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Bodies of Change: menopause as bio-psycho-social process

It is a little-known fact that only humans and two species of whale go through menopause. We learned this during a 2016 BBC Radio 4 documentary – *The Whale Menopause* – that described menopause as "one of human evolution's great mysteries" (BBC 2016). Presenting the case of 100+ year old killer whale ('J2'), anthropomorphically dubbed "Granny", the programme marvelled at the centrality of the non-reproductive female to the survival of the family group, concluding that older female killer whales are "not redundant. They actually have an important role to play". Granny's physical capacity to "prolifically" breach was also noted as marvellous, given her age. In 2017, when her death was announced, Granny was described as "the leader" and "matriarch" of the group in a BBC radio report (BBC Inside Science 2017). The interviewed scientist stated that "post-reproductive females" like Granny direct the pod to navigate safely through foraging grounds, "storing ecological knowledge for the group". Dependent adult sons (age 30+ years) are, the scientist reported, eight times more likely to perish when post-reproductive females die: these sons are dependent on their mothers for food. Again, it was confirmed that the females of only two species of whale and humans live beyond their reproductive years.

Humans, the 2016 documentary explained, have much to learn from this fact in understanding of the value of older women's lives, arguing that the story of the killer whales has the empowering potential for appreciating "the importance of older females in society" (BBC 2016). For us, this conclusion indicates the astonishing depth and strength of prevailing accounts of women's core value as reproductive beings and of menopause as a catastrophic ending to reproductive capacities. Although extensively studied within biology and medicine, menopause remains 'a mystery' because of the persistent social, cultural and scientific difficulties in conceptualizing female human and non-human animals' value beyond species propagation. For example, one attempt to explain human (and whale) menopause is the 'grandmother hypothesis', which posits that post-reproductive life enables females to invest in their own offspring's offspring in order to secure their own genetic survival. Menopause in this context has variously been discussed as an adaptation to allow for this investment or as a by-product of longevity that has enabled such investment (Peccei 2001). Either way, the frame of reference remains determinedly reproductive and female longevity beyond the reproductive years always demands explanation. As feminist anthropologist Margaret Lock argued in 1993,

> Women have a better survival rate than men, this cannot be denied, but the very fact that they live longer seems to count against them. Elderly women can only be troublesome to society, it seems, as though the present average life expectancy for men is the way things should be and anything more is unnecessary, especially if these women can contribute neither to the continuity of the species nor to the pleasure of men (Lock 1993: 365-6).

Biomedical definitions of menopause carry the freight of these long-standing cultural difficulties, typically articulating menopause as an 'end' of something 'reproductive' and 'natural'. The 2015 National Institute for Health and Care Excellence (NICE) Guidance, for example, defines menopause as "when a woman stops having periods as she reaches the end of her natural reproductive life" (NICE 2015: 24). The use of the cessation of menstruation here as the defining point of change creates a firm[i] break in fertility that fails to reflect women's experiences of declining fertility over a decade or more prior to menopause itself – something that women who have not reproduced find themselves constantly reminded of as they progress through their 30s and into their 40s (Faux 1984, Monach 1993, Morell 1994, Tyler May 1995, Throsby 2004). In this sense, menopause is the final nail in a very long coffin, and regardless *when* menopause is deemed to have taken place, its dominant framing is mired in the rhetorics of momentous failure and loss.

According to the British Menopause Society (BMS), for instance, menopause is "a major life event affecting all women, in a variety of ways, both short and long term" (Currie et al 2020: 1). Furthermore, for both NICE and BMS, as well as in everyday working and social life, menopause is strongly associated with a raft of unpleasant physical effects, long-term health risks and physical vulnerabilities, including: "hot flushes and sweats, tiredness and sleep disturbance, joint and muscle ache, heart palpitations, mood swings, anxiety and depression, forgetfulness, lack of concentration, vaginal dryness, vulval irritation, discomfort during sex, loss of interest in sex and increased urinary frequency or urgency". This, they warn the reader, "is not an exhaustive list" (Currie et al 2020: 3). Such symptoms should, the BMS argue, typically be treated by hormone replacement therapy (HRT) as well as 'lifestyle' interventions such weight loss, smoking cessation, reduced alcohol consumption and increased exercise (Currie et al 2020: 4-5).

