

## Review – Andrology

# Male Sexual and Reproductive Health—Does the Urologist Have a Role in Addressing Gender Inequality in Life Expectancy?

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## Article info

Associate Editor: Richard Lee

### Keywords:

Gender gap  
Life expectancy  
Prostate cancer  
Testosterone late-onset hypogonadism  
Testosterone replacement therapy  
Androgen deprivation  
Cardiovascular disease  
Diabetes  
Metabolic syndrome  
Male infertility

## Abstract

Despite considerable public health initiatives in the past century, there remains a significant gender inequality in life expectancy. The Global Burden of Diseases study has highlighted that the life expectancy for men is 70.5 years, compared with 75.6 years for women. This discrepancy in mortality appears to be related to a disproportionately higher number of preventable and premature male deaths. Whilst there has been an increased focus on men's health, as evidenced by the establishment of men's health charities and governmental legislation promoting equality, a recent World Health Organization report has highlighted that there is still a prevailing misconception that the higher rate of premature mortality amongst men is a natural phenomenon. We explore the association of male sexual and reproductive health-related diseases and the potential role of a urologist in addressing gender inequality in life expectancy.

**Patient summary:** In this report, we discuss the causes for the gender gap in life expectancy and highlight that men continue to have a higher rate of premature death than women, which is associated with diseases of the male reproductive system. Furthermore, this not only appears to be related to a number of metabolic and lifestyle factors, but may also be the result of the increased risk of cancer in men with sexual and reproductive health-related diseases.

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## 1. Introduction

A recent World Health Organization (WHO) [1] report has highlighted that there continues to be significant gender inequality in life expectancy, which is associated with a disproportionately higher number of male preventable diseases and premature deaths (death occurring between the ages of 30 and 69 years). For example, in the UK, the average life expectancy for men is 79.6 years compared with 83.2 years in women [2]. This difference in life expectancy exists worldwide, and the recent Global Burden of Diseases, Injuries, and Risk Factors study [3] has highlighted that the world average male life expectancy is 5.1 years less than that for a female.

The main contributors to male mortality in Europe are noncommunicable diseases (namely, cardiovascular disease [CVD], cancer, diabetes, and respiratory disease) and injuries [1]. In 2015, the aforementioned disorders accounted for >4 million male deaths [1].

Whilst there has been a political drive from governmental institutions and charities to address health gender inequalities and raise the profile of men's health (eg, Movember Foundation: <https://www.movember.com>), the latest WHO report [1] suggests that gender inequality in life expectancy still prevails.

The WHO report [1] also highlights that male sexual and reproductive health is under-reported, with a paucity of data on the prevalence of male infertility or sexually transmitted infections.

Unlike with women's health care, where there are gender-specific health services (eg, breast screening, cervical screening, and gynaecological services), men's health care services are neither usually gender specific nor streamlined.

It is also widely acknowledged that a contributing factor to premature male death is related to behavioural issues and risk taking. It is estimated that 73% of all road traffic deaths occur in men under the age of 25 years [4]. Globally, injuries (road traffic accidents, drowning, falls, poisoning, and self-harm) contributed to the top five leading causes of death in young people aged 15–29 years [5,6]. Male injuries accounted for 67% of all injury deaths [7]. Furthermore, men are more likely to be both the perpetrators and the victims of homicide [8]. Clearly, further research is needed to explore these gender behavioural differences in order to seek solutions to mitigate this risky and violent behaviour. This seems to also highlight that a major deficiency exists in our current understanding of men's health and is undoubtedly a representative of a wider issue with gender-based barriers.

This review focuses on the medical rather than psychological and mental health causes of premature male mortality. In particular, we offer suggestions on how a streamlined and dedicated men's health clinic could address the issue of premature male death by screening and treating disorders in male sexual and reproductive health, including lifestyle and metabolic factors.

## 2. Methodology

The European Association of Urology (EAU) has developed a new guidelines working group, which will provide

clinicians and patients with a systematic and evidence-based approach to male reproductive and sexual health, and aims to promote men's health in general and increase awareness of gender health inequalities globally. In line with this goal, this narrative review explores the association of diseases of the male reproductive system and gender gap in life expectancy.

