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An Evaluation of the Scottish Multiprofessional Maternity Development Programme

MAIN REPORT

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MAIN REPORT

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Marta McGillivray who transcribed the telephone interviews.

Dr Angie Docherty – Programme Leader in Public Health Nursing, University of the West of Scotland - Peer reviewer of interview data analysis.

Royal College of Midwives (RCM) Scotland Lead Midwives Group.

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EXECUTIVE SUMMARY

BACKGROUND TO THE EVALUATION

The report of the Expert Group on Acute Maternity Services (EGAMS) (Scottish Executive, 2002) provided recommendations based on the principles from the maternity framework document (Scottish Executive, 2001). The EGAMS report suggested that maternity staff receive sufficient training, support and education to ensure that they had the necessary skills and competencies to cope with obstetric and neonatal emergencies. It was agreed that all healthcare professionals (midwives, obstetricians, anaesthetists, paediatricians, general practitioners, paramedics, neonatal nurses, nurses and allied healthcare professionals) involved with intrapartum care, irrespective of location, should have and maintain these core skills. Each level of maternity care should have the appropriate skill mix for that level and every professional working in a maternity unit should achieve and maintain identified core competencies. As well as providing the appropriate courses to meet multiprofessional needs, innovative ways of maintaining skills and competencies were advocated, hence the advent of the Scottish Multiprofessional Maternity Development Programme (SMMDP).

The SMMDP commenced in 2003, and for the first 18 months, was supported by the Royal College of Midwives (RCM) and the Scottish Executive Health Department (SEHD) through a service level agreement. The SMMDP then moved into NHS Education for Scotland (NES) in 2005 and has provided a range of courses to address these recommendations (Scottish Executive, 2001; Scottish Government, 2011). Over 3,100 participants have attended at least one SMMDP course with the present SMMDP database comprising 2,000 active email addresses. The training is provided at local centres throughout Scotland and latterly in the south of England.

Previously an evaluation of the SMMDP courses was conducted by Robert Gordon University, Aberdeen (Gibb, Ireland and West, 2007) in addition to ongoing internal course evaluations. Gibb, et al (2007) reported that learning together seemed to have a positive impact on team working, sharing and collaboration resulting in improved patient care. Recommendations for the SMMDP included the need to have clear learning outcomes for the courses, in addition to team working being supported in the work place. They also highlighted that selection and training of facilitators was important.

A further robust evaluation of the impact of the programme is now required to build on this previous evaluation (Gibb, et al, 2007) and in alignment with the Healthcare Quality Strategy for NHSScotland (Scottish Government, 2010). This will inform future programme development so that the SMMDP remains contemporary and continues to provide improved maternity care for women

and their babies across Scotland. The evaluation should engage with both past participants and clinical managers to determine the holistic impact of the efficacy of the SMMDP. Issues that require investigation include the impact the programme has had on maternity services in terms of staff competence and confidence, changes to practice and also a cost / benefits analysis. The University of the West of Scotland (UWS) is delighted to undertake an evaluation of the SMMDP, which has been commissioned by NHS Education for Scotland. This evaluation will explore how the SMMDP has fulfilled the recommendations from the EGAMS Report.

PROJECT OBJECTIVES

1. To measure the impact on maternity services following the introduction of the SMMDP e.g. Does it provide staff with increased knowledge, preparedness, confidence and competences to carry out their role?

2. To provide examples of any changes in practice (effectiveness of training).

3. To explore the staff experience, perceived knowledge base following attendance at clinical skills training.

4. To identify a method to evaluate the effectiveness of the SMMDP model of course development.

5. To provide an analysis of the benefits both in quality, output, cost savings, time savings of the SMMDP.

6. To evaluate the partnership approach to the work of the SMMDP.

7. To evaluate the following courses: The Scottish Emergency Maternity Care Course (for Non-Maternity Professionals) and the new Scottish Maternity REACTS (Recognition, Evaluation, Assessment, Critical Treatment and Stabilisation) Course.

PROJECT DESIGN

Methodology

The research design was an evaluation, which attempts to seek worth or value of some innovation, intervention, service or approach (Robson, 2006). The evaluation framework utilised was the Kirkpatrick model (Kirkpatrick, 1996). This model was appropriate as it has been utilised to measure the effectiveness of training programmes since the 1950s (Kirkpatrick, 1996) and

is a goal-based model (Eseryel, 2002). It provides a taxonomy for training evaluation criteria (Alliger and Janak, 1989) and the chief purpose of the model is to clarify the meaning of evaluation and to be a source of guidance for conducting an evaluation (Kirkpatrick, 1996). The model comprises four stages or levels of training outcomes: reaction, learning, behaviour and results (Bates, 2004).

