



U3A Opening Address Wednesday 6th May

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Governor of Victoria, Patron of Andrology Australia

Background

Drivers of Health:

- Your genes establish your sex and your propensity for disease
- This genetic background is conditioned by life in the womb, your “conditioning” based on your family, education and your lifetime experiences
- Your societal experience can influence your approach to health: Peer pressure and conditioning
- Environmental exposure can influence disease
- Disease processes: Gender and non-gender specific

Issues in Male Reproductive Health

Diseases of Young Men

- Sexually Transmitted Disease & HIV
- Male Infertility (7.8% Infertility of Couples; ?% due to men)
- Testicular Cancer (400 new cases/yr)
- Androgen Deficiency (1 in 200 men)

Issues in Male Reproductive Health

Diseases of Older Men

- Androgen Deficiency
- Prostate Disease
- Prostate Cancer
- Erectile Dysfunction

General Health Issues

- Diabetes (5-8%; ~1 million)
- Heart disease, high blood pressure and stroke (~3.7 million)
- High Blood Pressure (30%)
- High Cholesterol (51%; ~6.5 million)
- Depression (17% of men over 40 years)
- Dementia (At 85 years, 1 in 4 chance)
- Cancer

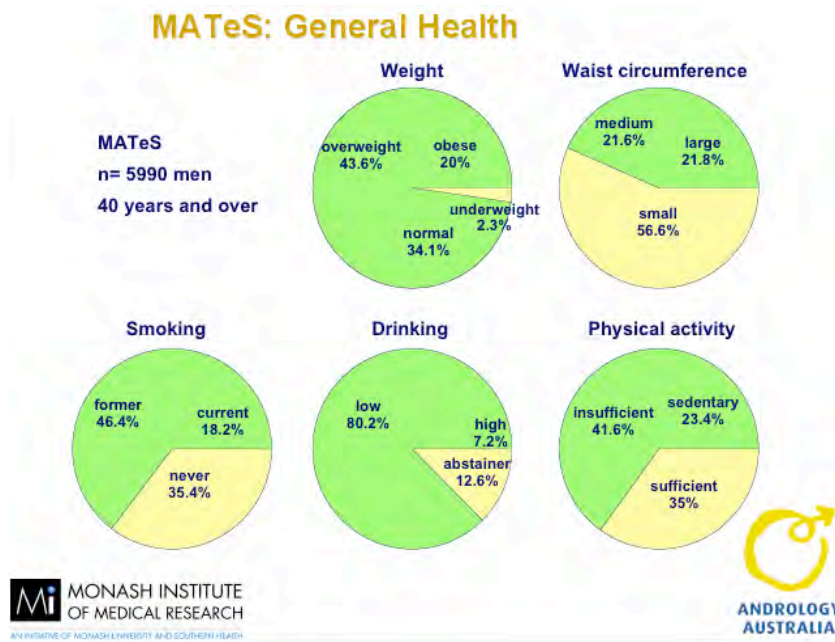
The need for healthy ageing: messages for men

Why pick this topic:

- Better levels of fitness in our younger days, the more likely we are to be fitter later in life
- We have an increasing number of older people in our population
- Clearly the longer we can keep healthy, the less of a cost to our community
- Prevention is better than the need for long term medication or placing older people into care

Methods

- **Men in Australia, Telephone Survey (MATeS)**
- Commissioned by Andrology Australia
- 5990 men (78.5%) participated, from a total of 7636 randomly selected households.
- Unbiased sampling stratified by age and across the 7 states
- Age groups 40-49, 50-59, 60-69 and 70+ years
- Findings are census-standardised to the national population
- 20 minute telephone interview on broad aspects of men's health and well-being, including reproductive health
- Survey conducted between Sept - Dec 2003



General Findings

- 87% had consulted a doctor within past 12 months
- 60% reported good health

- 21% high blood pressure
- 9% heart or blood vessel disease
- 13% depression
- 6% diabetes
- 2% stroke

Fertility and Infertility

- 7.8% of men were in an involuntary infertile relationship
- 25% of men were vasectomised and in the 40 yr old cohort this figure was 33%

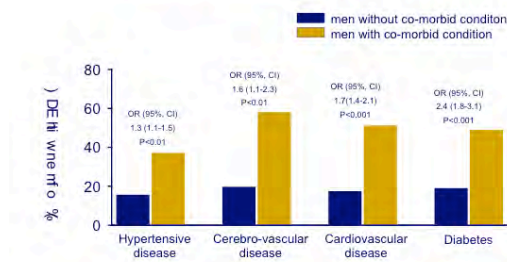
Sexual Activity: 77% of men over 40 were active, 90% in the 40-49yr group and 37% in the 70+yr group

Erectile Dysfunction: 80% of men said they would be very concerned if they had problems with erections