This chapter argues that this dominant framing of menopause as defined by loss and failure not only limits the questions that can be asked about menopausal experience but also the solutions that can be imagined for the challenges that menopause poses both within and beyond the world of work. (As noted in Footnote 1, it also limits the kinds of people considered to experience menopause to those who live as their at-birth assigned sex, failing to pay attention to people who have undergone gender transition or who are not clearly male or female physiologically.) In making this argument, we are not denying the challenges that menopausal experiences can pose. Nor do we wish to debate the rights and wrongs of controversial interventions such as hormone replacement therapies. Instead, we want to experiment with conceptualising the menopause not as an ending but as a transition – a bio-psycho-social process (Roberts 2015) enacted through a range of practices, emotions and effects, which is characterised not by a categorical break in the continuity of women's lives through the collapse of order into disorder, or from fecundity to barrenness, but rather "as moves from one kind of order to another" (Komesaroff 1997: 5); embodied but not necessarily binarily-sexed moves that may be experienced as positive, at least some of the time. In this way, we argue for the opening up of questions foreclosed by the dominant framing of deficit; questions that will allow us to search for more interesting, creative and inclusive answers.

To develop this argument, we begin by outlining the ways in which contemporary framings of menopause appear self-evident but are contingent on historical framings of sex / gender / reproduction and histories of endocrinological knowledge. We then demonstrate how contemporary menopause research has been shaped by these assumptions. We do this first, by highlighting the ways in which an emphasis on women as ignorant about menopause ignores the location of contemporary menopause within what Ian Wilmut et al (2000) call the 'age of biological control'; and second, by discussing how the dominant historical framing of menopause has led to a research focus on cohorts of white heterosexual cis-gendered women with teenage or adult children. This excludes, amongst others: trans and gender diverse people and those with atypical sex; people who have never given birth (either by choice or circumstance); people with disabilities; those going through a premature or medical menopause; and those who become parents later in life, further narrowing an already narrow frame within which menopause can be interrogated and re-imagined. If we want to understand the impacts of menopause both within and outside of the workplace, we argue, we need to widen the research frame and ask new questions about menopause as a mid-life, generative process. Indeed, it is only through a more nuanced bio-psycho-social framing of the menopause that we can begin to understand its multiple impacts on the complex worlds of work.

Biomedical framings of menopause

A number of feminist researchers have explored the history of menopause as a biomedical and scientific concept. Emerging from early twentieth century European endocrinological science that (re)articulated sex as binary in the face of new findings that sex hormones do not exclusively 'belong' to males or females (Oudshoorn, 1994), physiological changes associated with female ageing were in the 1950s medically reframed in terms of hormonal loss and deficit (Roberts, 2007). From the 1960s onward, female menopause came to be understood as the pathological degeneration of key elements of sexual difference and femininity, including (assumed heterosexual) desire, which were said to depend on estrogen. Building on the successful chemical isolation of estrogen in 1929 and the growing capacity to produce pharmaceutical estrogen-based products from the 1940s onwards, hormonal 'replacement' therapies (HRT) for menopausal women became widely available in the 1960s and 70s in the United Kingdom, Europe, North America and Australia. Women were encouraged, through news media, popular books and clinical practices, to view the hormonal processes of ageing through a lens of disease and to seek treatment that would return their bodies to a younger hormonal state (Foxcroft 2011). A similar framing of male ageing as loss of masculinity did not lead to an equivalent flourishing of testosterone replacement therapies, for complex reasons relating to the availability of research materials, the organisation of health care, and cultural framings of sex/gender and ageing (Roberts, 2007; Marshall 2007). Female reproductive capacity, of course, cannot be 'replaced' in any straightforward way, as it depends on eggs and ovarian function, as well as sex hormones. Many of the physiological signs of reproductive capacity, however – firm skin, constant temperature, sexual desire, vaginal lubrication, even menstruation – can be affected by exogenous hormones.

