Does Current Policy Support Reproductive Health of Australian Defence Force Veterans? A Review of Australian Defence Force Policy

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Introduction

Reproductive health is of central importance to the structure of people's lives and is fundamental to human identity. Increasingly, the importance of reproductive health is recognised at individual, societal and global levels. The issues encompassed are different for males and females and change dramatically over a person's lifetime1. Infertility affects approximately 1 in 6 couples and is associated with reduced quality of life and increased psychosocial distress, and can be a major source of concern for both partners in a relationship²⁻⁵. Clinical definitions of reproductive health vary, but for the purposes of this review, comprise the reproductive and sexual health of males and females during their reproductive lives, and include reproductive outcomes such as fertility, pregnancy, childbirth and diseases of the reproductive system.

Anecdotally, infertility among serving female Australian Defence Force (ADF) members and veterans is a growing concern. This is perhaps more pronounced in the female population because, unlike men, women are somewhat restricted in their fertile years to the period that directly corresponds to the age many people serve—mostly in their 20s and 30s. Age is the single biggest factor affecting a woman's fertility. For men, age-related fertility decline is more subtle but does happen⁶⁻⁹.

Female members are the fastest growing cohort in the ADF. The increasing number of serving females has, and will continue to, generate new health issues with a flow on effect to the Department of Veterans' Affairs (DVA), which is charged with the responsibility of delivering government programs including repatriation income support, compensation and health programs for veterans, members of the Defence Force, certain mariners and their dependants during and after their service.

Since 2010, female veteran client numbers have increased steadily—approximately 0.2 per cent each year. As at 31 March 2017, 6.5 per cent of veterans (or 8177) receiving treatment under a DVA White or Gold Card under any Act* were female. (Gold Cards are issued to veterans who are eligible for treatment and care for all health care conditions at DVA expense, whereas a White Card is issued to eligible veterans for treatment and care of a specific injury/condition). In the last few years, the Department has significantly improved services for contemporary veterans, including female veterans.

However, DVA clients comprise only those veterans or widows with claims. Not all veterans have or will submit claims to DVA, thus these figures are an underestimation of female veterans' health care use. This population, particularly the younger veterans, will remain under DVA care for many years to come, eventually overtaking the number in the war widows' cohort, which is currently the largest female DVA cohort.

Changing profile of health needs

International literature reflects that most female veterans report good to excellent health, even as they age¹⁰⁻¹². This is consistent with a group selected for their physical ability due the medical and fitness requirements of military service. In US studies, their all-cause mortality is lower than age-matched female civilians, similar to male veterans¹³. Although

^{*} This includes the Veterans' Entitlements Act 1986 (VEA), the Safety, Rehabilitation and Compensation Act 1988 (SRCA), or the Military Rehabilitation and Compensation Act 2004 (MRCA).

there is limited Australian specific literature, early indications are that this pattern will be replicated in the Australian population^{14, 15}. Nonetheless, female veterans have unique health needs, especially in relation to sexual and reproductive health. In order to maintain the fittest and most capable readily deployable fighting force, these needs must be acknowledged and accounted for in comprehensive, contemporaneous health policy.

In 2013, Neuhaus and Crompvoets identified the importance of understanding the gender-specific health impacts of both the ADF training environment and operational service within the Australian context¹⁶. As the number of servicewomen and female veterans increases and their roles expand, it is essential that Defence and Veterans' Affairs are aware of the gender-specific health effects of service on this emerging female veteran cohort¹⁶ and that policy reflects their unique requirements.

This paper aims to examine whether current ADF policy supports the reproductive health of ADF members, particularly female members, in the best way possible.

Materials and methods

A search of unclassified material was performed to identify extant Defence health policy with a nexus to the reproductive health of ADF members. Each piece of policy identified was reviewed and a further search conducted using the reference lists from the documents identified in the initial search. The search was then expanded to encompass general personnel policy, rather than just being restricted to health related matters only.

Review

Medical and physical requirements inherent in ADF service

An inherent requirement of ADF service is that members of all ranks are able to contribute fully to the delivery of decisive combat capability in the right place, at the right time. A prescribed level of medical and physical fitness is a fundamental requirement for entry and retention in the ADF. Certain reproductive or gynaecological disorders may prevent an applicant being accepted into, or retained in, the ADF if these conditions are likely to affect their ability to render unrestricted service.

