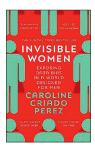
Life & Times **Books**

Invisible Women: Exposing Data Bias in a World Designed For Men Caroline Criado Perez

Vintage, 2020, PB, 432pp, £7.99, 978-1784706289



MIND THE GAP

This book is a startling exposé of the bias that exists against half the world's population. Through case studies, Perez illustrates the impact on women's lives of a world constructed on male data. Three themes recur: the effects on the female body, women's unpaid care burden, and the impact of male violence against women.

In 1977, in the US, women of childbearing age were excluded from drug trials, because of the thalidomide scandal. Women remain under-represented in studies. Menstrual cycle impacts have been found for antipsychotics, antihistamines, antibiotics, and heart medication, meaning that dosages can sometimes be too high or too low,2 and drug-induced arrhythmias more likely.3,4 UK research suggests that women are 50% more likely to be misdiagnosed following a heart attack,5 not only because doctors fail to recognise signs, formerly attributed as 'atypical,' but also that biomarkers are geared towards men, for example, the normal diagnostic threshold of troponin may be too high forwomen.6 Even medical textbooks have a male default bias,7 and medical curricula have been found lacking in gender-related issues.8 Town planning, public transport, car seat-belt design, toilet facilities, pension shortfalls, smartphone tracking apps, and occupational health are subjects revealed as to women's disadvantage. There are a wealth of references for further reading. The facts are there; we just haven't been looking

So what has to change? The author is clear: we must close the female representation gap in all spheres of life. Social attitudes must change. Women must become more visible.

Soon after I read Invisible Women, two noteworthy stories hit the headlines. In January 2020, the BBC journalist Samira Ahmed won an equal pay tribunal when it transpired she was paid just one-sixth of the salary that a male colleague earned who undertook a similar job.9 The same day, the Institute for Public Policy Research stated that the gender pay gap for GPs was as high as 35%, with female GPs earning, on average, £40 000 a year less than their male counterparts, in part because of a two-tier system. 10 On the 50th anniversary of the 1975 Equal Pay Act progress is slow.

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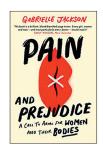
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Pain and Prejudice: a Call to Arms for Women and Their Bodies Gabrielle Jackson

Piatkus, 2019, PB, 368pp, £14.99, 978-0349424552



THE PLEA TO BE HEARD

It is a truth universally acknowledged, that man is the default human being, and any deviation from that is atypical, abnormal, and deficient. This is the conclusion I reached on reading Jackson's Pain and Prejudice, and this, surely, must change. Following on from *Invisible Women*, if further proof of the gender data gap and the bias against women's health is needed, it can be found in this polemic.

Fourteen years after receiving the diagnoses of endometriosis and adenomyosis, and after suffering pain for many years, the author is shocked to find that little has changed in the understanding or management of these conditions. One in 10 women of reproductive age has endometriosis, yet it is funded at 5% of the funding rate for diabetes, despite affecting the same number of women and costing the economy more. Other grossly underdiagnosed and mismanaged conditions such as irritable bowel syndrome, migraine, pelvic pain, and auto-immune conditions also come under the spotlight, as the author charts our historical understanding of the diseases and their social impact.

The author provides interesting commentary on social taboos. For example, in India, poor menstrual hygiene severely impacts girls' education and causes 70% of all reproductive illnesses. In many cultures sex is used as a method of control, sometimes with extreme consequences, such as stoning, female genital mutilation, foot-binding, and honour killing. There is also a thought-provoking critique on discriminatory workplace culture (including that affecting women in medicine), and analysis of the #MeToo movement.

The chapters on female anatomy and