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Counting the Hidden Costs of Male Reproductive Health

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Men participate less in health care-seeking than women and women make twice as many primary care visits as men. Thus, men are more likely to miss opportunities for preventative care and instead require help primarily for critical and acute health care issues. For example, testicular cancer (TC) is a critical health issue in men of reproductive age. Routine primary health care check-ups could afford early TC detection and less invasive therapeutic strategies. Perhaps more compelling are new data that point to an association between male infertility and somatic health [1].

For many men of reproductive age, participation in medically assisted reproduction (MAR) may represent the first time as an adult that a comprehensive medical and reproductive history is taken, and a physical examination performed. Medical evaluations for fertility are not only revealing earlier detection of, for example, TC but also of occult metabolic disorders and cardiovascular disease [2].

MAR has also enabled family building to be increasingly delayed. However, with advanced paternal age an even greater health risk looms on the horizon. Data clearly show that advanced paternal age at conception

can impact offspring in the form of an increased risk for autism, schizophrenia and other disorders [3]. Thus, in addition to infertility, male reproductive health has a broad-spectrum of comorbidities and transgenerational impacts, and for which our scientific knowledge is only in very early stages. More directly, there is very little general public awareness of this 'canary in the coalmine' scenario.

The global MAR market can readily be estimated at \$33 billion USD with projected increase to almost \$50 billion USD in 10 years [4]. The male contributes to approximately 40% of a couple's infertility; reflecting more than \$10 billion USD of the global MAR industry. In dramatic contrast, impactful databases, such as, Pew Charitable Trust, Eurostat, Centers for Disease Control and Prevention (CDC), conspicuously lack comprehensive information regarding males, reproductive health and fertility.

There is a present and growing crisis in male reproductive health and quite possibly their offspring for which the social and economic impact remains a mystery. This is a remarkable deficiency. With the collective bell-weather changes taking place as described

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above, we urge that strong action be taken to characterize and detail the health and socio-economic impact so that it can inform policy, education, practice and global health [5].

Conflict of Interest

Christopher J. De Jonge: no conflicts to disclose.

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