Training and operational tasks include demanding physical exercise, heavy lifting, irregular sleep and meals. These may aggravate certain gynaecological disorders $^{10,11,17-20}$. Specialist review and investigations

may also be regularly required. Regular absences from duty cannot be accommodated on operational deployment. The requirement for regular specialist reviews and medical treatment may also limit an applicant's employability and deployability. Conditions such as dysmenorrhoea, amenorrhoea, polycystic ovary syndrome (PCOS), hysterectomy, oophorectomy, endometriosis and fibroids can in some circumstances preclude enlistment and will almost definitely require specialist gynaecological review before acceptance²¹.

As Neuhaus and Crompvoets reported: 'the physiological, biomechanical and health impacts of soldiery impact differently on female and male bodies, and conditioning and training requirements therefore differ16. Female soldiers are at risk of developing osteoporosis, amenorrhoea and stress fractures²². Military load carriage requirements are significant (ranging between 40 kg and 60 kg in Afghanistan for example). Such loads can result in increased rates of musculoskeletal injury and, in females, pelvic floor instability, contributing to long-term incontinence²³. Both primiparous and multiparous females are at increased risk. The duration of this risk is currently the subject of ongoing research. The risk of musculoskeletal injuries, particularly pelvic injuries, also increases when attempting to match male stride length and frequency, and can be exacerbated by inadequately fitted equipment such as body armour^{22, 24}.'

Pregnancy

Policy pertaining to pregnancy in ADF members comprises the medical and administrative management of continuing pregnancy and termination of pregnancy. *The Defence Health Manual (DHM)* Volume 2, Part 9, Chapter 3—Management of Pregnant Members in the ADF²⁵ (formerly Health Directive 235 (HD235)) provides guidance on military specific administrative management of pregnant members, with the expectation that Defence health practitioners will maintain clinical currency in the medical management of pregnancy and reference to RANZCOG Statements and Guidelines are made.

Being able to achieve and carry a healthy pregnancy safely to term requires good sexual and reproductive health from pre-conception to the postpartum phase. Most militaries, including the ADF, are not designed with the capacity to deal with obstetric and gynaecological specialist issues. Historically, the United Kingdom (UK) military provided obstetric and gynaecological speciality services to garrison (including wives). From April 2013, the UK Defence Medical Services have been responsible for providing

primary health care to all service personnel and entitled civilians through the Defence Primary Healthcare organisation. It provides primary health care in the UK and overseas to service personnel and their dependants, where appropriate, to a common standard as directed by the Inspector General²⁶.

Australia has never been able to provide this level of care. The DHM (V2, P9, Ch3) identifies referral to a specialist obstetrician as mandatory, and shared, team and private care models are all supported by Defence in regards to midwifery, general practice, obstetrics and maternal foetal medicine²⁵. RANZCOG does not currently support home birth or freestanding birth centres without adjacent obstetric and neonatal facilities; thus, Defence does not support these options either. Defence health policy provides that female Defence members have timely access to operative care and specialist services, including anaesthesia, neonatal paediatrics and haematology during their intrapartum period.

management of medical employment classification (MEC), workplace and employment restrictions, posting and other administrative matters are now based on clinical risk assessment of individual pregnancies which shows the progression from earlier 'one size fits all' policies to consideration of females' health as unique and variable. Employment restrictions, other than those caveats outlined in the DHM, are determined by the complexity (or not) of the pregnancy, the member's workplace and occupational health risk profiles. Postpartum hospitalisation is determined by the nature of the member's delivery and clinical condition.

Although hospital based maternity units are considered the standard, reference is made to other birthing practices, albeit in the context of advising females of the medical, financial and indemnity risks associated with pursuing alternative birthing practices. This also shows an acknowledgment of a woman's choice in how she wishes to carry her pregnancy and give birth, while ensuring she does so with the required information and in consultation with her specialist obstetrician. This supportive approach is further noted in the inclusion of Commonwealth funded antenatal education classes, which the policy identifies should be encouraged.

