The Royal Australian and New Zealand College of Obstetricians and Gynaecologists

Excellence in Women's Health

Fatigue and the Obstetrician Gynaecologist

This statement has been developed and reviewed by the Women's Health Committee and approved by the RANZCOG Board and Council.

A list of Women's Health Committee Members can be found in Appendix A.

Disclosure statements have been received from all members of this committee.

Disclaimer This information is intended to provide general advice to practitioners. This information should not be relied on as a substitute for proper assessment with respect to the particular circumstances of each case and the needs of any patient. This document reflects emerging clinical and scientific advances as of the date issued and is subject to change. The document has been prepared having regard to general circumstances.

First endorsed by RANZCOG: November 2012
Current: November 2015
Review due: November 2018

Values: The evidence was reviewed by the Women's Health Committee (RANZCOG), and applied to local factors relating to Australia and New Zealand.

Background: This statement was first developed by Women's Health Committee in November 2012 and reviewed in November 2015.

Funding: The development and review of this statement was funded by RANZCOG.

1. Background

Excessive working hours, and the potential fatigue experienced by doctors, may have adverse effects on both patient safety and on the health and well-being of doctors.[1-3] For example, fatigued interns are more prone to make serious medical errors when they had been frequently rostered shifts exceeding 24 hours, compared to their performance during shorter shifts.[4] As well, they were more likely to fall asleep while driving or stopped in traffic if they had worked five or more extended shifts during a month. Such effects on clinicians' performance and patient safety are not uniform across all care providers, and a number of factors must be taken into account since different individuals require different quantities of sleep for optimum performance and safety.

The American National Sleep Foundation has recommended an average of eight hours of sleep each night for most adults.[5] Although wide variation in the amount of sleep each person needs is acknowledged, individuals do not become accustomed to less sleep, and sleep cannot be stored up. In addition, recovery from insufficient sleep requires a least two or three nights of adequate uninterrupted sleep.

Studies undertaken to analyse the effect of sleep deprivation on cognitive function have found that a sleep deficit has important effects on multiple functions - visual memory, cognitive performance, language and numerical skills, retention of information, concentration, complex problem solving skills, and mood resulting in decreased communication ability.

2. Discussion and recommendations

3.1 Measurement of Fatigue

It is not easy for an individual to estimate or measure their level of fatigue. Methods of objectively measuring fatigue would be useful to evaluate the success, or otherwise, of interventions that might reduce the effects of doctors' fatigue on the health outcomes of both patients and doctors themselves. At the present time no such tool exists, although a preliminary risk assessment model based on a scoring system has been published by the Australian Medical Association.[6] Based on this risk assessment tool, the discipline of Obstetrics and Gynaecology has improved in the area of fatigue management with an increase in the number of respondents falling into the lower risk category for fatigue and a decrease in the number of practitioners falling in the higher risk category, between reviews in 2006 and 2011.

3.2 Impact of fatigue

In the same way that individuals require differing amounts of sleep, there are many factors that influence a person's function when fatigued. These include, but are not limited to, age, mental and physical health and, relevant to the health professional, level of experience. The experienced practitioner could reasonably be expected to perform at a higher level than a trainee when fatigued or under duress.

3.3 Factors contributing to long working hours

The principle of limiting hours in the interests of avoiding fatigue needs to be placed into context alongside those factors that may drive long working hours for the obstetrician gynaecologist or the FRANZCOG trainee.

a. The unpredictability of "emergency after hours" work in obstetrics and gynaecology

   The very nature of obstetrics and gynaecology necessitates 24 hour provision of service with a substantial but commonly unpredictable component occurring "after hours". While appropriate rostering can cope with high demand, extremes of demand will inevitably occur that may lead to more working hours than would be desirable.

b. Continuity of care

   In comparison to other medical disciplines, women in labour benefit most from continuity of care provision by their obstetrician. In most circumstances, the midwifery staff will be working fixed hours necessitating handover of staff during a woman's labour and it is the obstetrician who provides the continuity. In some circumstances, this continuity is further enhanced by extension from antenatal care into intrapartum care.

