2008

Art nurses - Making an impact

Judith Applegarth  
*Central Queensland University*

Trudy Dwyer  
*Central Queensland University*

Lorna Moxham  
*Central Queensland University, lmoxham@uow.edu.au*

**Publication Details**  
Art nurses - Making an impact

Abstract
Fertility awareness and treatment is becoming an increasing focus in contemporary society. One in six Australian couples experience fertility problems that will impact their ability to conceive. The Assisted Reproductive Technology (ART) nurse plays a fundamental role in optimising quality of care and outcomes for clients accessing ART services in Australia. The ART industry in Australia is required to function within the Reproductive Technology Accreditation Committee Code of Practice. From a nursing perspective, one of the key elements of the Code is competence in relation to the management and coordination of ART treatment cycles. This paper examines the literature in relation to the concepts and assessment of clinical competence as well as the link between clinical competence and the Australian Nursing and Midwifery Council National Competency Standards for Registered Nurses. The literature review was undertaken as part of a research project being undertaken to identify cues to clinical competence for ART nurses in Australia. It is suggested that provision of a competent ART nursing service will optimise the quality of care provided and in turn make a significant impact on the lives and outcomes for women accessing ART services within Australia.

Keywords
impact, making, nurses, art

Disciplines
Medicine and Health Sciences | Social and Behavioral Sciences

Publication Details

This journal article is available at Research Online: http://ro.uow.edu.au/smhpapers/156
Art nurses – Making an impact

Judith Applegarth, Faculty of Sciences, Engineering and Health, Central Queensland University, Rockhampton, Australia, j.applegarth@cqu.edu.au
Trudy Dwyer, Faculty of Sciences, Engineering and Health, Central Queensland University, Rockhampton, Australia, t.dwyer@cqu.edu.au
Lorna Moxham, Faculty of Sciences, Engineering and Health, Central Queensland University, Rockhampton, Australia, l.moxham@qu.edu.au

Abstract

Fertility awareness and treatment is becoming an increasing focus in contemporary society. One in six Australian couples experience fertility problems that will impact their ability to conceive. The Assisted Reproductive Technology (ART) nurse plays a fundamental role in optimising quality of care and outcomes for clients accessing ART services in Australia. The ART industry in Australia is required to function within the Reproductive Technology Accreditation Committee Code of Practice. From a nursing perspective, one of the key elements of the Code is competence in relation to the management and coordination of ART treatment cycles. This paper examines the literature in relation to the concepts and assessment of clinical competence as well as the link between clinical competence and the Australian Nursing and Midwifery Council National Competency Standards for Registered Nurses. The literature review was undertaken as part of a research project being undertaken to identify cues to clinical competence for ART nurses in Australia. It is suggested that provision of a competent ART nursing service will optimise the quality of care provided and in turn make a significant impact on the lives and outcomes for women accessing ART services within Australia.

Key words: Clinical competence; competence assessment; fertility; quality of care; Assisted Reproductive Technology (ART)

Introduction

One in six Australian couples experience fertility problems that will impact their ability to conceive. The Fertility Society of Australia (FSA) defines infertility as failure to conceive after a year of unprotected sexual intercourse (FSA, 2005b). Reasons for infertility are equally shared amongst men and women and in most cases a cause can be diagnosed and treatment may include medical and/or surgical therapies as well as lifestyle modifications (Monash IVF, 2006; FSA). It has been acknowledged that a co-ordinated team approach (including: patients, clinicians, scientists, nurses, and counsellors) is required to assist couples/individuals to manage their infertility and hopefully achieve a pregnancy (Muirhead & Lawton,
1998). Even if their dream to become parents is not achieved, ART units aspire to make a positive difference to the lives of women and couples accessing treatment through compassionate, caring approach to assist them to come to terms with their fertility future. It could be suggested that as the main point of contact for all clients undergoing ART treatment, the ART nurse plays a fundamental role in optimising quality of care and outcomes. This review of the literature initially considers historical perspectives and background information regarding the ART industry. Nursing clinical competence and competence assessment will then be explored and linked to ART nursing practice. The paper concludes with suggestions for future research.