In early popular texts, male authors described menopausal bodies with revulsion. Taking hormones was described by North American HRT guru Robert A. Wilson, for example, as curing "menopausal castration [that] amounts to a mutilation of the whole body" (Wilson, 1966: 39). Over the last six decades, the language associated with the menopause has changed enormously. It is now less acceptable to write misogynist texts in the name of providing information about women's health. Women have also written personal and analytic accounts of menopause, which, whilst still typically remaining within the 'end of reproductive life'/ 'loss of sex hormones' model, are more likely to find some positives in female ageing and menopausal transition (Somers 2014; Rayner and Fitzgerald 2015; McLean 2018; Steinke 2019). They are also more likely to be more cautious in their approach to HRT, especially since the publication in 2002 of the first Women's Health Initiative Randomized Controlled Trial report, which recorded findings suggesting increased risks of breast cancer and cardiovascular disease (Writing Group for the Women's Health Initiative Randomized Controlled Trial 2002). These results were later re-evaluated and a recommendation for use with those close to menopause was reinstated (BMS 2012), but it remains a point of caution for many, as evidenced by the proliferating genre of menopause 'self-help' texts oriented towards achieving a 'natural' menopause. Despite these more positive articulations of menopausal possibility, menopause is still typically figured in terms of health decline and increasing risk of serious illness such as heart disease, osteoporosis and stroke. Little is said, for example, of the ways in which endometriosis sufferers (who constitute 1 in 9 of the Australian female population born between 1973-78)[ii] experience reprieve at menopause,[iii] or that some women may experience loss of fertility as a liberation (from menstruation, contraception, abortion or unwanted pregnancies) (Ussher, Hawkey and Perz, 2019; Dillaway, 2005).

The biomedical framing of menopause as loss has profound implications for biomedical research and practice. In an editorial comment on the 2016 NICE Guidelines, published in the *British Medical Journal,* biomedical researchers Martha Hickey and Emily Banks (2016) argue that the guidelines pay insufficient attention to treatments or solutions other than HRT, including anti-depressants, yoga and cognitive behavioural therapy (see also Banks, 2015). They are critical of the conclusions drawn about the safety of HRT over the long term, and argue that women should be more fully warned about the risks involved in taking it. Discussing the research agenda laid out in the document, they write,

> It was refreshing to see a research agenda for menopause but disappointing that four out of five items focused on MHT [menopausal hormone therapies]. There are cavernous gaps in the science of menopause: What regulates menopause timing? What is the mechanism of vasomotor symptoms? What causes sleep and mood disturbance? The research agenda is optimistic that further studies of new MHT formulations will show they have greater safety. Given the number of large and costly trials already completed, the justification for further studies seems uncertain and a broader research agenda would be welcome (Hickey and Banks, 2016: 1).

Most importantly to us, Hickey and Banks imply that these limited formulations of treatment and research derive from the fact that "Society has strong negative perceptions of female ageing" (Hickey and Banks, 2016: 2) In line with our argument here, they conclude that "Wider acceptance that menopause is a normal transition rather than an 'oestrogen deficiency syndrome' might be more empowering for women" (Hickey and Banks, 2016: 2) and may, even, lead to more interesting research questions. (We would add that such a reframing might also be empowering for people who do not identify as women.) This is not to disregard the hard-to-manage symptoms of menopause that many experience, but rather, to resist the binary of catastrophe or feminine triumph in search of what Dina Giorgis (2013), writing about stories of colonial stories and racial suffering, calls "the better story" – that is, not a story that occupies a higher place in a moral or cultural hierarchy, but rather, one that can capture, even if only provisionally, what is possible beyond a deficit model.

Information deficit models: menopause as an experience of ignorance

Both popular books on menopause and educational materials for clinicians, such as those produced by the British and Australasian Menopause Societies, emphasise the need to educate women about hormonal changes associated with mid-life. The content of such materials is remarkably repetitive and formulaic, whilst the education itself is consistently figured as rational, factual and impartial. Building on Roberts (2007), we want to suggest that such education schools women (and their partners) in a rather narrow biomedical understanding of ageing, sex/ gender, sexuality and reproduction that focuses on negative experiences, and, as noted above, ignores people who may not identify as cis-gendered women. More practically, it also important to note that in these texts, women are encouraged to talk to clinicians, which inevitably brings them closer to prescribed pharmaceutical 'solutions' to physical and psycho-social problems (Guillemin, 2000a and 2000b; Roberts and Waldby, 2021), while those who are not 'women' are left to find their own solutions.