Pregnancy on operations

All pregnant members are considered unfit for operational deployment (either domestic or overseas). Pregnancy is deemed to pose an unacceptably high risk to both mother and foetus in a deployed environment. Potential concerns include (but are

not limited to) hazardous occupational exposures, increased injury risk, heat stress, malarial prophylaxis and inadequate access to specialist obstetric and specialised medical support to deal with both routine obstetric care and emergencies.

The DHM (V2, P9, Ch3) recommends pre-deployment briefing for all Defence members include counselling to dissuade members from engaging in sexual relations while on deployment, and to provide advice on the potential risks of pregnancy on deployment/ operations²⁵. Female members using oral or other forms of contraception are required to ensure they have sufficient quantities to cover the length of their expected deployment plus two months.

All members (male and female) are advised on the availability of barrier contraception to prevent pregnancies and sexually transmitted diseases both before departure from Australia and on arrival in theatre [author's own experience]. Urine pregnancy test kits are also made available on request for female members in theatre. Any member who discovers she is pregnant is responsible for notifying her Defence healthcare provider immediately.

Arrangements for medical repatriation of a pregnant member should be undertaken as soon as reasonably practicable following confirmation of diagnosis of pregnancy. The DHM (V2, P9, Ch3) states that pregnant members are to be managed in accordance with current ADF medical evacuation doctrine and procedures, and the relevant operational health support plan as a Medical Return to Australia²⁵. Urgency of repatriation is determined by the level of risk associated with both the individual's pregnancy and the area/operation to which she has been deployed.

Redeployment or future deployment of members who undergo elective termination of pregnancy requires upgrade to a deployable MEC in accordance with the Health Support Order for the operation and is dependent on their medical and psychological fitness at the time. Once cleared, redeployment remains a Command decision, not that of the individual member.

Miscarriage

The administrative management of miscarriage and stillbirth is also addressed in the DHM (V2, P9, Ch3), as well as in the Pay and Conditions Manual with reference to maternity leave entitlements. The Pay and Conditions Manual (PACMAN), Chapter 5, Part 4: Maternity Leave²⁷ sets out a Defence member's entitlement to maternity leave. A member with a

low risk, uncomplicated pregnancy is anticipated to be fit to continue working within the limits of their restrictions until the period of required absence (six weeks prior to her expected date of delivery), at which stage the entitlement for maternity leave commences. A member may elect to continue working beyond this point if she remains fit within her limitations and has the consent of her command/workplace manager, medical officer and treating specialist obstetrician.

Pregnant members who suffer a miscarriage or undergo medical termination prior to 20 weeks' gestation should be provided with health care and counselling support as clinically indicated. These members have no entitlement to maternity leave. Where a pregnancy is lost after 20 weeks' gestation (stillbirth), maternity leave provisions do apply. However, the member may return to work six weeks after the stillbirth if she chooses and is deemed medically fit to return to duty. Return to work prior to six weeks may be recommended at the member's request following consultation with the treating medical officer and/or specialist. Thus, general personnel policy follows the health policy in supporting a woman's right to contribute to decisions around her own health care.

It is noted that periods of paid maternity leave are recognised as effective service for the acquittal of a service obligation. Two weeks (14 calendar days) paid parental leave can also be granted to a Defence member and regarded as effective service. Additionally, up to 64 weeks unpaid parental leave as prescribed in PACMAN²⁷ may be granted—this Defence parental leave is separate from the Government's Paid Parental Leave Scheme.

As a policy and guidance document, the DHM Vol 2, Part 9, Chapter 4, on termination of pregnancy in ADF members²⁸ (formerly Health Directive 208 dated 21 December 2001), highlights medico-legal issues, pre- and post-procedure care and potential mental health consequences of termination. The references used, although still reflective of good care, are 16 years old and discordance was identified with current best practice obstetric and gynaecological care outlined in Australian and international guidelines, such as the RANZCOG Statement on Termination of Pregnancy²⁹. Defence language is also inconsistent, e.g. the use of 'Defence Health Services' rather than 'Joint Health Command (JHC)' which may create confusion.

