broader social phenomena. Beyond these three principles, he also outlines five key features that distinguish analytic autoethnography from the more evocative forms. These include: (1) complete member researcher (CMR) status; (2) analytic reflexivity; (3) narrative visibility of the researcher's self; (4) dialogue with informants beyond the self; (5) commitment to theoretical analysis. Considerable debate followed Anderson's 2006 article (e.g. Atkinson, 2006; Chang, 2016; Denzin, 2006; Ellis & Bockner, 2006), with some autoethnographers arguing that this need not be an either/or situation (e.g. Stanley, 2015; Weaver-Hightower, 2012; Williams & Kamal Jauhari bin Zaini, 2016). I share some sympathy with this view but focus primarily on the analytic in this article. Following Chang (2016), and her attempt to set standards for autoethnographic research, I think it is important to speak to broader sociocultural issues and engage with theory so that autoethnographic work can make a scholarly contribution to the literature.

Tolich (2010) has raised a number of ethical challenges for autoethnography, particularly around consent when such accounts include information about other people (see also Chang, 2009, 2016). In many cases, consent is gathered retrospectively or not at all. In this article the extracts that are presented below contain minimal information about other people, only general discussion of the variety of health care professionals that I encountered, with any further identifying information removed entirely from the account. In this regard I have been alert to internal confidentiality, involving risk of disclosure of identifying information amongst colleagues, as well as external

confidentiality involving risk of identification to outsiders. The other ethical issue of particular relevance to autoethnography concerns risk to the researcher/author with self-disclosure. This is particularly significant for authors seeking to present highly sensitive and/or stigmatised material. In the present case that is not a particular risk given that: (i) this medical condition is not particularly stigmatising, and (ii) my medical history has already been widely shared with family, friends and colleagues, such that this poses minimal risk to myself either now or in the future.

Findings

On Saturday 13th April 2013 I experienced a heart attack that resulted in my hospitalisation and an emergency angioplasty. To be precise, I suffered an anterior ST-elevation myocardial infarct and underwent primary angioplasty in a large London hospital. The Left Anterior Descending Artery (LAD) – also known as ‘the widow maker’ due to the high risk of death with blockage to this artery - was tightly narrowed (95%) with thrombus and was stented (drug eluting) following thrombectomy. I was 43 years of age and otherwise in general good health. I am a white gay man in a long term relationship who would be classified as first generation middle class, a former smoker who is moderately overweight though otherwise fit and active. I have some distant family history of heart disease but none amongst immediate family. I had not suffered angina prior to the heart attack though had experienced some faints that prompted some heart investigation (ECG and blood tests) with nothing significant found. I stayed in hospital for 4 days. Before discharge I spoke with the cardiologist about the level of damage, which he said was ‘minor’ and a

hospital pharmacist about the medication that I was to take to prevent further heart attacks. The medication regime was as follows (od – once daily; bd – twice daily): Aspirin 75 mg od; Ticagrelor 90mg bd; Bisoprolol 5mg od; Ramipril 5 mg od; Atorvastatin 80mg od; Lansoprazole 30mg od; GTN spray as required. The bisoprolol and ramipril were due to be titrated up to 10mg od. This is a fairly typical diet of medication for people who have suffered a heart attack with only the anti-platelet Ticagrelor (to be taken for 12 months only) somewhat more unusual. A little over two years later and I now take the following: Aspirin 75 mg od; Bisoprolol 5mg od; Candesartan 2 mg od; Atorvastatin 80mg od; Lansoprazole 30mg od; GTN spray as required. The beta-blocker bisoprolol was titrated up but then dropped back down to 5mg od due to side effects (tiredness and laboured breathing). The ACE inhibitor (for blood pressure) ramipril was substituted with candesartan due to the common side effect of a dry cough.

Terrified at my inability to breathe, I grabbed my GTN spray and pumped it repeatedly into my mouth. Overdoing it in the panic, I collapsed on the bed and frantically asked Ian to call an ambulance. Dread: I escaped death the first time but feared I will not do this time.