Erectile Dysfunction

- 21% of all the men over 40 years had moderate to severe impotence, rising to ~70% in men over 70 years
- Only 30% of men with moderate to severe ED had spoken to a doctor
- There are many causes of ED both physical and psychological and both partners should be part of the discussion

MATeS: Erectile dysfunction



The frequency of diabetes, cardiovascular, cerebro-vascular and hypertensive disease was higher in men with ED

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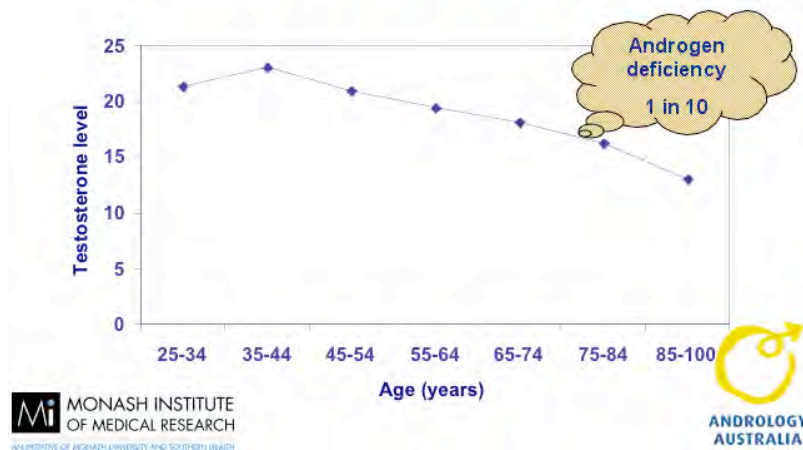
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Erectile Dysfunction

- From first episode of impotence, 2% of men within 12months and 11% of men within 5 years reported a significant heart attack or stroke
- Low level of consultation with doctor decreases chances of identifying this serious predisposing factors such as vascular disease and diabetes
- Need for education of physician to ask about ED in patients at risk
- Need to educate the consumer about serious underlying causes and modern therapy

Androgens and Ageing

Testosterone and Ageing



Age-related changes in androgen levels

- Testosterone levels peak between 25-30 years and decline at about 1% per year
- Testicular damage or disease can increase the rate of decline
- Obesity and diabetes can speed up the decline
- Severe illnesses and stress can temporarily depress T levels

What happens if Testosterone is low?

- Decreases sex drive and may cause hot flashes and sweating
- Causes a loss of muscle mass and increase in fat
- May cause tiredness, lack of drive and mood swings
- Loss of body hair and decrease in shaving frequency
- Causes loss of calcium and loss of bone strength

Type II Diabetes and Testosterone

- ~ 40% of obese type 2 diabetics have low testosterone levels
- Low T predicts insulin resistance and future likelihood to develop type 2 diabetes
- Treatment of low T resulted in improved insulin sensitivity, lowered HBA1C, decreased visceral fat and lowered cholesterol levels (Kapoor et al 2006)

Prevalence of low testosterone levels

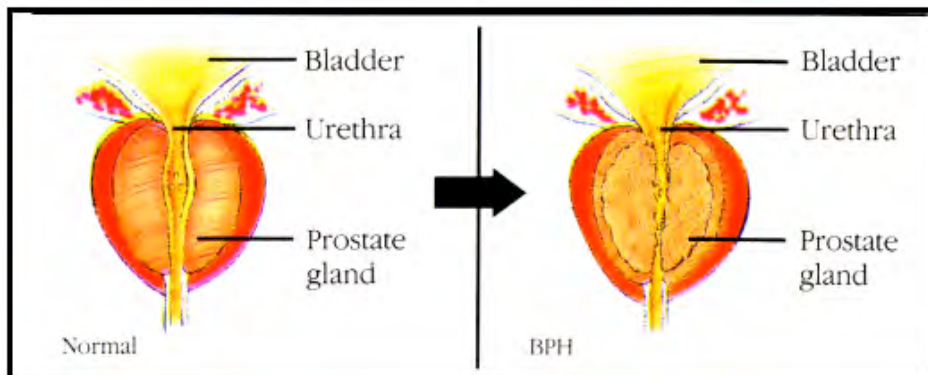
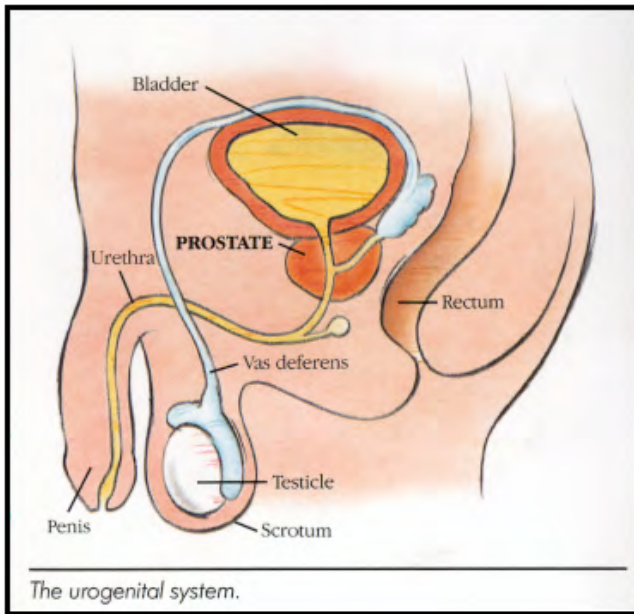
- 1.3% of men in our study were on T
- 5% of men >60 years of age are hypogonadal, serum testosterone <7 nmol/L (Tenover JL.1998)
- Prevalence of AD from Massachusetts Male Ageing Study was:
 - 21% at 55-59yrs,
 - 26% at 60-69 yrs,
 - 31% between 70-86 yrs,
 - overall prevalence 27% with only 1.4% on replacement. (O'Donnell et al 2005)