**Literature search strategies**

A comprehensive review was undertaken to identify relevant literature in relation to clinical competence; competence assessment; performance measurement; practice standards and indicators; and literature that explored the area of clinical competence for ART nurses both nationally and internationally. The following procedure was utilised:

- Academic journals were reviewed through use of online databases including: EBSCOhost; Informit; Infotrac; ProQuest; Sage CSA; ScienceDirect; SpringerLINK; and Synergy.
- ‘Google Scholar’ was also utilised to identify and retrieve relevant online publications.
- Publication reference lists were also examined to ascertain additional references.
- Web sites from Australia and internationally were used to identify background information and additional publications.

A significant number of publications relating to competence and competence assessment in nursing and related health fields were identified; however, many of the recent publications were in fact reviews of pre-existing literature. Of particular note was the fact that number of ART nursing specific publications was quite limited with one from the United States and fourteen from the United Kingdom. Some had an element of discussion regarding competence; however, the context generally related to advance practitioner roles including embryo transfer and oocyte retrieval. As a result, the review that follows is predominantly based on literature from other nursing and healthcare arenas. As a preliminary, background information will now be considered in relation to the ART industry and the ART nursing practice domain.

**What is ART?**

The world’s first InVitro Fertilisation (IVF) baby, Louise Brown, made history when she was born on 25 July 1978 (Edwards & Steptoe, 1981). Her birth was the end result of ten years of research and clinical trials by Gynaecologist Dr Patrick Steptoe and Scientist Dr Robert Edwards. Their publications made brief mention of role of their IVF nurse Ms Jean Purdie. In Australia, IVF research and treatments for infertility were pioneered by Professor Carl Wood and Professor Alan Trounson and colleagues from the Department of Obstetrics and Gynaecology at Monash University. They began their work in 1971 and Australia’s first (and the world’s third) IVF baby Candice Reed was born on the 23 June 1980 (Monash IVF, 2006). The expression IVF is now often replaced by the term ART to encompass the range treatment options which include “… clinical treatments and laboratory procedures that include the handling of human oocytes, sperm, or
embryos, with the intent of establishing a pregnancy” (FSA, 2005a, p. 14). ART considered to include some or all of the following: IVF; intracytoplasmic sperm injection (ICSI); cryopreservation of gametes or embryos; donation of oocytes, sperm or embryos; gamete or zygote intrafallopian transfer (GIFT or ZIFT); embryo biopsy for preimplantation genetic diagnosis (PGD); and, where legal, gestational surrogacy (FSA, p. 14). Since these early days when the focus was on the patient, IVF Clinician and scientific team, it could be suggested that an additional focus is now also directed to the contribution of nurses and this perspective will now be considered.

**Art—Nursing perspective**

The ART industry is dynamic and rapidly evolving with significant changes in technology, law and ethics. The specialised role of the nurse practicing in the ART arena is also continually evolving (FSA, 2005a). The ART nursing role varies, but generally involves multiple responsibilities including provision of: nursing care and counselling; education of patients, colleagues and the community; treatment plan management; links at all levels including between patients, clinicians and related disciplines; timely and accurate record management; and participation in quality assurance and improvement, professional development and research activities. All of these roles must be performed within the context of nursing and ART specific legislation and regulations (FSA) and these will now be briefly considered.

**Art Specific Legislation and Regulations**

The ART industry in Australia is required to function within the Reproductive Technology Accreditation Committee (RTAC) Code of Practice for ART Units (FSA, 2005a). Australian ART units must be accredited by RTAC so they can legally use embryos in any way as part of treatment regimes (FSA). The Code of Practice establishes the minimum standards required of ART units and also promotes the principles of continuous improvement to optimise the quality of care provided. This accreditation process involves triennial audits of every ART unit through a process of peer review by external representatives from all disciplines as well as a consumer representative. From the nursing perspective, one of the key elements of an RTAC audit encompasses competence in relation to the management and coordination of ART treatment cycles. Clinical competence will now be explored and related to ART nursing.