c. Training issues

   To gain an adequate understanding of the management of labour, an essential aspect of training is to observe the consequences of earlier decisions. While eight hour shifts may work well in an emergency department or intensive care unit, it would prevent the obstetric trainee ever seeing a long labour in continuity. A thorough "hand over" may inform the clinical facts of a situation, but there is important learning that comes from direct experience of long and difficult cases in both obstetrics and gynaecology. Furthermore, clinical experience is not simply qualitative but also quantitative and a specialist requires frequent exposure to develop skills.

d. Rural and Provincial practice

   Provision of obstetric and gynaecological services to the smaller rural and provincial communities necessitates longer working (availability) hours from a smaller number of clinicians. These clinicians need "breaks" from work (e.g. weekends off) as much as they need control in their length of shifts on-call. Mandating short working hours would inevitably close a number of smaller units, with consequences for the local community. In many cases, continuation of the obstetric service underpins the regional hospital which in turn impacts greatly on survival of the town itself.

e. Private Practice

   There are unique demands placed upon the obstetrician working in private practice. The unpredictability of spontaneous labour, length of labour and timing and nature of birth impacts directly upon the number of hours worked. There is also an indirect impact upon consulting time, operating time and other professional responsibilities. Even within the context of a group practice, a private practitioner remains committed to their own practice which cannot readily be handed over to someone else (who themselves may be fatigued).

3.4 How Best to Avoid and Manage Fatigue

It is important that all doctors are aware of the potential risks of fatigue on their patients and themselves. They should endeavour to employ processes to help deal with and limit the effect of fatigue when recognised. A number of general fatigue management principles have been described and include:

(a) Having arrangements in place to ensure that whenever possible, the natural circadian rhythms are maintained when working. For example timing inductions of labour so that delivery is more likely to occur at times of optimal labour ward staffing and adequate rest.

(b) Awareness of timetabling and organisation of work practices such that, for example, where possible, major operating lists are not routinely scheduled after having been on call the previous night.

(c) Recognising that it is difficult to predict when women will come into spontaneous labour, and having arrangements in place where colleagues offer mutual assistance when fatigue becomes an issue. Practice models of sharing the burden of being on-call during weeknights as well as weekends may be available and could be explored by particularly busy practitioners.

(d) Doctors working in large hospital departments should have input to the appropriate rostering for duties the day after being on-call, and it is important that requirements for fatigue management be met by both junior and senior staff in accordance with local regulations.

3.5 Effects of fatigue management

At present, there are few data to allow evaluation of the effect of limiting the working hours of doctors on patient safety or doctor health and well-being.[7]

In particular, there is no evidence that restricting work hours improves patient outcome under the care of experienced practising obstetricians and gynaecologists. For this reason, RANZCOG strongly supports the involvement of fellows and members of the College in collecting and analysing specialty specific data.

Evidence does exist that cutting work hours has not had any immediate and measurable detrimental effect on patient safety nor on the learning outcomes of doctors in training.[8] This review did not offer conclusive evidence that reduced working hours in isolation improve patient safety and that other features such as better staffing levels and patient handover arrangements may also play an important role.

Until such time that properly conducted and evaluated research exists, RANZCOG agrees with the American College of Obstetricians and Gynaecologists in not having "guidelines placing any limits on the volume of deliveries and procedures performed by a single individual or the length of time one may be on call and still perform surgery."[7]

3. References

1. Australian Council for safety and quality in health care industry and health ministers conference. Safe staffing discussion paper- safety and quality Council Canberra 2003.

2. Ulmer C, Miller Wolman D, Johns MME. Resident Duty Hours: Enhancing Sleep, Supervision, and Safety. Washington (DC)2009.

3. Canadian Association of interns and residents. Position paper on resident duty hours. Canadian patient and physician safety and well-being. Resident duty hours. , CAIR. 2012.

4. Lockley SW, Cronin JW, Evans EE, Cade BE, Lee CJ, Landrigan CP, et al. Effect of reducing interns' weekly work hours on sleep and attentional failures, N Engl J Med. 2004;351(18):1829-37.

5. Malik SW, Kaplan J. Sleep deprivation, Prim Care. 2005;32(2):475-90.

6. Australian Medical Association. Safe hours campaign. Risk assessment of junior doctor rosters., AMA. 2001.

7. American College of Obstetricians and Gynaecologists Fatigue and Patient Safety.Committee Opinion Number 519 March 2012.