Despite the proliferation of these texts, the British Menopause Society (2016), responding to the launch of the 2015 NICE guidelines, declared that too many women – up to 50% – are unadvisedly choosing to "suffer in silence" rather than seek medical help, later arguing that "incorrect interpretation of data and sensational media reporting" has led to "non-informed decision-making" in relation to HRT (Currie, Abernethy et al. 2020). Women experiencing menopause are figured as poorly informed and thus at risk not only of physical and mental health problems but also of declining productivity in both the private and public domains. In the same year, the Chief Medical Officer, Professor Dame Sally Davies, recommended that workplaces become more "menopause aware" in order to protect the necessary productivity of middle-aged women (Department of Health 2015). Chapters in this volume address this issue in depth.

Within the contemporary biomedical model of menopause, then, information deficit accounts for women's failure to attend medical clinics to discuss menopause, to comply with clinical advice or to conform to mainstream narratives of menopausal experience as loss and suffering. This framing reflects wider assumptions of counter-normative health behaviours as evidence of knowledge deficit, which can be rectified through information dissemination (for example, in the case of 'lifestyle' health information campaigns around obesity, smoking or alcohol consumption). The assumption here is that once people know, they will do the 'right thing', rendering refusals to do so deviant and pathological. The inadequacy of this approach is evident in the relentless flood of information aimed at facilitating weight loss, which the targets of those information flows can reproduce easily when prompted even while resisting it, or de-prioritising it, in everyday life (Thompson and Kumar 2011, Cappellini, Harmna et al. 2018). Indeed, refusals of received menopausal 'truths' (or other health advice) are themselves figured as a form of 'suffering'; the possibility that they could be expressions of positive desire, or the result of informed choice, is not countenanced. As Paula Treichler observed in relation to public health communications around AIDS:

> [we] do not passively receive and internalise definitions and facts provided by authorities, rather, we talk about them with our friends, argue about how to interpret

> them, think about how they will apply to our everyday lives and work out what is gained or lost by adopting new behaviour and what that implies about our identity (1999: 267).

This figuration of menopausal women as ignorant sits incongruously alongside the fact that the current mid-life generation of assigned-female-at-birth people have encountered a lifetime of hormonal and technological interventions into the reproductive body (including the contraceptive pill and fertility treatments) – either directly through use, or at least, through awareness (and perhaps repudiation) of those interventions. It is hard to conceive of them as likely to be ignorant of hormonal processes and medications. (Of course, those who identify as trans or who have been diagnosed as having atypical sexual development may well also have such expertise.) This generation has also experienced two decades of online health information - as Sally Wyatt et al (2005) have discussed in relation to the menopause transition - as well as the widespread effects of feminist health movements, advocating women's education and proactive relationship to their bodies and health (Boston Women's Health Book collective 1989; Davis 2007; Ehrenreich and English 2005; Morgen 2002; Murphy 2012; Smith 1995). Ussher, Hawkey and Perz (2019), for example, found a strong effect of feminist health discourses on many women in their study of Australian and Canadian migrants' experiences of menopause: they analyse this effect in terms of the emergence of a resistance to negative biomedical models.

Thinking even more broadly, we note that the contemporary menopausal generation are living in 'the age of biological control' (Wilmut et al 2000). This marks a time in which citizens (particularly women) are expected to actively pursue their health through engaging with medical and scientific knowledge, pharmaceutical products and digital technologies that track and monitor the body (Lupton 2016; Mort et al 2016; Roberts and Waldby, 2021). And while those expectations and practices are firmly, and problematically, located within a relentlessly middle-class milieu, the figuration of women as ignorantly suffering in silence sits at odds with evidence that health consumers are increasingly proactive in tracking, managing and researching physical processes and experiences. As such, the premise that 'if only women knew…' falls far short of being able to account for menopausal experience and meaning, both in its own terms and in the fields of inquiry that it forecloses.

Feminist articulations of menopause

There is a long and vociferous radical feminist history of resistance towards biomedical intervention into bodies coded as female, with new reproductive technologies, for example, conceptualised as patriarchal efforts to contain and control women's bodies to maintain the asymmetrical gender order and protect the interests of capital (Spallone and Steinberg 1987; Rowland 1992; Raymond 1993). In relation to menopause transitions, HRT has been the primary target of this politicised refusal, with scholars and popular writers criticising the experimental nature of these medications, the investment of the pharmaceutical industry in profit over women's wellbeing, and the repudiation of women's 'natural' ageing processes involved (Greer 1993; Coney 1995; Coupland and Williams, 2002; Foxcroft 2011). Passionately invested in women's wellbeing, this approach is typically reliant on a 'natural' female body that is disarticulated from the complex social worlds in which bodies come into being and are lived. Furthermore, such arguments trap conceptualisations of menopause in entrenched debates around HRT that inescapably narrow the field of vision and delimit the questions that can be asked (see also Ballard et al 2009; Dillaway and Burton, 2011).