More importantly, some clinical information such as the statement that medical termination using mifepristone is not available in Australia does not reflect current Australian practice. Until quite recently, surgical abortion was the only method available in Australia; however, greater access to medical abortion became possible when mifepristone was registered in Australia in 2012. There have been updates to guidelines on its use since then. The current RANZCOG Statement was updated in 2016³⁰. Medical termination is considered to be a less invasive and generally safer option due to not requiring anaesthesia, although complication rates are comparable to surgical termination of pregnancy³⁰, and may lessen the recuperation time for an ADF member returning to work after termination. Regardless, all females should be given accurate information and appropriate counselling to inform their decision (or not) to terminate and current Defence health policy does not provide that. It would be expected, however, that the medical practitioners counselling the pregnant member would be providing the most contemporaneous information in accordance with current clinical best practice.

The DHM (V2, P9, Ch4) also identifies that although termination does not contribute to the health readiness of personnel for operational deployment, it is listed on the Medicare schedule and, as the Defence Health Service benchmarks against Medicare, termination should be provided by DHS²⁸. This is almost counterintuitive. As a number of other policy documents^{21,25,31-34} note that pregnancy is not compatible with deployment or seagoing service and will exclude an ADF member from domestic or international operations, a procedure, which would change the pregnancy status of a member and, therefore, their medical employment classification to a deployable MEC, would contribute, even indirectly, to individual readiness.

More recent health policy produced by JHC better reflects a more supportive health service. The language used in the DHM (V2, P9, Ch4) does not present as particularly supportive of female ADF members who wish to take ownership of, and responsibility for, their reproductive health—the connotation that termination is only provided because it's on the Medicare schedule, rather than because reproductive care should form part of a comprehensive health service, does not demonstrate recognition of the unique needs or rights of female members. This particular health policy would benefit from a complete review and rewrite to reflect contemporaneous practice and language 16 years on.

Assisted reproduction

The DHM Volume 2, Part 9, Chapter 5—Provision of Assisted Reproductive Technologies to Defence Members³⁵ (formerly Health Directive 203) identifies that, consistent with the Medicare Benefits Schedule (MBS), Defence will cover an unlimited number of invitro fertilisation (IVF) cycles as well as other specified reproductive procedures where assisted reproductive technology (ART) is the clinically appropriate treatment for medical infertility. Standard baseline fertility investigations include laparoscopy, semen analysis and radiological examinations.

With regard to specific ARTs, those services covered by Medicare will be provided to the member at Defence expense. This includes general expenses associated with the treatments, such as anaesthetic fees, hospital expenses and gynaecologist fees. Wherever possible, these services will be provided by the preferred provider of the relevant Regional Health Service. Defence will cover both the Medicare fee and the gap for the specific ARTs authorised by JHC.

Defence policy enables the funding for storage and freezing of gametes for any member whose spouse is actively undergoing ART while the member is deployed and prior to the commencement of clinical treatments that may render a member infertile e.g. chemo or radiotherapy. However, Defence will not fund the freezing of semen, ova and embryos as a preventative measure against potential exposure on deployment nor are these services covered by Medicare. This is the subject of debate, particularly from the Special Forces community due their elevated risk of exposure to known reprotoxic substances such as chemical weapons (e.g. mustard gas) on deployment.

There is currently no published literature on the prevalence of infertility specifically in Special Forces soldiers. The proposal that there are higher rates within some populations is anecdotal, reflected also in examples such as the 'Cav Curse', which is a wide held belief among Armoured Corps soldiers that those who have served in Cavalry regiments will only have daughters. Consistent with the lack of evidence on outcomes, there is only anecdotal information on the level and type of concerns among personnel.

For example, there are concerns among both Special Forces soldiers and their wives that the heightened potential for exposure to a number of substances or toxicants, because of either their location, task or employment, may lead to infertility or difficulties in conceiving. With regards to fertility preservation strategies, many have been campaigning Defence to

pay for the freezing of semen before early deployments in order to future proof their potential childbearing. In comparison to IVF (~\$9290 per cycle + extras), surgical sperm collection (\$850) and freezing (\$450 = storage fees), is relatively inexpensive [based on IVF Australia fees current as at 1 April 2017]. It is also important to note that IVF will be relatively ineffective once gametes are damaged or lost, which is why gamete and embryo cryopreservation is commonplace prior to chemotherapy.

The relatively low number of Special Forces soldiers may make cryopreservation a viable and cost-effective possibility for Defence to consider, however, it brings with it a number of ethical issues. Apart from equity concerns (if Defence paid for Special Forces soldiers, why not everyone else who has potential for high exposure and where would the line be drawn), there may also be ethical issues regarding the future use of the frozen gametes in circumstances including, but not limited to, the death of a spouse, or dissolution of a relationship.

