Ericka Johnson (2017) Gendering Drugs. Feminists Studies of Pharmaceuticals. Cham: Palgrave Macmillan. 232 pages. ISBN 978-3-319-51486-4

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Gendering Drugs edited by Ericka Johnson was published in 2017 by Palgrave Macmillan. The work presented is result of a five-year group research project and increase understanding about the intersection of pharmaceuticals and gender. On the one hand, drugs can be gendered and tailored to either men or women. On the other hand, they contribute to create gendered subjectivities for us, so they can produce gender.

This work analyses how drugs can be sexed/ gendered and produce sex/gender. Pharmaceuticals, as they are technologies and nonhuman elements, can be active agents involved in social and power relationships. They cannot be understood as being separated from each other, but as material-discursive entanglements. The drugs context analysis provides us the possibility of calling attention on how some discourses articulate subject positions and relations. The book has used a wide fieldwork, as drug pharmaceutical advertisements, medical guidelines and the experience of some of the people directly affected by the side effects of some of tools for health.

The work is theoretically premised in feminist technoscience studies with an interest in material-discursive bodies (Haraway, 1997; Barad, 2007) and how pharmaceuticals produce bodies and gender (Petryna et al., 2006). From a feminist critique, the concern for masculinities, non-binary sex/gender understandings, and the intersection of race, class, sexuality, and global inequalities is present. The posthuman approach extend analytical focus to incorporate nonhumans as active agents.

The book is divided into three parts and it has ten chapters in all. Part I analyses pharmaceuticals in different life phases and adjacent health concerns, such as Alzheimer's disease, prostate treatments or trans-childhood. The section starts with ethnographic observations of Tara Mehrabi of breeding transgenic Alzheimer's flies where Mehrabi worked as a laboratory assistant. The chapter shows that in Alzheimer's research not only are fly models tested upon, research also produces sex differences. The sexing processes of flies are essential for pharmaceutical development in Alzheimer well before pharmaceutical cure or treatment is manifest. As such the gendered nature of pharmaceuticals begins well before the materialisation of pharmaceuticals but a gendered binary notion of gender guides the very research methods and questions asked about diseases, in this case Alzheimer's. The next chapter is written by the editor of the book Ericka Johnson. It takes the example of alpha-blockers used to treat lower urinary tract secondary symptoms of benign prostate hyperplasia (LUTS/BPH) to develop an analysis based on Karen Barad's (2007) concepts of actant and intra-action. Based on three sets of different clinical practice guidelines the chapter concludes that alpha-blockers treat and increase the size of the prostate, creating also a pharmaceuticalized prostate. The last chapter is written by Celia Roberts and Cron Cronshaw focuses on trans-childhood and the uses of the gonadotropin-releasing hormone (GnRH) used to prevent pubertal development. The authors argue that we live in a 'pharmacopornographic era', as Paul Preciado (2013) says, in which legal minors cannot engage in adult-centric policies. They are dependent on adults to obtain pharmaceuticals. The authors advocate for the recognition of the needs experienced which are produced partially in these kinds of discourses and practices which try to solve them, and the obligation of including trans people as an active and essential part in these politics.

Part II analyses advertisements of pharmaceutical treatments, which includes commercial images and discourses and the way they also prescribe relational practices for individual subjectivities. First, Ericka Johnson and Cecilia Asberg analyse two pharmaceuticals with the assumption that they also prescribe particular ways of becoming a healthy subject. They analyse three advertisements, two about Alzheimer's drug and one about a benign prostatic hyperplasia (BPH) drug. In all of cases, they conclude, the drug represents an important part of the relational agency between the potential users of the drugs and their partners, introducing a unique element in intimate relationships. After this, the Lisa Lindén studies Gardasil the vaccine advertisements produced by pharmaceutical company Sanofi Pasteur in Sweden against cancer caused by human papillomavirus (HPV) aimed at young girls. The advertisements show the vaccine as a product through which parents can exercise care responsibly. Advertisements were especially focused on mothers, who are made responsible for such matter, leaving fathers an invisible role: vaccines appear to be as nonhuman participant involved in the relationships of care. This second part demonstrates the importance of addressing the pharmaceutical advertisement as material-discursive elements, which take part in the construction of diseases and subjectivities.

Part III analyses throughout its three chapters gendering in HPV campaigns in three different contexts: Colombia, the UK and Austria. It commences with an analysis by Oscar Javier Maldonado of tensions around the introduction of HPV vaccines in Colombia. The vaccine represents a new gendered technology aimed at girls as sexualized subjects. The context implies

that the relation between sex and pathology could reproduce a stigma. Maldonado reflects on the intersections of race, gender and class in the cancer prevention campaigns as well as the relationship between HPV and social difference. The chapter is followed by Ali Hanbury's analysis about the introduction of HPV vaccine in the UK as a possibility to make young women responsible for their own health and so their sexual partners' health, too. Hanbury takes five cases of experiences of vaccine injury to prove deficiencies in this vaccination program. Despite the fact that the vaccine is presented as being genderneutral, vaccination programmes continue to be paternalistic especially over women's bodies and autonomy. Finally, Lisa Lindén and Sina Busse describe how Austria is the first country to offer the HPV vaccine to both girls and boys with no expense. Offering the vaccine universally changes the gendered focus; now girls are not the one and only group at risk but all children equally. The analysis illustrates how sexual health is built and how a discursive shift makes changes possible. This third part is relevant due to the fact that a posthuman approach of HPV diagnosis experience is very interesting and could open new analysis about it.

Concerning to the omissions in the book along the three parts, in the first one in the chapter about Alzheimer it would have been interesting to deepen in the relation between the construction of the pharmaceutical in the laboratory and the patients experience with the treatment. In addition, the third chapter about trans children and pharmaceuticals could have mentioned the strategies developed in some cases to obtain these pharmaceuticals in an illegal way as an evidence of the situation in terms of politics which concern trans people. The second part would have been more completed with the pharmaceuticals' advertisements analysis of other diseases or health campaign because this method of analysis is very interesting and enlightening. Finally, the third part would have been better with more information about the situation of the HPV vaccine in more countries.

In a nutshell, the book is a relevant contribution which highlight the subjective processes in science and evince how nonhuman takes part in gender construction. It throws light on the construction of bodies and subjects in relation

to pharmaceuticals, and the multiplicity of such material-discursive entanglements.

References

Barad K (2007) *Meeting the Universe Halfway: Quantum Physics and the Entanglement of Matter and Meaning.*Durham, NC: Duke University Press.

Haraway D (1991) Simians, Cyborgs, and Women. The Reinvention of Nature. New York: Routledge.

Petryna A, Lakoff A and Kleinman A (2006) *Global Pharmaceuticals. Ethics, Markets, Practices*. Durham, NC: Duke University Press.

Preciado P (2013) Testo Junkie. New York: Feminist Press.