Our approach learns from this history of resistance, but takes a different path, articulating menopausal bodies as bio-psycho-social. The extensive feminist literature on the body and its processes as inseparable from the world and from any individual's life experience, we argue, offers a way out of constraining 'for or against' arguments about HRT and the nature of menopausal bodies. This literature includes, for example, research articulating new reproductive technologies as processes rather than technical procedures (Throsby 2004; Wilson 2006); refiguring the hormonal body (Roberts 2007, 2015; Yancey et al 2006); rethinking menopause as a locally particular rather than universal phenomenon (Lock 1993); exploring metaphors for making sense of menopause transitions (Martin 1997); and articulating genealogies that highlight the inextricability of menopause transitions from the wider social context within which they are experienced (Sybylla 1997; Houck 2006).

Whose bodies count?

One of the striking features of research on menopause, particularly within the social sciences, is a reliance on easier-to access homogenous cohorts of middle-class, cis-gendered, heterosexual women (e.g. de Salis et al 2018). Many studies focus on white women, although a growing literature on menopause experiences among ethnic minorities is beginning to address this issue (e.g. Agee 2000; Dillaway et al 2008; Murphy et al 2012; Sievert et al 2016; Wray 2007; Ussher, Hawkey and Perz, 2019). Prevailing public and biomedical framings exclude the experiences and desires of many who lives do not fit conventional reproductive and hormonal patterns, or who occupy disadvantaged social positions. This includes those whose opportunities for information, choice and control in relation to health, and particularly reproduction, have been actively constrained – for example, women with learning and physical disabilities and those from economically disadvantaged situations (Emerson and Baines 2011; Feinberg 2001; Graham 2009). Looking beyond an additive approach whereby new cohorts are folded into existing conceptual frameworks, a bio-psycho-social approach demands consideration of how concerns about reproductive and physical changes intersect with other responses to, experiences of, and contexts surrounding menopause. This includes not only those most intensely subject to social expectations of self-care and bodily discipline - for example, women experiencing involuntary childlessness (Throsby 2004) - but also those whose opportunities for information, choice and control are limited, or whose bodies are less likely to be conceptualised (either by themselves or by others) in reproductive terms.

A (non-exhaustive) selection of those whose menopausal experiences are typically overlooked in medical and social research includes LGBTIQ+ people, those with disabilities, people undergoing a premature menopause and those who have never given birth (either by choice or circumstance). In the case of LGBTQI+ people, for example, the limited menopause research focuses on the social risks and possibilities of the menopause among lesbians (Hyde et al 2001) or on sex post-menopause, usually in comparison to heterosexual experiences (Winterich 2003, 2007). An exception here is Kelly's (2005) interview-based study of lesbian menopausal experience, which actively resists this comparative impulse, insisting on centralising lesbian experience and looking beyond the biological to include the psycho-social. Menopause is similarly absent from the trans literature, except for the use of

HRT as a point of reference for discussions of hormone use, and there is scant research on the implications of ageing for trans-related hormonal regimens (although see Siverskog 2015; Mohamed and Hunter 2014).

There is also a paucity of work on the experiences and understandings of menopause transitions among those with disabilities, where both research and services have concentrated on puberty, menstruation and sexual activity (Fish 2016a, 2016b; Martin, Kakumani et al 2003), or more biomedically, on the timing of menopause (e.g. Schupf et al 1997). In 1995, Carr and Hollins reported the absence of any significant body of knowledge about experiences of menopause among those with learning disabilities, and in 2008, Willis noted how little the body of work had expanded since then. Existing research highlights the need for accessible information sources for those experiencing menopause, support for those caring for them and the importance of opportunities to consider positive aspects of menopausal transitions (Martin et al 2001; McCarthy 2002; McCarthy and Millard 2003). More recent research on the experiences of menopause among autistic people highlights a similar paucity of appropriate information and support, as well as the challenges of managing the new and pre-existing social, emotional, cognitive and sensory difficulties, which can be exacerbated by the onset of menopause (Moseley et al 2020; Karavidas and deVisser 2021). Research on physical disabilities and menopause also addresses the potential exacerbation of existing conditions (Vandenakker and Glass 2001); potential barriers to accessing screening programmes (Weiner, Simon and Weiner 2002); the importance of healthcare providers' recommendations in decision-making, particularly in relation to HRT (Becker, Stuifenbergen and Gordon 2002); the need for information and guidance addressing the particular needs and desires of disabled people (Harrison and Becker 2007; Dormire and Becker 2007); and the importance of not focusing on menopause to the exclusion of the wider social context and its accompanying stressors for those with disabilities (Kalpakjian and Leqeurica 2006). Each of these small pockets of publication emphasise the urgent need for more research into these largely excluded experiences.