Sterilisation / reversal of sterilisation

At the other end of the spectrum, Defence also supports sterilisation of both male and female members in line with the MBS, as outlined in the DHM Volume 3, Part 4, Chapter 1—Counselling Guidelines Prior to Voluntary Sterilisation Referral³⁶. This is in line with informed consent, ensuring that the member fully understands the risks, consequences, implications, advantages and disadvantages of their request for this procedure. The policy is also cognisant of medical, social and psychological factors, as well as reference to reversal (including likelihood of failure) and additional procedures, which may be organised at own expense such as freezing of semen.

Other reproductive and sexual health related policies

One of the more controversial Defence policy reviews which has attracted substantial media attention in recent years, is that related to gender dysphoria and gender realignment^{37, 38}. The (now cancelled) Defence Instruction³⁷ on Transgender Personnel in the ADF promulgated in 2000 indicated that transgender personnel would not be suitable for employment in the ADF because of the psychological implications of gender dysphoria. Medical and recruiting policy also identified that persons undergoing or contemplating gender reassignment could not be considered suitable for service in the ADF because of the need for ongoing treatment and/or the presence of a psychiatric disorder, nor would such persons be able to meet ADF individual readiness requirements.

There were allowances for personnel who had been discharged in these circumstances and subsequently transitioned to reapply to re-join the ADF as a person of their new gender.

In 2015, this policy was contemporaneously reviewed and updated, and Health Directive 234 (now *Defence Health Manual* Volume 2, Part 9, Chapter 13)³⁸ was promulgated to provide information on diagnosis and clinical management of gender dysphoria and gender realignment (as defined in the *Diagnostic and Statistical Manual of Mental Disorders* 5, 2015³⁹ and World Professional Association for Transgender Health Standards of Care⁴⁰) in ADF members, including deployability and Commonwealth funded management.

In accordance with MILPERSMAN Part 3, Chapter 2 — Australian Defence Force Medical Employment Classification System⁴¹ and the DHM Volume 2, Part 6, Chapter 2—Retention Standards⁴², all members who require treatment for gender dysphoria or reassignment should have their MEC considered although not all will require treatment, and it may or may not have an impact on their employability or deployability. For those who do require treatment, the bias is towards a case-by-case consideration of temporary MEC downgrade while undergoing gender reassignment rather than discharge. The International Standards of Care⁴⁰ as well as Australian specific guidance⁴³ and referral to a professional who specialises in the field are the cornerstones of the new policy. Entitlements for treatment at public expense align with entitlements for all other Defence members and include treatments that are available to Australian citizens at public expense.

Equity with Medicare under the provisions of the *Human Services (Medicare) Act 1973*⁴⁴ and described in the DHM Volume 1, Part 4, Chapter 1—Health Care of Australian Defence Force personnel⁴⁵, is the guiding principle for considering healthcare entitlements at public expense for Defence members including the management of gender dysphoria. This is detailed in the MBS and Pharmaceutical Benefits Schedule (PBS).

This would generally mean the following healthcare requirements (including any travel to attend appointments) with appropriately qualified or experienced professionals are provided at public expense:

- psychological and psychiatric care or assessments as clinically appropriate to assess or manage gender dysphoria or coexisting conditions;
- · clinical assessment (including specialist

involvement with endocrinologists or primary care providers who specialise in gender dysphoria and reassignment), baseline pathology testing and regular monitoring for the management of gender realignment;

- hormone treatment requirements;
- surgical procedures that meet MBS clinical indication requirements;
- any routine clinical care unrelated to gender dysphoria or its management, as for all other members.

Procedures that will not be provided at public expense, but for which members should be afforded paid medical absence leave as appropriate include any gender realignment surgery including surgical consultations that do not meet MBS clinical indication requirements or hair electrolysis or removal procedures.

