GUYnecology: The Missing Science of Men's Reproductive Health by Rene Almeling, 2020, 304 pp, ISBN: 9780520289253

GUYnecology is an ambitious work, interrogating the 'missing' science of men's reproduction through uncovering the origins and reproductions of "non-knowledge" [p.5]. Focused on the United States, the book provides a generative starting point for future research on men and reproduction. Author Rene Almeling explores the intersection of "production, circulation, and reception" [p.170] in biomedical knowledge and non-knowledge and invites us to consider what might happen when knowledge of men's reproduction is produced. By contributing not only to biomedical but also sociological literature on reproduction, this book will be of interest to an interdisciplinary audience of medical and cultural sociologists, demographers, and public health experts.

Part 1 charts the attempts throughout US medical history to establish a specialisation relating to men's reproduction and reproductive health. The historiography details the repeated efforts to popularise this specialisation, whether as the field 'genito-urology', 'andrology' or 'urology'. Medical professionals were "ridiculed mercilessly" [p43] for their focus on men's genitals and reproduction, and the chapter explores how political and cultural discourses undermined andrology and its variants. Men's reproduction, rejected by biomedical institutions, was marginalised to more covert 'quack' providers who provided limited treatments of STIs and reproductive concerns discretely, outside the formal medical system and its privileges (and prejudices). Even with the attempted re-invigoration of a men's reproductive specialisation in the 1960s, including the formation of the American Society of Andrology, the compounding impact of biomedical and cultural non-knowledge on men's reproductive healthcare remained.

In Part 2, Chapter 3, Almeling and co-author Jenna Healey interrogate the paucity of studies on 'paternal effects', operationally defined in the book as how a man's age, behaviours and exposures that can affect sperm and, in turn, his children's health. The chapter illuminates how the increase in studies relating to the terms 'andrology / andrologist' and 'men's reproduction' since the 1960s remain minute relative to studies on women's reproduction. This "lacklustre level of attention" [p. 89] links, Almeling shows, to the consistent inability for andrology to gain recognition in the 19th Century.

By interrogating the reporting and circulation of pregnancy and reproductive health information in the US cultural milieu, this non-knowledge makes it almost inevitable that little public attention has been paid to

paternal effects. Through a small sample of outputs: New York Times articles and reports (n=138), two popular books on paternal effects, consumer websites (WebMD and Mayo Clinic), and Federal agencies, Almeling tests the hypothesis that the lack of bio-medical evidence is reflected in the (non)-circulation of information on men's reproduction in the public sphere. The chosen outputs are case studies, intended to represent various categories of knowledge sharing – mass media, bestselling books, medical and government web advice. There are limitations as the author acknowledges, for example the exclusion of social media platforms. It reflects the novel nature of the study and offers avenues for future inquiry.

Despite the increasing existence of evidence of paternal effects, Almeling illustrates the paucity of information of men's reproduction in the public sphere. Men's reproduction is frequently reduced to reports on sperm health and rarely on paternal effects. Sperm are made masculine, active, powerful in reporting, while risks of paternal effects such as a person's age are obscured or downplayed. Most information relates to infertility, and the only exception to their findings was a small national campaign on paternal effects by the non-profit organisation March of Dimes. These chapters compel us to understand how both medical shortcomings and continued gendered cultural outputs place the burden of reproduction on the pregnant body.

The impact of this medical and cultural "non-knowledge" of men's reproduction is interrogated through interviews with 40 men from a Northeastern city in the US. Part 3, Chapter 5 explores men's knowledge of reproduction and their cultural and biological understanding of sperm and fatherhood. Two strands of knowledge or "sperm tales" [p. 130] emerged: the first of an active sperm and passive egg, the second of the sperm and egg as two halves of a whole. Both "tales" mirror the active, anthropomorphised sperm messaging found in media and public health messaging. The lack of ready knowledge of men's reproduction, conversations on men's reproduction were puckered with hesitation and pauses, suggesting a total lack of cultural script. The sample of women interviewed as part of this study was left underexplored and perhaps could have complicated or complemented the evidence found among men.

In the final chapter, Almeling explores men's receptiveness to the idea of paternal effects through the creation of a public-health styled leaflet. The leaflet mirrors public health language by individualising paternal effects. Ultimately, men's knowledge of paternal effects was extremely limited. Responses to the leaflet revealed a "disjuncture" [p.156] among men: while they positively received information on paternal effects, they foresaw that their peers would likely dismiss this. It is an important finding on the messiness of health and reproduction that encourages further exploration on how to engage men.

Given the aims of the book, the more biomedical approach to paternal effects makes sense, though it could have been generative to explore how much of men's non-knowledge is due to discordant constructions of concepts 'paternity' and 'health' across socio-ecologies. Throughout the book are important references to the operationalisation of masculinities across the biological, cultural and personal, and this could have been further unpacked, not only in how non-knowledge was reproduced, but in men's own responses and their experience of the recruitment and interview process.

Explicitly operationalising sociological theories, such as 'hegemonic masculinity', would aid in making explicit some of the threads that tie together the mechanisms underlying political, social, and medical gendering and (re)production of non-knowledge of men's reproduction. Moreover, it would allow for greater interrogation, contextualisation and reflexivity of the qualitative data. The brief reference to the influence of "personal circumstances" [p.158] among respondents reminds us of just how important a situated, grounded approach to qualitative research can be for interrogating constructions of reproduction in the context of cultural scripts. However, it was not always clear why, for example, a respondent's mental health and housing status was described in the context of a conversation of cells and DNA, sometimes leaving the reader to assume implied connections.

GUYnecology is a generative book and acts as a foundation from which future scholars can build the field of reproductive health. The book convincingly argues the interconnectedness of political, social, and medical constructs in the production, circulation and reception of men's reproduction. Studies of reproduction must destabilise the notion that reproduction relates specifically to cis-gendered women, and Almeling leaves us to ponder the implications of considering *all people* as reproductive. It is, perhaps, this tantalising conclusive thought that will prove most generative for future research.