Both premature menopause and the experiences of those going through menopause who have never given birth has received more attention in the literature, albeit in constrained ways. 'Premature menopause' is used to describe those entering the menopause before the age of 40 (Torrealday and Pal 2015). It can occur spontaneously or be induced, related to autoimmune syndromes, genetic conditions (such as Turner Syndrome), ovarian toxins (chemotherapy, radiation) or surgery. It affects around 1% of women and is understood as having a "high symptom and quality-of-life burden including menopausal, sexual and cognitive symptoms as well as infertility" (Moore et al, 2019: 210). The literature highlights the common experience of spontaneous premature menopause going unrecognised in clinical consultations (Conway 2019; Milsom and O'Sullivan 2017), leaving those experiencing symptoms feeling isolated and uninformed, while for cancer patients, concerns around menopause (and fertility loss) exist alongside, and sometimes in tension with, the pressing demands of cancer treatment (Porroche-Escudero 2016; Parton, Ussher and Perz 2017). Much of the available medical literature also focuses on improved care practices: in an article on best nursing practices, Conway (2019: 803) concludes that there is a need to "adapt the level of information and types of treatment according to life circumstances", proposing the adaptation must be informed by a thorough evidence base of women's experiences. In relation to those who have never given birth, either by choice or circumstance, the limited research focuses on menopause as either a tragic finality to thwarted efforts to give birth to a baby (Ferland and Caron 2013; Friese et al 2005); a controversial site of NRT-assisted reproduction among older women (Bahn et al 2010); or a release from the threat of either unwanted pregnancy or the stresses of infertility (Olshansky 2005). This reproductive lens, we suggest, obscures other bio-psycho-social dimensions of menopausal transitions, delimiting the questions that can be asked and the solutions that can be imagined, both within and outside of work.

The case for the inclusion of under-represented cohorts in scientific and social scientific research is based not simply on filling 'gaps', but rather, following bell hooks (1984), moves excluded experiences from margin to centre to prompt a re-imagining of the social and research field. This enables us not simply to ask about what is missing from our prevailing understandings of menopause as lacunae to be filled, but rather to interrogate why and how non-normative perspectives are so easily overlooked and what difference it makes to public, personal and clinical responses to menopause when diverse relationships with the technologies of reproduction and hormonal intervention (and therefore with menopause itself) are placed at the centre of inquiry. For example, by focusing on cohorts who are largely unaccounted for in mainstream policy and practice, we can ask new questions critical to contemporary lives: What does a framing of menopause as the end of fertility mean to someone who is in/voluntarily childless? What do trans people do with their hormonal regimes around menopause? How does menopause as part of cancer treatment or gender transition challenge us to rethink gendered narratives of menopausal transitions and (healthy) ageing? How do those identifying as LGBTIQ+ feel about menopausal hormonal changes widely descried as problematic because they are 'de-gendering' (such as increased facial hair)?

'There's no such thing as THE menopause'

Central to this expanded bio-psycho-social understanding and the questions that it opens up, is the realisation that "[…] there is no such thing as *the* menopause" (Komesaroff et al 1997: 13). As Melby, Lock and Kaufert (2005: 507) conclude, "[there] is no universal menopausal entity or experience waiting to be exposed through systematic inquiry." As such, the goal of any research or intervention in this field should aim to highlight specificities and differences, rather than to uncover foundational commonalities inherent to a singularly knowable physiological process. The menopause is not *the* Change, as it is ominously known, but a shifting constellation of bio-psycho-social changes (Hunter and Edozien 2017), with bodies conceptualised not only as *changing* but also as subject to *being changed* (e.g. as a result of surgical, radio-therapeutic or hormonal intervention) and as *enacting change* in environment and social relations (for example, in the workplace (e.g. Hardy, Griffiths and Hutner 2017)), both reflecting and producing transformations in the employment patterns, caring responsibilities and visibility of mid-life and older women in public life. As such, these attempted re-imaginings of menopause should not hold the biomedical model in place and add layers of nuance and diversity on top but rather speak to the need to reimagine the medical model itself, as Hickey and Banks (2016) suggested above.