The study was undertaken in three phases from October 2010 to March 2011.

- Phase one analysed pre-existing SMMDP internal course evaluations.
- Phase two evaluated individual course participants and the impact on their practice and benefits from this training (Sample size was n=540).
- Phase three evaluated the impact on practice and cost benefits from a wider perspective (Sample size n=15).

Triangulation provided rigor (Polit and Beck, 2006) in the form of:

- Research methods (qualitative and quantitative).
- Data collection tools (course evaluations, online questionnaire and telephone interviews).
- Data sources (candidates and instructors on the courses, heads of midwifery / lead midwives, midwifery managers, consultant midwives, practice development midwives, midwives, Scottish Ambulance Service training officers, medical directors, medical practitioners, nurses, neonatal nurses and allied health professionals).

MAIN FINDINGS

- Confirmability of data was through triangulation: research methods, data collection and data source.

- The SMMDP is relevant, up-to-date, evidence-based and a quality assured method of training multiprofessionals within the maternity services.

- The multiprofessional aspect to the programme was positively evaluated and endorsed the partnership approach to the work of the SMMDP.

- Participants reported that the SMMDP was an enjoyable, beneficial and effective mode of training, which increased their knowledge, confidence and competence and prepared them to carry out their role and advanced roles e.g. examination of the newborn.

- Participants reported numerous examples of evidence-based changes which have been implemented into their practice areas following SMMDP training.

- The current internal evaluation from the SMMDP has been an appropriate tool to evaluate the effectiveness of the model of SMMDP courses. However, some sections need to have an identical stem question to be able to readily conduct more rigorous comparative data analysis.

- The Scottish Emergency Maternity Care Course (for Non-Maternity Professionals) and the new Scottish Maternity REACTS (Recognition, Evaluation, Assessment, Critical Treatment and Stabilisation) Course were both positively evaluated by the small number of participants who have attended to-date.

- The SMMDP was perceived to be cost effective, value for money and an efficient use of time. However, there was no evidence provided by the practice areas to allow the researchers to quantify these findings.

- The participants acknowledged that the SMMDP should remain a national evidence-based training programme, which is utilised by all professionals and non-professionals involved in providing maternity care across Scotland. Whilst sustainability of the SMMDP was important at this time a challenge identified from some respondents was financial constraints within NHS Boards and attending local in-house training maybe an option.

- Managers stated that if staff were underperforming in practice then the SMMDP was deemed to be an appropriate training programme to re-skill and update these practitioners even when in-house training was available.

- The continuing positive evaluations across all the courses emphasises the consistency of the instructors within the SMMDP who come from a variety of professional backgrounds and regions. This finding confirms a rigorous and robust quality assurance mechanism within the SMMDP.

RECOMMENDATIONS

Based on the findings the following recommendations have been made for NHS Education Scotland and / or employers of professionals and non-professionals delivering different levels of maternity care in Scotland.

NHS Education for Scotland

- Continue to provide the SMMDP as a national evidence-based programme for all professionals and non-professionals providing maternity care in Scotland as the recognised standard for obstetrics and neonatal training.

- Continue to promote the multiprofessional and partnership approach by incorporating staff from other NHS Boards to enhance the shared learning across disciplines and NHS Boards in Scotland.

- Continue to maintain this high standard of national, quality assured, cost effective training, which remains aligned to the Healthcare Quality Strategy for NHSScotland and focuses on safe patient care.

- Continue the present format of core lectures and small group teaching. Continue to keep the focus of scenarios used in courses to accommodate the variety of healthcare provisions from remote, rural and community areas as well as hospital environments.

- Continue the present format and administration of internal course evaluations but include identical stem questions for each heading to enable more rigorous comparative data analysis.

- Review the format for assessments and the appropriate method of feedback to both the candidates and their line managers.

- Review policy on travel expenses for courses.

- Review current advertising and marketing strategy.

NHS Education for Scotland and / or employers of professionals and non-professionals delivering different levels of maternity care in Scotland.

- Continue to encourage all staff providing care within the maternity services to attend for continual professional development as the SMMDP enhances their knowledge, confidence and competence and prepares them for their roles and advanced roles.

- Explore options for resources to support healthcare staff to be released from the areas when they are away as candidates, instructors / instructor candidates.

Employers of professionals and non-professionals delivering different levels of maternity care in Scotland.