I was readmitted on the 18th April following further symptoms similar to the initial heart attack. No acute changes were noted with the electrocardiogram (ECG), and my troponin level did not rise, so – following an exercise ECG - I was discharged the next day. On Friday 3rd May I began a six-week

programme of cardiac rehabilitation under the supervision of a cardiac physiotherapist in the same London hospital where I was previously treated. This consisted of discussion about lifestyle and a guided exercise programme in the hospital gym. Following discharge from hospital I sought out a private cardiologist to discuss what had happened to me and particularly my long-term prognosis. I had a follow up ECG and echocardiogram and returned to work as Head of Department (HoD) and a private psychotherapist after 4 months sick leave.

As part of my psychological recovery, I undertook two separate 4-month periods of psychotherapy and documented my experience by writing a personal narrative account of the heart attack itself and the critical moments that followed. The documentary account of my experience of recovery forms the basis for the analysis that follows. The process of writing the documentary account of the experience was undoubtedly therapeutic in itself, as was the process of analysis. I should also note that I wrote this account prior to any examination of the extant literature and found my own experience very much reflective of the major themes in existing qualitative literature on this topic (as identified in Astin et al., 2014 for instance). The analysis below aims to provide greater depth of analytic insight into the psychosocial processes at stake across some key areas of biomedicalisation in operation in my experience of recovery from a heart attack. This includes: (1) The transfer of responsibility and becoming a subject 'at risk'; (2) technologies of biomedicine and the disciplining of subjectivities; (3) the transformation of body towards a new bodily normal. The findings below are discussed in relation to the

structural model of biomedicalisation, with the addition of further analysis through the theoretical lens of biopower and governmentality.

(1) The transfer of responsibility and becoming a subject 'at risk'

In common with the extant literature (e.g. Salminen-Tuomaala et al., 2012; Wiles, 1998) my experience of recovery shifted and changed over time. Most extant research is cross-sectional and includes patients within 12 months of hospital discharge (see Astin et al., 2014). Whilst some research on recovery has included patients with longer time periods from the cardiac event (e.g. Gambling, 2003; Gulanick, Billey, Perino & Keough, 1998) this has also been cross-sectional and not involved qualitatively examining the recovery process itself over a significant period of time for any individual participant. My experience spans three years from the cardiac event in April 2013 to the time of writing in May 2016. Over the course of these three years, it has become apparent that my 'recovery' was not to be a simple linear march of progress, a story of 'getting better' or a linear series of teleological 'nows' to healthy well-being but rather something much more complex.

Immediately following the heart attack I was able to comfortably and willingly adopt the sick role (Parsons, 1951; Williams, 2005), albeit only briefly. I remained in the intensive care unit for two days where I had nothing to do but eat, drink and ostensibly regain my health. With my sense of bodily security fundamentally undermined, it was 'the machinery' of the hospital that provided the security that I needed. This ranged from the technology of the ECG and

blood pressure monitors to the embodied practice of nurse and doctor. Moving to the cardiac ward began the process of returning me to the world and my sense of responsibility for self, with visits from family and friends, and flowers from work serving to pull me back into the present time, and place. Following discharge and the loss of the immediate safety of the hospital ward, the six weeks of cardiac rehabilitation kept me close to the hospital, with a continued sense of safety further reinforced through: (1) the variety of medical interventions: blood pressure measurement, blood tests, ECG, echocardiogram and so on, and (2) the social connections between myself, cardiac physiotherapist and other patients.

I found myself epidemiologically constructed as a subject 'at risk' whilst in hospital by the cardiologist, and then later in relation with my general practitioner. This was powerfully invoked when the cardiologist asked me if there was a family history of heart disease. I replied that there was not and he immediately informed me that I must be wrong and that there must be a family (read: genetic) basis for heart disease at such a young age. This turn to the molecular (Rose, 2001a) with its attendant power led to a rapid trawl through my family history for evidence to fit the theory. An *implicit* bio-genetic personhood (Rose, 2001b) was brought into play in which there was no genetic testing but instead epidemiological evidence deployed to force me onto the Procrustean bed of a genetic basis for having a heart attack at such a young age. Not only this but I played my part in uncovering some (albeit minor) family history to provide evidence for this new subjectivity within my own narrative of becoming someone 'at risk'.