Due to the small numbers involved and privacy issues, there is limited evidence available that examines how transgender ADF members view the success of this change in policy and whether they have seen a corresponding shift in health care delivered by Defence health practitioners and referred specialists. In two recent Australian (non-ADF) studies, there appear to be mixed reports regarding an improvement in the way medical professionals assist transgender Australians. Erasmus, Bagga and Harte (2015) surveyed 127 patients who made contact with Australia's Gender Dysphoria Clinic over a one-month period. The authors concluded that 'patients reported a high level of overall satisfaction with services'46. On the other hand, Riggs, Coleman and Due (2014) surveyed the views of 188 transgender people and concluded that 'some medical professionals are doing well in servicing the healthcare needs of gender diverse clients in Australia, while other professionals are falling short of adequately meeting these needs'47.

Sexual assault and intimate partner violence

Sexual assault and intimate partner violence in the ADF has also drawn attention in recent years following the ADFA Skype incident¹², Defence Abuse Response Taskforce and the recent Royal Commission into Institutional Responses to Child Sexual Abuse, which examined some Defence cases in detail.

The medical management of sexual and indecent assault in the ADF is addressed in the DHM Vol 2, Part 9, Chapter 19—Sexual and Indecent Assault in

the ADF – Medical Management⁴⁸, which is a content transfer from Health Directive 227 dated 31 March, 1999. While the underlying principle—that the first priority must be the psychological and clinical welfare of any member presenting with an allegation of sexual assault-remains extant, a number of advancements have been made in the medical management of sexual assault, particularly in the use of prophylaxis/antibiotics/etc. in the past 15 years. Even since 2007, World Health Organization (WHO) recommendations on the use of key antiretroviral drugs for preventing and treating HIV have changed. Some of the drugs listed as alternative drugs for post-exposure prophylaxis are now no longer recommended for antiretroviral therapy. The latest WHO guidelines^{49,50} give preference to tenofovir disoproxil fumarate (TDF) and lamivudine (3TC) or emtricitabine (FTC) as a first-line treatment for adults. The recommended antibiotics for sexually transmitted infections are still current. While it would be expected that clinicians would ensure their own currency in regards to treatment protocols, it is important that policy also reflect this.

DI(G) PERS 35–4 Reporting and management of sexual misconduct including sexual offences 51 outlines the responsibilities for management of sexual offences from an administrative perspective while also noting that medical staff, pastoral care and legal officers will have confidentiality obligations inherent in their roles. The overarching principle is that any report of rape or sexual offence is handed over to ADFIS (the ADF Investigative Service) to manage and investigate or refer to civilian police as appropriate. However, a Defence member may make a 'restricted disclosure' to the Sexual Misconduct Prevention and Response Office (SeMPRO) in limited circumstances. This form of confidential disclosure provides Defence members who do not wish to make a report to their chain of command or other mechanisms, with an avenue to access support, health and counselling services, if they have not already accessed these services.

Conclusion

There is a growing need to understand the effects of military service on health status, with a goal to inform Defence and Veterans' Affairs policy leaders and clinicians about post-deployment health issues for veterans, particularly females. A vital and unique aspect of wellbeing for females is that of sexual and reproductive health. ADF health policy has not kept up with societal and medical practice change,

and needs to be revised now. It will also require ongoing review to ensure that the ADF remains at the forefront of practice and does not allow itself to become outdated in a quickly changing clinical environment. To date, Australian specific literature in this area is quite sparse and, if it follows the trend of data that has so far been published on Australian female veterans, will vary, possibly significantly, from the US or other international literature when it is available and published.

Internal Defence policy in general has long been criticised as copious, confusing and convoluted. Following a number of reviews and initiatives including, most recently, the First Principles Review of Defence⁵², the way we develop and promulgate policy is being addressed and refreshed. Notably, the new DHM²¹ represents a concerted effort to revise, simplify and consolidate medical and health related policy in line with both First Principles and the Defence Administrative Policy Framework. This revision offers the opportunity to ensure that all health policy is reviewed and updated in accordance with Australian and international best practice, rather than just transitioning to a new structure. While extant policy is sufficient, and is unlikely to harm, practical and technological advances, especially in relation to sexual and reproductive health, over the past 15+ years should be reflected in a best practice, world leading Australian Defence policy.

While much of this paper has emphasised the importance of female reproductive health, it is a male, female and transgender issue; one that is of vital importance to all groups, not just within the ADF, but broader society.

Disclaimer

The opinions expressed herein are those of the authors and do not necessarily reflect those of the Australian Department of Defence or any extant policy.

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