- Current employers should link the effectiveness of staff training to risk management outcomes through a mapping exercise or further audit or research project.

- Current employers should develop a database or log of training to identify the cost benefits of the SMMDP compared to other training courses and create a benchmark for continuous professional development.

- Current employers should take cognisance of the benefits and outcomes for the maternity services from the national approach of SMMDP training in supporting the uptake of staff attendance. This will enhance safe and effective practice and promote up-to-date evidence-based obstetrics and neonatal care in Scotland.

GLOSSARY

Brief explanation of terms and abbreviations used in the report:

CPD	Continuous Professional Development
CPR	Cardio Pulmonary Resuscitation
EGAMS	Expert Group on Acute Maternity Services
ICE	Internal Course Evaluations
NES	NHS Education for Scotland
NHS	National Health Service
NMAHP	Nursing, Midwifery and Allied Health Professionals
NMC	Nursing and Midwifery Council
RCM	Royal College of Midwives
REACTS	Scottish Maternity REACTS (Recognition, Evaluation, Assessment, Critical Treatment and Stabilisation) Course
SBAR	Situation, Background, Assessment, Recommendations
SCOTTIE	Scottish Core Obstetrics Teaching and Training in Emergencies Course
SEMCC	Scottish Emergency Maternity Care Course (for Non-Maternity Professionals)
SGITBC	Scottish Generic Instructor Training Bridging Course
SGITC	Scottish Generic Instructor Training Course
SMMDP	Scottish Multiprofessional Maternity Development Programme
SNRC	Scottish Neonatal Resuscitation Course
SNPTCC	Scottish Neonatal Pre-Transport Care Course
SRENC	Scottish Routine Examination of the Newborn Course
SNLBC	Scottish Normal Labour and Birth Course
UWS	University of the West of Scotland

TABLE OF CONTENTS

SECTION ONE

THE PURPOSE OF THE EVALUATION STUDY

Background

The report of the Expert Group on Acute Maternity Services (EGAMS) (Scottish Executive, 2002) provided recommendations based on the principles from the maternity framework document (Scottish Executive, 2001). The EGAMS report suggested that maternity staff receive sufficient training, support and education to ensure that they had the necessary skills and competencies to cope with obstetric and neonatal emergencies. It was agreed that all healthcare professionals (midwives, obstetricians, anaesthetists, paediatricians, general practitioners, paramedics, nurses and allied healthcare professionals) involved with intrapartum care, irrespective of location, should have and maintain these core skills. Each level of maternity care should have the appropriate skill mix for that level and every professional working in a maternity unit should achieve and maintain identified core competencies. As well as providing the appropriate courses to meet multiprofessional needs, innovative ways of maintaining skills and competencies were advocated, hence the advent of the Scottish Multiprofessional Maternity Development Programme (SMMDP).

The SMMDP commenced in 2003, and for the first 18 months, was supported by the Royal College of Midwives (RCM) and the Scottish Executive Health Department (SEHD) through a service level agreement. The SMMDP then moved into NHS Education for Scotland (NES) in 2005 and has provided a range of courses to address these recommendations (Scottish Executive, 2001; Scottish Government, 2011). Over 3,100 participants have attended at least one SMMDP course with the present SMMDP database comprising 2,000 active email addresses. The training is provided throughout Scotland at local centres and latterly in the south of England.

Previously an evaluation of the SMMDP courses was conducted by Robert Gordon University, Aberdeen (Gibb, Ireland and West, 2007) in addition to ongoing internal course evaluations. Gibb, et al (2007) reported that learning together seemed to have a positive impact on team working, sharing and collaboration resulting in improved patient care. Recommendations for the SMMDP included the need to have clear learning outcomes for the courses, in addition to team working being supported in the work place. They also highlighted that selection and training of facilitators was important.

A further robust evaluation of the impact of the programme is now required to build on this previous evaluation (Gibb, et al, 2007) and in alignment with the Healthcare Quality Strategy for NHSScotland (Scottish Government, 2010). This will inform future programme development so that the SMMDP remains contemporary and continues to provide improved maternity care for women and their babies across

Scotland. The evaluation should engage with both past participants and clinical managers to determine the holistic impact of the efficacy of the SMMDP. Issues that require investigation include the impact the programme has had on maternity services in terms of staff competence and confidence, changes to practice and also a cost / benefit analysis.

Therefore NHS Education for Scotland has commissioned the research team from the University of the West of Scotland in 2010 to conduct this evaluation study. This evaluation will explore how the SMMDP has fulfilled the proposed recommendations outlined.