8. Moonesinghe SR BJ. Impact of reduction in working hours to doctors in training on postgraduate medical education and patient outcomes, systematic review BMJ. 2011(342):1580.

4. Links to other College statements

Evidence-based Medicine, Obstetrics and Gynaecology (C-Gen 15)

Appendices

Appendix A Women's Health Committee Membership

Name	Position on Committee
Associate Professor Stephen Robson	Chair and Board Member
Dr James Harvey	Deputy Chair and Councillor
Associate Professor Anusch Yazdani	Member and Councillor
Associate Professor Ian Pettigrew	Member and Councillor
Dr Ian Page	Member and Councillor
Professor Yee Leung	Member of EAC Committee
Professor Sue Walker	General Member
Dr Lisa Hui	General Member
Dr Joseph Sgroi	General Member
Dr Marilyn Clarke	General Member
Dr Donald Clark	General Member
Associate Professor Janet Vaughan	General Member
Dr Benjamin Bopp	General Member
Associate Professor Kirsten Black	General Member
Dr Jacqueline Boyle	Chair of the ATSIWHC
Dr Martin Byrne	GPOAC representative
Ms Catherine Whitby	Community representative
Ms Sherryn Elworthy	Midwifery representative
Dr Nicola Quirk	Trainee representative

Appendix B Overview of the development and review process for this statement

i. Steps in developing and updating this statement

This statement was originally developed in November 2012 and was most recently reviewed in November 2015. The Women's Health Committee carried out the following steps in reviewing this statement:

- Declarations of interest were sought from all members prior to reviewing this statement.
- Structured clinical questions were developed and agreed upon.
- An updated literature search to answer the clinical questions was undertaken.
- At the November 2015 face-to-face committee meeting, the existing consensus-based recommendations were reviewed and updated (where appropriate) based on the available body of evidence and clinical expertise. Recommendations were graded as set out below in Appendix B part iii)

ii. Declaration of interest process and management

Declaring interests is essential in order to prevent any potential conflict between the private interests of members, and their duties as part of the Women's Health Committee.

A declaration of interest form specific to guidelines and statements was developed by RANZCOG and approved by the RANZCOG Board in September 2012. The Women's Health Committee members

were required to declare their relevant interests in writing on this form prior to participating in the review of this statement.

Members were required to update their information as soon as they become aware of any changes to their interests and there was also a standing agenda item at each meeting where declarations of interest were called for and recorded as part of the meeting minutes.

There were no significant real or perceived conflicts of interest that required management during the process of updating this statement.

iii. Grading of recommendations

Each recommendation in this College statement is given an overall grade as per the table below, based on the National Health and Medical Research Council (NHMRC) Levels of Evidence and Grades of Recommendations for Developers of Guidelines. Where no robust evidence was available but there was sufficient consensus within the Women's Health Committee, consensus-based recommendations were developed or existing ones updated and are identifiable as such. Consensus-based recommendations were agreed to by the entire committee. Good Practice Notes are highlighted throughout and provide practical guidance to facilitate implementation. These were also developed through consensus of the entire committee.

Recommendation category		Description
Evidence-based	A	Body of evidence can be trusted to guide practice
	B	Body of evidence can be trusted to guide practice in most situations
	C	Body of evidence provides some support for recommendation(s) but care should be taken in its application
	D	The body of evidence is weak and the recommendation must be applied with caution
Consensus-based		Recommendation based on clinical opinion and expertise as insufficient evidence available
Good Practice Note		Practical advice and information based on clinical opinion and expertise

Appendix C Full Disclaimer

This information is intended to provide general advice to practitioners, and should not be relied on as a substitute for proper assessment with respect to the particular circumstances of each case and the needs of any patient.

This information has been prepared having regard to general circumstances. It is the responsibility of each practitioner to have regard to the particular circumstances of each case. Clinical management should be responsive to the needs of the individual patient and the particular circumstances of each case.

This information has been prepared having regard to the information available at the time of its preparation, and each practitioner should have regard to relevant information, research or material which may have been published or become available subsequently.

Whilst the College endeavours to ensure that information is accurate and current at the time of preparation, it takes no responsibility for matters arising from changed circumstances or information or material that may have become subsequently available.