**What is competence?**

The Chief Executive Officer of the (ANMC) indicates that despite the dynamic nature of the healthcare environment some things remain constant. In particular, Cook suggests that healthcare professionals must meet community needs through provision of a quality healthcare service that is safe and also maintain competence to facilitate safe practice (cited in foreword to Andre & Heartfield, 2007). The ANMC defines competence as “The combination of skills, knowledge, attitudes, values and abilities that underpin effective and/or superior performance in a profession …” (ANMC, 2006, p. 8). A key factor that contributes to the quality of care and outcomes is the competence of members of the healthcare team (Gunther & Alligood, 2002; McConnell, 2001). Nursing competence is also an expectation of both the community and the profession (McGrath et al., 2006). Calman (2006) reported the results of a grounded theory study that explored patients’ perceptions regarding nursing competence which identified that technical skills and knowledge
were considered to be the most significant components of nursing competence. After confirming technical competence, the patients then reported that next most significant components were interpersonal attributes. Zhang, Luk, Arthur, and Wong (2001) identified that personal attributes that equated to nursing competence included commitment and interpersonal understanding. The ANMC has developed and validated National Competency Standards for Registered Nurses and Midwives (ANMC, 2006); Code of Ethics for Nurses (ANMC, 2005a); a Code of Professional Conduct (ANMC, 2005b). These standards and codes of practice were developed to provide a framework to guide and promote accountability and the delivery of safe and competent nursing care within Australian healthcare arenas (ANMC, 2006). ART nurses are expected to practice in accordance with these standards as well as following the RTAC Code of Practice for ART nursing services (FSA, 2005a).

Several Australian nursing practice groups have developed unique sets of competency standards to meet their specific practice requirements including some that are developed for advanced practice nurses. The Australia and New Zealand College of Mental Health Nurses (ANZCMHN) (1995), now the Australian College of Mental Health Nurses, is currently in the process of revising their Standards of Practice for Mental Health Nursing in Australia to reflect best practice. The current document includes six standards for registered mental health nurses plus an advanced practice standard. Each standard incorporates a standard definition; rationale; and attributes which include knowledge, skills, attitudes and practice outcomes. This group has produced a standards document that has clearly identified all of the elements within the ANMC (2005b) definition of competence. Other Australian standards include: critical care; occupational health; diabetes educators; specialist paediatric and child health; community; continence advisers; gastroenterology; remote area; gerontic; sexual and reproductive health; general practice; and specialist breast nurses. All include standards, elements and cues to indicate competence. Some are independent documents whilst others indicate they must be read in conjunction with the ANMC standards for registered nurses. As an example, the ANF (2005) clearly identifies that registered nurses in general practice must meet both the ANMC national standards plus the specific standards for general practice nurses. This raises a question as to whether it would be feasible to combine practice specific indicators with the ANMC standards rather than having two separate standards documents. It could be suggested that a single document may be more user-friendly and potentially increase the likelihood that it will be accessed by nurses within that practice domain.

From the international perspective, the Royal College of Nursing (RCN) in the United Kingdom (2007) recently published a set of specialist competencies for fertility nurses. This document was designed to complement the UK national core competency framework and also to be used in conjunction with other frameworks involving core skills and competencies for nursing. Of note is the fact that the scope of practice of UK fertility nurses appears to be more advanced than is commonly practiced in Australia with many UK nurses undertaking oocyte collection and embryo transfers and thus this would impact the competency requirements. In Australia, there are currently no specific, nationally recognised practice indicators that could be used to identify competence of ART nurses. It would seem logical to utilise the ANMC Competency Standards to form the basis to identify and develop practice indicators for ART nurses in the Australian context in a similar manner to those developed for the UK fertility nurses. In addition, it is suggested that the practice indicators should include knowledge, skills and attitudes to ensure all elements of competence are considered as is the case in the ANZCMHN standards (1995). Assessment of competence will now be explored.
Competence assessment