## 3. What is men's health?

The WHO defines health as “of complete physical, mental and social wellbeing and not merely the absence of disease or infirmity” [9]. This gender-neutral definition does not take into account the different health and social needs of men compared with women. Subsequently, the Men's Health Forum in the UK defines a male health issue as “one arising from physiological, psychological, social, cultural or environmental factors that have a specific impact on boys or men and/or in which interventions are required to achieve improvements in health and well-being at either the individual or population level” [10]. Bardehle et al [11] performed a review comparing the different definitions of men's health within the period of 1990–2014 and noted that definitions are changing from a more pathogenic focused model to one that also encompasses salutogenesis. However, the lack of a consensus on the definition of men's health makes estimation of the scale of the issue uncertain.

## 4. CVD and the urologist

The leading cause of both male mortality and premature mortality is CVD [1,12,13]. The disability-adjusted life year (DALY) is a measure of the years of life lost due to premature death from a condition and years lived with a disability due to a condition, with 1 DALY equating to 1 healthy year of life lost. CVD contributed to 36.4 million DALYs lost in European men (24% of all lost DALYs) [13]. Studies indicate that the major risk factors for CVD, including hypertension [14,15], smoking [16], and elevated cholesterol [17–20], are all more prevalent in men than in women. This may be due to a combination of biological and behavioural factors; men have a diet more enriched in salt than women [1,21] and oestrogens are possibly cardioprotective [22–24]. Although not gender specific, obesity rates have also been reported to be on the rise with the average body mass index (BMI) increasing from 24.1 in 1975 to 27.4 in 2014 [25]. In addition to this, middle-aged men are at a significantly higher risk of diabetes than women [26–29].

Men have higher premature death rates from CVD because they tend to have higher rates of all major risk factors. It is important to note that on average (across all social classes) men have been shown to smoke earlier and more cigarettes per day than women [1,30]. This contributes to higher susceptibility to chronic respiratory diseases, which represents one of the other major causes of premature adult deaths worldwide [1].

Given that erectile dysfunction (ED) is well recognised as one of the earliest signs of atherosclerotic disease [31–33], it

places urologists with a unique opportunity for screening the aforementioned risk factors and offering health promotion in men with ED. Accordingly, at least six meta-analyses have confirmed the relationship between ED and CVD risk [34–39].

Furthermore, it is increasingly apparent that male infertility is associated with CVD, metabolic syndrome (MetS) [40], and type 2 diabetes [41–43].

Table 1 summarises the studies associating male infertility with an increased Charlson comorbidity score, which is a validated predictor of 1-yr mortality.

In addition to this, abnormal semen parameters have been demonstrated to be associated with prediabetes [44], diabetes [45] and hypertension [46]. Similarly, Eisenberg et al [47] identified that men with at least two abnormal semen parameters had a 2.3 times increased mortality risk (95% confidence interval 1.12–4.65) over a 20-year study period compared with those with normal semen analysis.

Indeed, Jensen et al [48] reviewed a cohort of 43 277 infertile Danish men (with a follow-up of 40 years) and observed a dose-response relationship with higher semen quality and decreased all-cause mortality. Interestingly, the increased mortality associated with abnormal semen parameters was due to a diverse range of diseases, rather than diseases related to lifestyle factors such as CVD and diabetes. This, therefore, implies that sperm quality may be a proxy for general health and urologists can be the gatekeeper to men's health.

It is now also recognised that dietary and life style factors are associated with both ED [49,50] and infertility [51,52]. Therefore, male sexual and reproductive assessment also offers the opportunity for lifestyle modification, with not only consequential beneficial effects on CVD risk, but also positive effects on fertility and sexual function. Studies have demonstrated that weight loss can improve semen parameters [53] and erectile function [54]. Furthermore, cessation of smoking [55] has been demonstrated to significantly improve erectile function. Whether smoking cessation improves sperm production in infertile smokers is not yet clear.

Focusing on ethnic groups with ED or infertility may also enable targeting of subpopulations at higher risk for CVD.

For example, it is well recognised [56] that men of South Asian descent have increased risk of CVD morbidity and mortality as compared with the general population. This is especially true amongst younger generations [56]. Interestingly, this ethnic group did not benefit from the overall decline in CVD mortality in the past decade [56]. Therefore, urological clinics treating men with sexual and reproductive health can also present an opportunity to specifically target ethnic groups for health screening, similar to the targeting of Afro-Caribbean men for prostate cancer screening (see below).