Lay understandings of coronary heart disease played a role here in providing some resistance to the production of this new (and consequently, somewhat ambiguous) subjectivity (cf. Shim, 2010). In common with the extant literature (French, Senior, Weinman & Marteau, 2001), friends and family were quick to conclude that the cause of my heart attack must be due to lifestyle rather than genetics and - in particular - must be due to stress. My stressful role as a Head of Department (HoD) was invoked time and time again as a primary causal factor, with many people suggesting that I should stand down from this role. These lay understandings contrasted markedly with medical opinion, with stress now considered much less important than the key unhealthy behaviours of smoking, poor diet and lack of exercise. The tension between these two regimes of power/knowledge (lay and medical) manifest itself in my decision to return to my role as HoD to finish my term (I had a year left in the role), and the difficulty of knowing whether this was 'the right thing to do'. For me, not returning to my role as HoD meant that I was fundamentally and irrevocably changed – someone who is 'ill' – and unable to cope with such stressful situations now or in the future: 'if I am healthy then I can carry on with my stressful job but if I am ill then perhaps I should slow down and disengage with such things'. Not returning to my role also meant closing down future possibilities. As a relatively young survivor of a heart attack, closing down future possibilities felt deeply depressive. My decision-making process was also undoubtedly inflected by a need to embrace a (traditionally masculine) 'vibrant physicality', as seen in other recovery stories (Robertson et al., 2010).

Biosociality (Rabinow, 1996) was also relevant to the genetic construction of being 'at risk', with a coming together on the ward and during cardiac rehab with others sharing the same 'biological susceptibility' to heart disease. Whilst I was young amongst my biological peers, and our shared sociality only implicitly genetic, there was a sense of shared experience of now being 'at risk' and then later a shared purpose in the process of recovery, with those of us in cardiac rehab all seeking to return to work fundamentally unchanged (as academic, barrister and yoga teacher...). The weekly sessions served to maintain a biosocial space in which anxieties could be shared and motivation for the required biomedical self-governance developed. Rights claims were not formulated beyond the individual and a request for personalised insight into illness and recovery, as there are few claims that remain to be made with this 'saturated' disease category (Pollock, 2011). Regardless, this coming-together allowed for the sharing of the latest thinking in the biomedicine of heart disease and both genetic and lifestyle factors in recovery.

A sense of safety and accepting personal responsibility for future health did not increase with time, however, but actually decreased as the passing of time involved a growing distance from the safety of continual medical surveillance and biosociality. The end of cardiac rehabilitation marked a loss for me, a loss of regular access to expert and lay expertise that helped mediate the anxiety of emergent body sensations and change. This rapid - and not entirely consensual - transfer of responsibility left me carrying the burden of my (potentially precarious) health and well being without immediate biomedical

expertise or any sense of continuing biosociality, with no post-cardiac event community available to me.

(2) Technologies of biomedicine and the disciplining of subjectivities

Following the end of cardiac rehabilitation, confusion began to emerge for me about whether I was now someone who was healthy or ill. My cardiologist performed an echocardiogram some months after my heart attack to assess the level of damage and possible impact longer term. He turned the screen and showed me my pumping heart and pointed out the area where there was damage, mentioning that it was unlikely that an untrained eye would even notice it. But it could be seen and my heart was now damaged with the visualisation technology of modern cardiology meaning that I could see it myself. As Joyce (2010: 200) points out:

Computer-based visualization technologies are crucial to the legitimisation and deployment of surgical, chemical, and lifestyle interventions and are part of the larger trend of biomedicalization that, as Clarke and her colleagues (2003, 181) rightly suggest, works “from the inside out.”

This biomedical risk assessment technology served to bolster the (biogenetic) epidemiological construction of me being a subject ‘at risk’ in need of ‘aggressive secondary prevention’ (Saukko, Farrimond, Evans & Qureshi, 2012), albeit someone ‘lucky’ to have only minor heart damage and a positive

long-term prognosis. And it was visualization that proved critical in framing my subjectivity within the context of biomedicalisation (Clarke et al., 2003) and the production of new subjectivities concerned with health as much as illness. This revolved around a governmental discourse of prevention that is central within discourses of heart attack recovery and secondary prevention.