Assessment of competence plays a key role in co-ordination and management of nursing care processes aimed at achieving quality outcomes (Meretoja & Leino-Kilpi, 2003). It has been suggested that competence assessment evaluates the synthesis of knowledge and skills as they apply in a given clinical situation (McConnell, 2001). However, as discussed earlier in this paper, competence involves more than knowledge skills and it is these other elements which include critical thinking, insight and caring that are difficult to quantify (McGrath et al., 2006). Following a comprehensive systematic review of the literature, Watson, Stimpson, Topping, and Porock (2002) proposed that clinical competence assessment remains controversial due to issues of validity and reliability. This view was reflected in an analysis of agreement between nurses and nurse manager competence assessments undertaken by Meretoja and Leino-Kilpi (2003). These researchers found significant discrepancies between the assessed levels of competence in each group. Similar concerns were also highlighted by McGrath et al. who also suggested that use of a standardised assessment tool which should theoretically produce reliable results may in fact have the very real potential to be a constraining factor in competence assessment. In contrast, Meretoja, Isoaho, and Leino-Kilpi (2004) suggested that self-assessment using a standardised test instrument allows nurses to enhance their practice and subsequently positively impact quality of care through identification of individual strengths and weaknesses. Similarly, Cowan, Wilson-Barnett, Norman, and Murrells (2007) suggested that a self-assessment tool developed for European general nurses proved to be a non-threatening, accurate means of competency assessment, the results of which were transferable across the European Union. It has been suggested that “… a multi-method approach enhances validity and ensures comprehensive assessment …” (Redfern, Norman, Calman, Watson, & Murrells, 2002, p. 51). This view was supported by Whelan (2006) who also suggested that competence assessment needs to be an ongoing to optimise quality of care and outcomes. It has been suggested that a professional portfolio provides the ideal means to communicate competency in those areas that are not easily measured or observed (Andre & Heartfield, 2007).

The multi-focal approach to competence assessment was supported by the RCN in their recently published competencies for fertility nurses (2007). The RCN encourages fertility nurses to use a range of strategies to demonstrate competence. These strategies include: practice verification through structured observation; personal portfolio that may include a reflective diary, case studies and logbook; and performance reviews that may include 360-degree feedback. In Australia, ART nurses who are members of the FSA are all provided with a folder that contains a standardised template to maintain their professional portfolio. This portfolio includes, but is not restricted to, registration and endorsement certificates; curriculum vitae; position description; performance review summaries; and professional development records. Interestingly, there are no clear links or references to the ANMC Competency Standards in the portfolio despite the fact that the majority of ART nurses are Registered Nurses. As stated earlier there are no nationally documented/accepted ART specific competencies, thus, given that competence is a key focus for RTAC accreditation; this must be an area for future research to facilitate assessment and optimise service quality.
Conclusion

The ART industry is rapidly evolving and requires a consistent team-approach to optimise quality of outcomes. The ART nurse plays a significant role in the coordination of care and treatment plans. The links between clinical competence, quality of care and outcomes were identified. Nursing competence and competence assessment and their potential application to the Australian ART nursing practice domain were explored and related to the ANMC Competency Standards for Registered Nurses. It is suggested that these standards would be enhanced if ART specific practice indicators (including knowledge, skills and attitudes) were identified. ART specific practice indicators should in turn facilitate provision of a competent ART nursing service, the demonstration of competence to meet RTAC requirements and ultimately optimise the quality of care provided. It is suggested that this in turn would result in a significant and positive impact on the lives and outcomes for women and couples accessing ART services within Australia.

References