Whilst both EAU and American Urological Association guidelines groups recommend screening for CVD risk factors in men with ED [57,58], unfortunately, in clinical practice, a CVD risk assessment is likely to be neglected. Thus, a dedicated men's health service that is able to accommodate CVD screening (eg, elucidating any cardiac symptoms, and measurement of blood pressure, lipid profile, and HbA1c) and lifestyle modification advice (smoking cessation, diet modification, and exercise information), when assessing male sexual and reproductive health, represents a unique and tangible opportunity for the urologist to potentially address male CVD morbidity and risk. This holistic approach would likely be attractive to the patient, as it offers a streamlined consultation, which provides not only an opportunity for CVD screening and health modification, but also treatment of their primary complaint (eg, ED) [59].

## 5. Hypogonadism

The recognition of testosterone deficiency in diabetes is a major step forward in the world of men's health. ED is a common presenting symptom of type 2 diabetes. The American Diabetes Standards of Care include the following recommendation (number 4.17): "In men with diabetes who have symptoms or signs of hypogonadism, such as decreased sexual desire (libido) or activity, or ED, consider screening with a morning serum testosterone level" [60]. Whilst there are concerns about the overuse of testosterone replacement therapy (TRT) and some studies contradicting its health virtues, there is increasing evidence that

**Table 1 – Studies highlighting the association between male infertility and the Carlson Comorbidity Index (CCI).**

Study reference	Methodology	Results
Salonia et al (2009) [105]	Prospective case-control study	The infertile cohort had a significantly higher rate of comorbidities (CCI: 0.33 [0.8] vs 0.14 [0.5]; $p < 0.001$ ; 95% CI 0.08–0.29)
Eisenberg et al (2015) [106]	A total of 344 men with male factor infertility compared with 293 age-matched fertile men Retrospective analysis of semen parameters, comorbidities, and CCI of 9387 men referred to infertility clinic	Higher CCI scores associated with lower sperm motility, count, and morphology ( $p < 0.01$ )
Ventimiglia et al (2015) [107]	Cross-sectional study; analysis of the CCI and semen analysis of 2100 infertile men	Endocrine ( $p < 0.02$ ), dermatological ( $p < 0.01$ ), and genitourinary ( $p < 0.01$ ) disorders associated with abnormal semen parameters Sperm concentration $< 45.6$ million/ml conferred with 2.74 increased susceptibility of having a CCI of $\geq 1$

CI = confidence interval.

when used appropriately it can offer protective health benefits. For example, the TIMES 2 study demonstrated that TRT may improve insulin sensitivity and glycaemic control in hypogonadal men with type 2 diabetes [61–64]. Furthermore, the TIMES 2 study also demonstrated that TRT improved cholesterol levels, body fat composition, and sexual health. Moreover, Corona et al [65,66] demonstrated that MetS has an independent association with hypogonadism, with TRT associated with a significant reduction in fasting glucose, triglycerides, and waist circumference. Similarly, a randomised controlled trial examining the impact of TRT in men with both MetS and hypogonadism highlighted significant improvements in weight, BMI, and weight circumference [67]. The aforementioned studies highlight a potential intimate association between infertility, hypogonadism, diabetes, and MetS. Therefore, it could be argued that men who present with symptoms of hypogonadism should also be screened and risk stratified for CVD. Whilst there is a lack of consensus amongst several systematic reviews [68–71] with regard to the cardiovascular safety of TRT, overall a number of authors argue that there is strong and consistent evidence that TRT is safe when hypogonadism is adequately diagnosed and managed [68,72,73]. Given the controversy surrounding the overuse of TRT, it seems logical that men with hypogonadism should be seen in a gender-specific service that offers informed advice and a holistic, multidisciplinary approach encompassing endocrinological, cardiovascular, and sexual reproductive assessment.

## 6. Male cancers, survivorship, and sexual and reproductive health

Cancer is the second most common contributor to disease burden in European men [1]. The most common cancer (excluding nonmelanoma skin cancer) among European men is prostate cancer [74].