To further compound this new subjectivity came a post-heart attack diagnosis of hypercholesterolaemia in support of the long-term pharmaceuticalisation of subjectivity through the need for an aggressive 'chemoprevention' strategy (see Fosket, 2010 and Shim, 2002). I had only slightly high levels of cholesterol prior to the heart attack that were - at the time - being 'treated' through lifestyle intervention only. Following the heart attack these figures became glossed into a clinical diagnosis of hypercholesterolaemia in support of the desire to explain the heart attack incident occurring at an unusually young age and also to position me as a subject 'at risk' in need of long-term pharmaceutical intervention. Similarly, I was advised to take pills for reducing blood pressure in spite of having 'normal' blood pressure for they might have some 'cardiac protective effect'. Is this about prevention of illness or rather the enhancement of health spoken of in the biomedicalisation thesis (Clarke et al., 2003)?

Central here is the notion of 'adherence to treatment', or what used to be called compliance, and sometimes also known as 'concordance' depending on the emphasis being placed upon patient agency (Kähkönen, Kankkunen, Saaranen, Miettinen, Kyngäs & Lamidi, 2015). Motivation and responsibility

figure highly as predictive factors in adherence, along with other items like feeling a sense of normality, fear of complications and support from family and health care professionals (ibid). This is far from straightforward, however, with figures around 50% for adherence to drug and lifestyle regimes following a heart attack (ibid). There is evidence of a tension between biomedical regimes of recovery from heart attack (and its associated health governmentality) and individual experiences and strategies (Evans & Crust, 2015; Wiles, 1998; Robertson, Sheikh & Moore, 2010). In their study of older patients' experience of cardiac rehabilitation, Evans & Crust (2015: 30) highlight the processual nature of rehabilitation and "changing 'I' identities", with participants negotiating multiple – sometimes competing – embodied identities. There is an implied telos in this work, however, with the endpoint some notion of a return to health, as implied in the etymology of 'recovery' itself (c1300 *recoverie* - return to health; a means of restoration; to get back). My own experience troubles the teleological end point of 'health' in 'recovery' from a heart attack for the biomedical construction of being a subject 'at risk' has no end point other than death. The biomedical triptych of (bio-genetic) epidemiology, visualisation technology (the echocardiogram) and the (post-hoc) construction of clinically high cholesterol levels needing pharmaceutical intervention, all serve to produce a new ambiguous subjectivity in which health and illness become inextricably blurred.

Adherence to aggressive secondary prevention involves not only serious lifestyle changes but also a new drug regime and continued medical surveillance. This tension between competing subjectivities of health and

illness has serious implications, such as a risk of anxiety through a perpetual ambiguity of the lifeworld (Merleau-Ponty, 1945/1962) that is problematic for long-term health and well-being (Januzzi, Stern, Pasternak & DeSanctis, 2000).

I am sat on the train to work, drinking my (decaf) coffee and thinking about the day's activities in my diary. And I'm hit by the realisation that I have forgotten to take my pills (the proton pump inhibitor, the beta blocker and aspirin). I immediately panic and contact my partner, though I'm not sure why. Their presence reassures and I gather myself and talk myself into calm: 'you will not die from missing some pills, you will be fine'.

I wake with a start in the middle of night realising that I have forgotten to take my evening pills (statin and ace inhibitor). I chastise myself for forgetting and reach for the bedside drawer where the pills are kept.

I am out walking with the dog, enjoying the sunshine on the Common, when I reach down to my pocket for my phone. I then realise that I've come out without my GTN spray and panic with the 'what if' thoughts entering my head. I reassure myself but still end the walk quickly and head home, reassured there by the pressure of this (mostly never used) spray that has become my equivalent of the Disney Dumbo's feather.

The pills that I take, along with the regular medical checks, form a figural backdrop (Elias, 1982, 1985) to how I feel about my recovery. I am reminded morning and night about the heart attack when I take my medication (see also Gregory, Bostock, Backett-Milburn, 2005). It is impossible to forget what happened: there is no space for closure here (see Figure 1 – The pill drawer).