Testosterone treatment of older men Major Issues

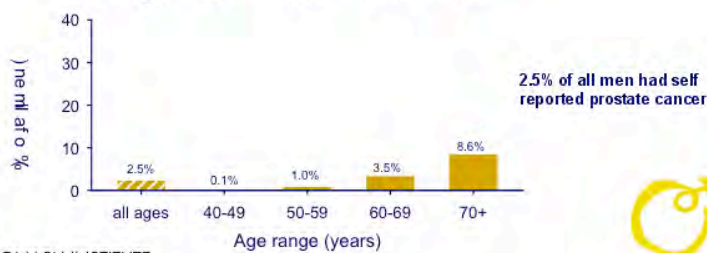
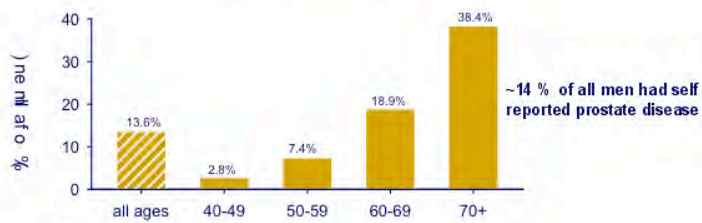
- Recognise the need to make a definitive diagnosis and to identify co-morbidity
- Exclude Prostate Cancer before treatment
- Physiological replacement of androgens in men with proven androgen deficiency but to which range; Younger men?

- Pharmacological: Testosterone treatment of eugonadal men. The benefits and dangers of this approach have not been defined by appropriately controlled studies

Prostate Disease



MATeS: Prostate health



Prostate Disease

2.8% in men 40-49yr rising to 38.4% in men over 70yr

Prostate Disease

- Benign Prostate Hyperplasia can cause nocturia, straining, dribbling, hesitancy, frequency, urgency of urination: 16% of men had severe symptoms, 18% of all men had nocturia, decreased quality of life
- Prostate cancer may produce symptoms of obstruction but often has no symptoms until it has already spread, for instance to bone

Prostate Cancer

0.1% in men 40-49yr rising to 8.6% in men over 70yr

Prostate Cancer Testing

- 50% of all men over 40 years had either a digital rectal examination (DRE) or a blood test to measure prostate specific antigen (PSA) rising to ~70 % in men over 70 years
- PSA test is very sensitive but not always specific for prostate cancer. Recent papers raise questions as to the value of screening with tests that cannot predict which are aggressive cancers

Issues in Male Reproductive Health

Diseases of Older Men

- Androgen Deficiency (~6-10% over 65yr)
- Prostate Disease (13% of men >40yr rising to 38% in 70+ age group)
- Prostate Cancer (12,000 new cases/yr and 2,700 deaths/yr)
- Erectile Dysfunction (20% mod/sev. In men>40yr rising to ~70% in 70+age group; only 30% discuss with doctor)

Conclusions

- There is a high prevalence of reproductive health disorders in ageing men and some of these are linked to general health issues
- Men need to realise that they are not immortal and be proactive in dealing with such important matters as avoiding obesity, increasing exercise and ceasing smoking.
- They need to use their visits to the doctor to build a relationship that enables them to discuss sensitive issues

More General Issues for the Community

- Obesity is a critical issue for all of us especially the increasing evidence of childhood obesity, with encouragement of healthy eating strategies
- There is a need for an increased emphasis on regular exercise at all levels of our community
- Opportunities exist for workplace strategies to promote healthy lifestyles and preventive approaches to healthcare:
- Healthy ageing may require personal risk-benefit decisions
 - Use of androgens
- General issues such as link with family, relationship with partner, interests in other activities

- No longitudinal studies of mens' health in Australia; these need to be multidimensional
- Role of ethnicity in healthy ageing

Andrology Australia

- **Website: andrologyaustralia.org**
- **1.2 million hits per month**
- **Many downloads from website**
- **Over 120,000 booklets issued**
- **Quarterly newsletter distributed to over 5000 people**