Although there is no conclusive evidence that any single diet has a protective effect against prostate cancer, a recent review [75] highlighted that physical activity, a normal BMI, and a diet rich in cruciferous vegetables with reduced processed red meat may confer to a decreased risk of prostate cancer progression. Therefore, discussing men's health including risk of prostate cancer represents an opportunity to inform patients about optimisation of male lifestyle factors. However, there is also some evidence to suggest that men on TRT may have a lower risk of high-grade cancer [76]. However, it is important to appreciate that the mechanism for this is currently unknown.

As mentioned above, the issues of health promotion in men from ethnic groups should also be highlighted. It is well recognised that Afro-Caribbean men with prostate cancer have double the mortality rate than Caucasian men [77]. It is not clear from studies whether this is a reflection of biological causes or due to cultural and socioeconomic factors that lead to delayed detection. Improvements in diagnostics, interventional therapies, and public awareness have helped improve prostate cancer survival rates and also narrowed this discrepancy in ethnic mortality rates. As an example, the Surveillance, Epidemiology, and End Results (SEER) data

[78] indicate that the 5-yr survival rate for black males has increased from 60.7% (1975–1977) to 97.4% (2007–2013). The progress achieved with African-American survival is likely to be attributable to better access to health care or diagnostics, and highlights that a focused men's health care policy can potentially improve life expectancy.

With advancements in cancer therapies, there has been a subsequent increase in life expectancy and emphasis on survivorship programmes. Chemotherapy, radiotherapy, and oncological surgery can negatively impact fertility and sexual function, in particular interventions for prostate cancer [79,80]. Consequently, key priorities to any men's health clinic are the survivorship model and addressing both the physical sequelae of interventions for cancer and the psychological support for men [81]. Urologists dealing with sexual and reproductive health are therefore primed to act as a vanguard for cancer survivorship programmes.

It is also compelling that there is substantial emerging evidence to suggest that men with infertility are at a higher risk of testicular cancer (Table 2). Skakkebaek et al [82] has postulated the theory that the rising incidence of testicular cancer, cryptorchidism, hypospadias, and male infertility have all been linked to male in utero exposure to environmental endocrine disrupting chemicals (EDCs). Chemicals such as bisphenol A and phthalate, which are widespread in the environment and feature in many household items, have been shown to induce reproductive abnormalities in animal studies [83]; however, these have also been associated with abnormal semen parameters [84,85] and sexual dysfunction [86] in humans. Similarly, there is evidence that EDCs may play a role in the development of cancer [87] and MetS [88]. This *testicular dysgenesis syndrome* has been implicated as a major deterrent to both current and future generations' male sexual and reproductive health, and may account for the observed increases in cancer in this cohort of men. Jacobsen et al [89] reported that men diagnosed with testicular cancer had a lower standardised fertilised ratio than the general population prior to any cancer treatment.

There are also studies linking male infertility to other subtypes of cancer (Table 3). Eisenberg et al [90] has compared data from the Texas Cancer Registry and andrology clinics, and observed that infertile men were 1.7 times more likely to develop cancer than the general population. However, it must be appreciated this association is not as well established and there is evidence that infertility may confer a reduced risk of prostate cancer [91]. This association between infertility and cancer has been speculated to be related to an underlying genetic disorder [92], and this may explain the reported higher familial risk of cancer in patients with infertility [93]. Given the above evidence, infertile men should be screened for testicular cancers, and be made aware of potential key symptoms and signs of other cancers that may allow for early detection. The potential advantage of a male-focused health approach is that it not only provides an opportunity for early cancer detection in high-risk populations, but also allows streamlining of male survivorship programmes, with a dedicated psychosocial support team and fertility preservation service.