This proposed shift away from a strictly biomedical imaginary of menopause towards a bio-psycho-social lens that keeps a greater diversity of experience in view aligns with recent biomedical, social scientific and policy arguments for better understandings of menopause. For example, Brewis et al (2017: 15) observed in their evidence review of the effects of menopause on women's economic participation that there is a serious lack of knowledge about the ways in which employers and the government could better support those experiencing menopausal transitions. Indeed, it is important to note that those in the overlooked cohorts we have described above also perform both paid and unpaid work, and their experiences speak directly not only to menopausal experience in the workplace, but also to the wider social and cultural context within which those experiences are navigated and made meaningful. In a similar vein, a 2015 review in *Maturitas* argued for "a new conceptual framework for a healthy menopause", which will take the physical social and psychological elements of this transition into account (Jaspers et al 2015), while a 2016 article in the same journal describes the need for a "new model of care for healthy menopause" (Stute et al 2016).

These calls for more nuanced accounts of menopause also resonate with burgeoning interest in the popular domain and within policy circles as other chapters in this book describe. While we are pleased to see TV documentaries such as Kirsty Walk's *The Menopause and Me* (BBC 2017) and Mariella Frostrup's *The Truth About The Menopause* (BBC 2018), as well as published first-person accounts, we are concerned that even within these, menopausal transitions are positioned as something to be confessed (McLean 2018), held at bay (Somers 2014) or befriended (Raynor and Fitzgerald 2018). We note, more positively, however, that sometimes authors agree that menopause should be re-imagined (Steinke 2019). While this flourishing interest clearly signals an unmet demand for expanded and nuanced re-imaginings of an experience that is at once shared and unique, known and unrecognisable, it is important to keep an eye on whose voices and experiences get airplay.

Conclusion

We started this chapter with whales not just as an interesting hook, but to pose questions about how far we might push current thinking about menopause. 'Granny' the whale was smart, resourceful and central to the survival of her pod. She did not appear to be suffering from hormone-related decline or mourning the loss of her reproductive function (although how could we know?). For us, she is an inspiration in many regards. The perplexity she triggers, however, also points to hugely restrictive modes of thought that continue to shape scientific, biomedical and cultural thinking about ageing bodies, sexuality and sex/gender. We have argued in this chapter that existing research tends to repeat well-worn stories of loss and decline, (re)producing menopause as something to be dreaded and treated, and framing those who refuse treatment as woefully ignorant. It is time to break out of this circular trap, to listen more carefully to people's experiences and to create new stories.

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[i] Here, as in most literature on the menopause, the word 'women' is used to designate those undergoing 'female menopause.' Some scientists and clinicians also talk about 'male menopause', an ageing-related set of hormonal changes in people with male physiology and assigned male at birth. As we discuss, menopause-related changes also occur in trans and gender-fluid and gender-queer people and people of atypical sexual differentiation, but may have unique characteristics connected to individuals' histories of taking exogenous hormones and/or endogenous hormonal differences. There is very little research on these experiences. In this text we use the word 'women' when referring to specific knowledge and arguments about cis-gendered people assigned female at birth, fully acknowledging that there are also other kinds of women who may have different experiences of ageing and that some men and others who do not identify as men or women may also experience related kinds of issues because they have elements of 'female' physiology.

[ii] 'In Australia, around one in nine women born between 1973-78 were diagnosed with endometriosis by age 40-44. The condition may cost up to $9.7 billion in Australia per year, mostly through productivity losses' (https://www.menopause.org.au/hp/studies-published/1523-australian-women-and-cannabis-for-endometriosis-symptoms).

[iii] The webpage of the Australasian Menopause Society reports that there is 'sparse' evidence about the safety and efficacy of HRT for people with endometriosis (https://www.menopause.org.au/hp/information-sheets/1401-endometriosis-management-after-menopause).