Insert Figure 1 about here – The pill drawer

I must accept what has been lost (my sense of self before a heart attack), and incorporate the change into my present sense of identity, and embrace some sense of being a subject 'at risk' (or ill) even if antithetical to how I feel (Rosenbaum, 2015). A new story of self is now interwoven with being someone who has had a heart attack – mediated by biomedicine - and these two cannot be unbound. This is good for the governmental aims of the medical profession, of course, which requires people to take their pills and enact an active 'health citizenship' (Redden, 2002), taking personal responsibility for looking after themselves. But there is a tension, as I feel repeatedly drawn back to a traumatic moment, time and time again. I feel that I am changed now, in a liminal state of healthy but not healthy, ill but not ill. It is this 'in-between' that troubles, with me struggling to find solid ground: it is the ambiguity of the lifeworld (Merleau-Ponty, 1945/1962) that truly unsettles the telos of 'being healthy'. Am I healthy now, just like everyone else who is 'well', or am I sick in need of treatment? My pills feed this ambiguity as they are not strictly life preserving, but rather serve a longer-term

protective/enhancement role in preventing further heart attacks. And so do my encounters with the medical profession, where I am clearly changed in their perception, someone 'at risk' and in need of additional surveillance.

(3) Transformation of bodies and a new 'bodily normal'

In common with work on recovery from cancer, the extant literature on cardiac recovery speaks directly to the issue of people wanting to 'find a new normal' (Astin, Horrocks & Closs, 2014). The concept of 'a new normal' is complicated, however, as there are considerable variations in what this means. For many, this is not about 'a new normal' at all but rather about 'a getting back to normal', the apotheosis of the etymological basis of 'recovery' itself. For others, it is about creating a new normal in which new limits are understood and accepted, with lifestyle and medical regimes successfully incorporated into everyday life. I discovered the notion of 'a new normal' spontaneously myself, having never before heard it deployed in the context of recovery from a heart attack, when I went to the gym having forgotten to take my morning pills.

It was in many ways a very normal morning. I got up, ate breakfast and hauled myself to the gym. All felt as usual as I walked to the gym, got changed and got on a cross-trainer, my machine of choice. After a few minutes a trainer introduced himself to me and we chatted briefly. I started to feel slightly puffed out, which was unusual given I was only a few minutes in to the exercise. I

checked my heart rate on the machine and it was 126. My heart rate never gets to that level, except when pushed to the limit once by the cardiologist, as I am on beta-blockers to keep it low. I panicked slightly, packed up my things and headed home as fast as I could. I had clearly forgotten to take my morning pills. It was after taking the beta-blocker and feeling calmer that I realised that me on beta-blockers was my 'new normal'. A heart rate of 126 in a gym is perfectly normal and would have been normal for me before the heart attack and pills designed to support 'aggressive secondary prevention'. But no more, my 'new normal' is a medically enhanced normal where my heart rate almost never exceeds 115. I felt a curious sense of being changed, being ill but not ill.

This 'new normal' is anything but 'a getting back to normal'. Instead, it represents a very concrete example of the impact of biomedicalisation and the production of new embodied pharmaceuticalized subjectivity. My 'new normal' is founded on a sense of my body being fundamentally changed, slowed down, though not by the heart attack itself but rather the medication deployed to facilitate the 'aggressive secondary prevention' deemed necessary by biomedical epidemiology, visualization technology and my clinical state of being 'at risk'. The technoscientific subjectivity of 'someone with - or at risk from - heart disease' has been created through technological advances in measurement and monitoring, with the *necessary* treatment itself further reinforcing this sense of subjectivity. It is reinforced in the most profound way by fundamentally altering the way a body feels, and therefore profoundly

altering a person's sense of subjectivity given our bodies are the 'vehicle of our being in the world' (Merleau-Ponty, 1945/1962), and a primary means of learning (Benoot & Bilsen, 2016).

Conclusions

This article has sought to explore the process of recovery from a heart attack through the lens of the contemporary biomedicalisation of life. There was no simple process of 'getting back to normal' and no obvious end-point for recovery but instead a shifting figural landscape in this account, with the consequences to health and well being that follow (Januzzi et al., 2000). The construction of new – and competing – biomedical subjectivities emerged that are relevant to the long-term adoption of healthy behaviours and a new form of health citizenship. Whilst the need to 'find a new normal' has been identified in the extant literature (see Astin, Horrocks & Closs, 2014), I highlight a more nuanced account of the challenge in finding a way to live with the tension between health and ill-health. For whilst embracing ill health may result in a more active health citizenship, and greater (internalised) individual responsibility for the self-management of one's medical regime and lifestyle, this has a potential cost in the form of increased anxiety from the ambiguity inherent in this liminal state. It is here that we may need to encourage the telling of new stories that provide alternatives to the traditional 'restitution narrative' of recovery (Frank, 2003), such that we find new ways of managing this tension.