**Table 2 – Studies highlighting the association between testicular cancer and male subfertility.**

Study reference	Methodology	Arms	Results
Haughey et al (1989) [108]	Case-control study	250 testicular cancer patients	Prior to the diagnosis, testicular cancer patients had subfertility (OR 4.77, 95% CI 0.40–52.5) and low sperm count (OR 2.61, 95% CI 0.4–17.1) compared with controls.
		250 age-, occupation-, and marital status-matched controls	
Møller and Skakkebaek (1999) [109]	Case-control study	514 testicular cancer patients	Reduced risk of testicular cancer was associated with paternity (RR 0.63, 95% CI 0.47–0.85).
		720 age-matched controls	
Jacobsen et al (2000) [89]	Case-control study	3530 testicular cancer patients	Prior to diagnosis, testicular cancer patients had reduced fertility (SFRR 0.93, 95% CI 0.89–0.97) and a significantly lower proportion of boys ( $p = 0.02$ ) compared with the controls.
		Comparisons made with the Danish population	
Jacobsen et al (2000) [110]	Cohort study	32 442 men undergoing semen analysis for subfertility	Men undergoing semen analysis for fertility issues had an increased risk of testicular cancer (SIR 1.6; 95% CI 1.3–1.9).
		Comparisons made with the Danish population	
Richiardi et al (2004) [111]	Case-control study	4592 testicular cancer patients	Prior to cancer diagnosis, testicular cancer patients had a lower number of children (OR 0.71, 95% CI 0.62–0.81; at least three children compared with no children) compared with controls.
		12 254 age-, year of birth-, and location-matched controls	
Doria-Rose et al (2005) [112]	Case-control study	329 testicular cancer patients	Paternity was associated with reduced testicular cancer risk (age-adjusted OR 0.76, 95% CI 0.54–1.06). Infertility prior to cancer diagnosis, associated with increased risk of testicular cancer (OR 2.40, 95% CI 1.00–5.77)
		672 age-, race-, and location-matched controls	
Raman et al (2005) [113]	Cohort study	3847 patients with infertility and abnormal semen analysis	Infertile men had an increased risk of testicular cancer (SIR 18.3, 95% CI 18.0–18.8) compared with controls.
		Comparisons made with American population	
Baker et al (2005) [114]	Case-control study	201 testicular cancer patients	Prior to cancer diagnosis, testicular cancer patients were more likely than controls to report having an infertility diagnosis (OR 9.47, 95% CI 1.19–75.2) or a low sperm count (OR 5.85, 95% CI 1.28–26.7).
		204 age- and location-matched controls	
Olesen et al (2007) [115]	Cohort study	453 patients undergoing testicular biopsy for infertility	The prevalence of carcinoma in situ was 2.2% (95% CI 1.1–4.0%). This exceeds the estimated risk of 0.45% for the controls.
		Comparisons made with the Danish population	
Walsh et al (2009) [116]	Cohort study	22 562 men with fertility issues	Men with male factor infertility had 3 times higher risk of developing testicular cancer (HR 2.8, 95% CI 1.3–6.0) compared with the control population.
		Comparison made with the American population	
Eisenberg et al (2015) [117]	Cohort study	76 083 infertile men	Infertile men had a higher risk of testicular cancer than the control group (HR 1.99, 95% CI 1.47–2.70) and men who had undergone vasectomy (HR 1.50, 95% CI 1.01–2.22).
		112 655 men who had undergone a vasectomy	
		760 830 control men (fertile and not undergone vasectomy)	
Hanson et al (2016) [118]	Cohort study	20 433 men who had undergone a semen analysis	Men with oligospermia based on low concentration (HR 11.9, 95% CI 4.9–28.8) or low count (HR 10.3, 95% CI 4.1–26.2) and infertile men with normozoospermia (HR 2.9, 95% CI 1.2–6.7) had an increased risk of testicular cancer compared with fertile controls.
		20 433 age- and birth year-matched controls	

CI = confidence interval; HR = hazard ratio; OR = odds ratio; RR = relative risk; SFRR = standardised fertility rate ratio; SIR = standardised incidence ratio.

## 7. Utilisation of health care resources

A number of studies [94,95] reported that men have higher death rates than women, but women do worse with regard to physical strength, disability, and other health outcomes. This male-female health-survival paradox would imply that

gender behaviours and utility of health care may be contributing to the gender gap in mortality.

Men have been shown to be less engaged with health services, and this has been linked to male stereotypes (especially those related to masculinity conventions) [96]. A Danish population study [97] analysing nationwide



**Table 3 – Studies highlighting the association between nontesticular cancer and male subfertility.**

Study reference	Methodology	Arms	Results
Jacobsen et al (2000) [110]	Cohort study	32 442 men undergoing semen analysis for subfertility	Men undergoing semen analysis for fertility issues had an increased risk of cancers of peritoneum and digestive organs (SIR 3.7; 95% CI 1.3–8.0).
		Comparisons made with the Danish population	
Walsh et al (2010) [119]	Cohort study	22 562 men evaluated for infertility	Men with male factor infertility had an increased risk (HR 2.6, 95% CI 1.4–4.8) of high-grade prostate cancer compared with controls.
		Comparison made with the American population	
Eisenberg et al (2013) [90]	Cohort study	2238 infertile men	Infertile men had a higher risk of overall cancer (SIR 1.7, 95% CI 1.2–2.5) than control cohort. Azoospermic men had an elevated risk of overall cancer (cancer subtypes included brain and central nervous system, lymphoma, melanoma, prostate, small intestine, stomach, and testis cancers; SIR 2.9, 95% CI 1.4–5.4).
		Comparison made with the American population	
Eisenberg et al (2015) [117]	Cohort study	76 083 infertile men	Infertile men had a 49% higher risk of developing cancer (all subtypes) than controls. Specifically, infertile men had higher risks of melanoma (HR 1.37, 95% CI 1.06–1.77), prostate cancer (HR 1.78, 95% CI 1.41–2.25), bladder cancer (HR 2.29, 95% CI 1.49–3.50), thyroid cancer (HR 1.52, 95% CI 1.01–2.30), Hodgkin's lymphoma (HR 1.67, 95% CI 1.04–2.67), non-Hodgkin's lymphoma (HR 1.76, 95% CI 1.39–2.23), and leukaemia (HR 1.82, 95% CI 1.29–2.59) compared with controls.
		112 655 men who had undergone a vasectomy	
		760 830 control men (fertile and not undergone vasectomy)	
Hanson et al (2016) [118]	Cohort study	20 433 men who had undergone a semen analysis	Men with a high sperm concentration (HR 2.1, 95% CI 1.0–4.4) or high sperm count (HR 2.7, 95% CI 1.4–5.3) had an increased risk of melanoma compared with fertile controls.
		20 433 age- and birth year-matched controls	

CI = confidence interval; HR = hazard ratio; SIR = standardised incidence ratio.

health care registries reported that females have higher frequencies of contact with their general practitioner, but men have higher rates of hospital admissions and mortality. The authors postulate that these trends are related to a greater male reluctance to seek medical help, and hence delayed diagnosis and worse prognosis.

In addition to this, men are less aware of common cancer symptoms [98] and also other pathologies. An example of this is the lack of knowledge surrounding the human papillomavirus (HPV) and its associated sequelae. Capogrosso et al [99] reported that in a cohort of 1106 patients (70.6% male) presenting to an academic sexual and reproductive medicine centre, almost half were not aware of the HPV infection. The increased reluctance seen amongst men to seek medical care is arguably more detrimental when we consider that men adopt more unhealthy behaviour [4,100]. Research has shown that men are more likely to be heavy alcohol drinkers and to participate in illicit drug use than women [101]. Furthermore, higher male suicide rates [102] can be partly explained by men's reluctance to seek help [103]. Unfortunately, disease prevention strategies often target women, and few initiatives have specifically targeted men. Clearly, men have different health needs, and studies [1,104] suggest that men are more attracted to self-management support and also programmes that have a clear purpose for an intervention. Thus, a dedicated men's health clinic that can offer

male-tailored health initiatives would therefore go some way to ameliorating this gender-specific indifference to health care with appropriate educational and psychological support. Moreover, a dedicated clinic will offer interaction with peers, gather sexual health information, and be a point of contact for help. This will strengthen the role of social support in men's health.

## 8. The vision for a men's health clinic

The WHO report has highlighted that current medical initiatives and global health policies are failing men, and that a different model of health care is urgently required. In this context, the urologist has a prime opportunity not only to further develop the concept of men's health, but also to potentially help lessen the gender gap in terms of mortality (Fig. 1).

Screening for male reproductive and sexual health, CVD, and cancers, with the development of survivorship programmes and psychological counselling should become integrated to urological care. A specialised clinic with clear diagnostic pathways and protocols incorporating a multi-disciplinary team approach (Fig. 1) and gender- and disease-specific patient-reported outcome measures would be invaluable to the promotion of men's health. Moreover, this will allow for novel data acquisition, which will improve our current understanding of men's health and the