Frank (2003) identifies three key narrative forms that underpin the telling of stories of ill-health: stories of restitution, chaos and quest. Stories of restitution constitute the classic recovery narrative driven by contemporary medicine in which we see a move from health to ill-health (the moment of chaos) and back again. My experience of an emergency angioplasty might otherwise fall into this narrative form, with me readily able to narrate a story involving a 'return to normal' but for the new health citizenship that stems from the advance of biomedicalisation being described here. The demand for greater personal responsibility in reducing 'risk', allied to ongoing medical intervention and monitoring, and a change to the materiality of the body itself that is inherent in contemporary health citizenship suggests the need for a new narrative form. It appears we need to define a new category of narrative, one of 'health citizenship', in which the person is ill but not ill, well but not well, having to live out a new contingent subjectivity in which they are perpetually 'at risk' and subject to a growing regime of pharmaceuticalization. This narrative may currently sit alongside the story of restitution, as there is still space for simple medical stories of cure, but may in time replace it completely as biomedicalisation embeds itself ever deeper within our cultures through greater deployment of epidemiology, visualisation technologies and pharmaceuticalization.

This study speaks to the growing work on embodiment and health in the context of cardiac rehabilitation (e.g. Evans & Crust, 2015; Robertson et al., 2010). It builds on the extant work by highlighting a number of ways that existing stories of recovery (e.g. around 'the new normal') may manifest

themselves in a distinctly embodied manner. It is not the illness, in this particular case, which disturbs one's existing bodily equilibrium but rather the impact of the drugs associated with the 'aggressive secondary prevention' of another cardiac event. Here, we see a new pharmaceutical body-subject in action through the creation of a technoscientific identity as 'someone at risk of heart disease'.

It is necessary to recognise the limitations of this work however. My position as a relatively young man undoubtedly colours my experience, with greater likelihood for anxiety (Oranta et al., 2011) and a distinct masculine experience (Robertson et al., 2010). That is, in spite of my avowed resistance to hegemonic masculinity (Connell, 1995) in my own presentation as a man, it remains highly likely that my developmental context has coloured my own experience of illness. The relatively limited damage to my heart is also significant in framing this particular account of the recovery experience. People with more serious damage and the potential for disability from a serious cardiac event will likely provide very different accounts of the temporal process of recovery (see Wiles, 1998). All this being said, it is worth noting that the emergent themes are resonant with the broader extant literature. The similarity of experience at a general level offers considerable reassurance that this is not simply an idiosyncratic account but instead a deepening in our understanding of a more generalised process of biomedicalisation, a process that has profound implications for the experience of 'recovery' from illness as a consequence of the disciplinary demands of a new health citizenship.

Acknowledgements

I would like to thank the anonymous reviewers who provided constructive feedback that helped to improve this work.

Funding

This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

Competing Interests

The Author declares that there is no conflict of interest.

References

- Anderson, L. (2006). Analytic autoethnography. *Journal of Contemporary Ethnography*, 35, 4, 373-395.
- Astin, F., Horrocks, J. & Closs, S.J. (2014). Managing lifestyle change to reduce coronary risk: a synthesis of qualitative research on peoples' experiences. *BMC Cardiovascular Disorders*, 14: 96.
- Atkinson, P. (2006). Rescuing autoethnography. *Journal of Contemporary Ethnography*, 35, 4, 400-404.
- Benoot, C. & Bilsen, J. (2016). An auto-ethnographic study of the disembodied experience of a novice researcher doing qualitative cancer research. *Qualitative Health Research*, 26(4), 482-489.
- Chang, H. (2009). *Autoethnography as method*. London: Routledge.
- Chang, H. (2016). Autoethnography in health research: growing pains? *Qualitative Health Research*, 26(4), 443-451.

- Clarke, A.E., Mamo, L., Fishman, J.R., Shim, J.K. & Foskett, J.R. (2003).
Biomedicalization: technoscientific transformations of health, illness,
and U.S. biomedicine. *American Sociological Review*, 68, 2, 161-194.
- Connell, R.W. (1995). *Masculinities*. Cambridge: Polity Press.
- Denshire, S. (2014). On auto-ethnography. *Current Sociology Review*, 62, 6,
831-850.
- Denzin, N. (1989). *Interpretive biography*. Newbury Park, CA: Sage.
- Denzin, N. (1997). *Interpretive ethnography: ethnographic practices for the
twenty-first century*. Newbury Park, CA: Sage.
- Denzin, N. (2006). Analytic autoethnography, or déjà vu all over again.
Journal of Contemporary Ethnography, 35, 4, 419-428.
- Elias, N. (1982). *The civilizing process*. New York: Pantheon.
- Elias, N. (1985). *The loneliness of the dying*. Oxford: Basil Blackwell.
- Ellis, C.S. (1991). Sociological introspection and emotional experience.
Symbolic Interaction, 14, 23-50.
- Ellis, C.S. (1995). *Final negotiations: a story of love, loss, and chronic illness*.
Philadelphia, PA: Temple University Press.
- Ellis, C.S. (2004). *The ethnographic I: a methodological novel about
autoethnography*. Walnut Creek, CA: AltaMira Press.
- Ellis, C.S. & Bochner, A.P. (2000). Autoethnography, personal narrative,
reflexivity: research as subject. In N. Denzin & Y. Lincoln (eds.)
Handbook of qualitative research, 733-768. Thousand Oaks, CA: Sage.
- Ellis, C.S. & Bochner, A.P. (2006). Analyzing analytic autoethnography.
Journal of Contemporary Ethnography, 35, 4, 429-449.

- Evans, A.B. & Crust, L. (2015). 'Some of these people aren't as fit as us...': experiencing the ageing, active body in cardiac rehabilitation. *Qualitative Research in Sport, Exercise and Health*, 7, 1, 13-36.
- Foucault, M. (1978). *The history of sexuality volume 1*. New York: Pantheon.
- Foucault, M. (2003). The birth of biopolitics. In P. Rabinow & N. Rose (eds.) *The essential Foucault: selections from the essential works of Foucault 1954-1984*. New York: New Press [pp. 202-207].
- Flowers, P., Langdridge, D., Gough, B. & Holliday, R. (2013). On the biomedicalisation of the penis: the commodification of function and aesthetics. *International Journal of Men's Health*, 12, 2, 121-137.
- Frank, A.W. (2013). *The wounded storyteller: body, illness and ethics (2nd Ed.)*. Chicago: University of Chicago Press.
- Gambling, T.S. (2003). A qualitative study into the informational needs of coronary heart disease patients. *International Journal of Health Promotion and Education*, 41, 68-76.
- Gregory, S., Bostock, Y. & Backett-Milburn, K. (2005). Recovering from a heart attack: a qualitative study into lay experiences and the struggle to make lifestyle changes. *Family Practice*, 23, 220-225.
- Gulanick, M., Billey, A., Perino, B. & Keough, V. (1998). Recovery patterns and lifestyle changes after coronary angioplasty: the patient's perspective. *Heart & Lung*, 27, 253-262.
- Hanssen, T.A., Nordrehaug, J.E., Eide, G.E. & Hanestad, B.R. (2009). Does a telephone follow-up intervention for patients discharged with acute myocardial infarction have long-term effects on health-related quality of

- life? A randomised control trial. *Journal of Clinical Nursing*, 18, 1334-1345.
- Januzzi, J.L., Stern, T.A., Pasternak, R.C. & DeSanctis, R.W. (2000). The influence of anxiety and depression on outcomes of patients with coronary artery disease. *Archives of Internal Medicine*, 160, 1913-1921.
- Kähkönen, O., Kankkunen, P., Saaranen, T., Miettinen, H., Kyngäs, H. & Lamidi, M-L. (2015). Motivation is a crucial factor for adherence to a healthy lifestyle among people with coronary heart disease after percutaneous coronary intervention. *Journal of Advanced Nursing*, 71(10), 2364-2373.
- Merleau-Ponty, M. (1945/1962). *Phenomenology of perception* [Trans. C. Smith]. London: Routledge & Kegan Paul Ltd.
- Nicols, M., Townsend, N., Scarborough, P. & Rayner, M. (2013). Trends in age-specific coronary heart disease mortality in the European Union over three decades: 1980-2009. *European Heart Journal*, 34, 3017-3027.
- O'Driscoll, J.M., Shave, RT. & Cushion, C.J. (2007). A National Health Service hospital's cardiac rehabilitation programme: a qualitative analysis of provision. *Journal of Clinical Nursing*, 16, 1908-1918.
- Oranta, O., Luutonen, S., Salokangas, R.K.R., Vahlberg, T. & Leino-Kilpi, H. (2011). The effects of interpersonal counselling on health-related quality of life after myocardial infarction. *Journal of Clinical Nursing*, 20, 3373-3382.
- Parsons, T. (1951). *The social system*. Glencoe, IL: The Free Press.