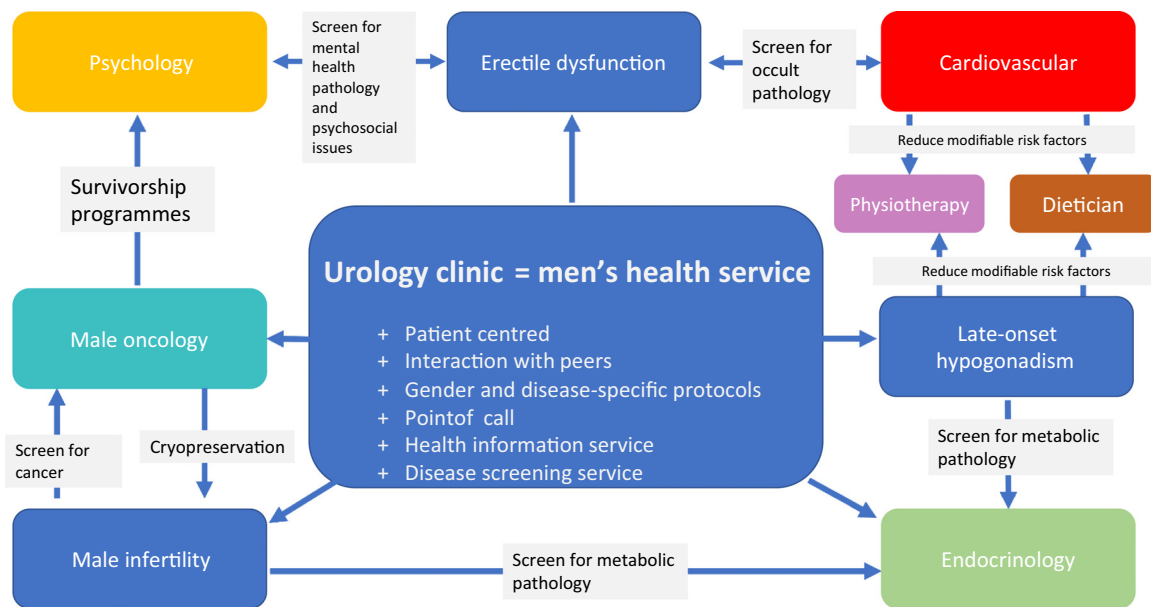


Fig. 1 – The men's health concept in urology.

inter-relationship between male sexual and reproductive health, CVD, and cancers.

Service provision will need to incorporate a bidirectional approach with streamlining of care.

## 9. Conclusions

Globally, men's life expectancy is still inferior to that of women, primarily due to a higher prevalence of male preventable diseases and premature deaths. Nevertheless, whilst there has been room for optimism in the establishment of charities highlighting inequalities in men's health, there still remains a considerable difference in gender-specific mortality rates.

Campaigns such as “Movember” have increased public awareness of male-specific cancers, and legislation such as the Equality Act (2006) mandates public authorities to strive for gender equality and public health programmes. However, there still remains a global gender gap in mortality, and there is an urgent need to develop the concept of a men's health programme. A significant issue is that there is currently no reference specialist within the framework of health care structures that can be a true advocate of male well-being. However, the urologist is in a prime position to drive this change in health care policy, which is likely to be not only cost effective but also pivotal in bridging the gender gap in life expectancy.

**Author contributions:** Tharu Tharakan had full access to all the data in the study and takes responsibility for the integrity of the data and the accuracy of the data analysis.

**Study concept and design:** Tharakan, Minhas.

**Acquisition of data:** Tharakan, Minhas.

**Analysis and interpretation of data:** Tharakan, Minhas.

**Drafting of the manuscript:** Tharakan, Minhas, Salonia.

**Critical revision of the manuscript for important intellectual content:** Tharakan, Minhas, Salonia.

**Statistical analysis:** Tharakan, Minhas.

**Obtaining funding:** None.

**Administrative, technical, or material support:** Darraugh, Plass.

**Supervision:** Bettocchi, Carvalho, Corona, Joensen, Jones, Martínez Salamanca, Serefoglu, Kadioglu, Verze, N'Dow, Salonia, Minhas.

**Other:** None.

**Financial disclosures:** Tharu Tharakan certifies that all conflicts of interest, including specific financial interests and relationships and affiliations relevant to the subject matter or materials discussed in the manuscript (eg, employment/affiliation, grants or funding, consultancies, honoraria, stock ownership or options, expert testimony, royalties, or patents filed, received, or pending), are the following: None.

**Funding/Support and role of the sponsor:** None.

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