- Polllock, A. (2011). Transforming the critique of big pharma. *BioSocieties*, 6, 106-118.
- Rabinow, P. (1996). *Essays on the anthropology of reason*. Princeton: Princeton University Press.
- Rabinow, P. & Rose, N. (2006). Biopower today. *BioSocieties*, 1(2), 195-218.
- Redden, C.J. (2002). Health as citizenship narrative. *Polity*, 34, 3, 355-370.
- Robertson, S., Sheikh, K. & Moore, A. (2010). Embodied masculinities in the context of cardiac rehabilitation. *Sociology of Health and Illness*, 32, 5, 695-710.
- Rose, N. (2001a). The politics of life itself. *Theory, Culture & Society*, 18(6), 1-30.
- Rose, N. (2001b). Normality and pathology in a biological age. *Outlines. Critical Practice Studies*, 3(1), 19-33.
- Rose, N. (2006). *The politics of life itself: biomedicine, power and subjectivity in the twenty-first century*. Princeton: Princeton University Press.
- Rosenbaum, L. (2015). Beyond belief – how people feel about taking medications for heart disease. *New England Journal of Medicine*, 372, 2, Jan 8th, 2015.
- Rose, N. & Novas, C. (2004). Biological citizenship. In O. Aihwa & S.J. Collier (eds.) *Global assemblages: technology, politics, and ethics as anthropological problems*. Oxford: Blackwell [pp. 439-463].
- Rosman, L., Whited, A., Lampert, R., Mosesso, V.N., Lawless, C. & Sears, S.F. (2015). Cardiac anxiety after sudden cardiac arrest: severity, predictors and clinical implications. *International Journal of Cardiology*, 181 (Feb), 73-76.

- Salminen-Tuomaala, M., Astedt-Kurki, P., Rekiaro, M. & Paavillainen, E. (2012). Coping experiences: a pathway towards different coping orientations four and twelve months after myocardial infarction – a grounded theory approach. *Nursing Research and Practice*, ID 674783, doi: 10.1155/2012/674783.
- Saukko, P.M., Farrimond, H., Evans, P.H. & Qureshi, N. (2012). Beyond beliefs: risk assessment technologies shaping patients' experiences of heart disease prevention. *Sociology of Health & Illness*, 34, 4, 560-575.
- Stanley, P. (2015). Writing the PhD journey(s): an autoethnography of zine-writing, angst, embodiment, and backpacker travels. *Journal of Contemporary Ethnography*, 44, 2, 143-168.
- Tolich, M. (2010). A critique of current practice: ten foundational guidelines for autoethnographers. *Qualitative Health Research*, 20, 12, 1599-1610.
- Weaver-Hightower, M.B. (2012). Waltzing Matilda: an autoethnography of a father's stillbirth. *Journal of Contemporary Ethnography*, 41, 4, 462-491.
- Wiles, R. (1998). Patients' perceptions of their heart attack and recovery: the influence of epidemiological 'evidence' and personal experience. *Social Science & Medicine*, 46, 11, 1477-1486.
- Williams, S.J. (2005). Parsons revisited: from the sick role to ...? *Health: An Interdisciplinary Journal for the Social Study of Health, Illness and Medicine*, 9, 2, 123-144.
- Williams, J.P. & Kamal Jauhari bin Zaini, M. (2016). Rude boy subculture, critical pedagogy, and the collaborative construction of analytic and

evocative autoethnography. *Journal of Contemporary Ethnography*,
45(1), 34-59.