Project Objectives

1. To measure the impact on maternity services following the introduction of the SMMDP e.g. Does it provide staff with increased knowledge, preparedness, confidence and competences to carry out their role?

2. To provide examples of any changes in practice (effectiveness of training).

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Outline of the Report

The structure of the report is presented below with a brief description of each section:

Section one introduces the study and includes a brief literature review and describes the model of evaluation used.

Section two outlines the design and methods used for each stage of the study.

Section three presents the data from the SMMDP internal course evaluations (ICE) 2008/2009 and 2010.

Section four presents the data from this evaluation for both the online survey and telephone interviews.

Section five provides a discussion of the findings, identifies the strengths and limitations of the evaluation and presents conclusions and recommendations.

Appendices are included for additional information.

THE EVALUATION STUDY

Introduction

The EGAMS report (Scottish Executive, 2002) recommended that there was a need to re-organise services so that all staff could provide appropriate care regardless of the location. They also emphasised that maternity staff should receive sufficient training, support and education to ensure that they had the necessary skills and competencies to cope with obstetric and neonatal emergencies. Therefore it was agreed that all healthcare professionals involved in intrapartum care irrespective of location, should have and maintain these core skills. The identification and management of risk was identified as crucial to successful maternity care, with training vital to support maternity care professionals in successfully managing obstetric emergencies as well as caring for 'ill' women.

The EGAMS report (Scottish Executive, 2002) highlighted that a multiprofessional approach to education, training and service provision on a local and regional basis was crucial. The multiprofessional approach to education and training is a concept endorsed by many researchers (Harden, 1998; Freeman, Miller and Ross, 2000; Marquis and Huston, 2010). Freeman, et al (2000) highlight that because multiprofessionals work together in the clinical place it makes complete sense that they should learn together thus producing a cohesive approach to patient care and management. This has been highlighted by Draycott, Sibanda, Owen, et al (2006) in their retrospective observational cohort study where they identified that multiprofessional obstetric emergency training had a significant effect on neonatal Apgar score. Moreover interprofessional learning leads to improved relations between professions and prevents barriers being created through shared knowledge and respect for each other's roles (Pirrie, Wilson, Elsegood, et al, 1998; Marquis and Huston, 2010). Harden (1998) detailed the eleven steps of classification of multiprofessional learning, multiprofessional, interprofessional and transprofessional being the three highest levels. In multiprofessional learning, the individuals explore the subject from their own professional perspective, with interprofessional learning the professionals look at the subject from the perspective of other professions as well as their own. Whilst the transprofessional education is based on the real life experiences in their milieu to enhance learning, these findings are endorsed by Ker, Mole and Bradley (2003) in their large study exploring interprofessional learning in simulated environments between senior student nurses and medical students (n=151). The students enjoyed shared learning and felt that this helped with team working, leadership and collaboration. However, the researchers found that this varied depending on group dynamics.

Goble (2004) stated that there is increasing evidence to suggest that collaborative learning leads to collaborative care. In this position paper the proposed advantages include a greater range of professional skills, more efficient deployment of relevant

skills, mutual support, high morale and cost effectiveness of both training and provision of care. However, there appears to be perceived barriers to implementing multiprofessional and interprofessional education and practice. Barriers include attitudes, organisational and political issues with the main obstacle relating to the attitudes of the health professionals, who do not think it is important to use resources to promote collaborative education and activities (Goble, 2004). Reeves (2000) identified that staff and students attitudes to multiprofessional learning were instrumental to the success of the learning. Reeves and Freeth (2002) found in their studies relating to pre-registration / post-registration learning that multiprofessional learning contributed to high levels of patient satisfaction and provided valuable staff development in relation to multiprofessional facilitation as well as improved team working and awareness of roles.

Perceived high monetary cost has also been highlighted in some studies as a potential obstacle in multiprofessional / interprofessional learning (Goble, 2004). However the Scottish Executive (1999) suggest in their 'Learning Together' strategy that interprofessional learning is a cost effective way to deliver complex learning needs. The location of courses and travel has also been identified with the issue of cost and an advantage of local training helps reduce cost and allows more participants to attend (Black and Brocklehurst, 2003; Draycott, et al, 2006).

The EGAMS report (Scottish Executive, 2002) indicated that confidence and decision-making skills would be enhanced if professionals (midwives, obstetricians, anaesthetists, paediatricians, general practitioners, paramedics, neonatal nurses, nurses and allied healthcare professionals) are equipped with the necessary skills and competencies, and have the professional backup and resources to support their role irrespective of demographics. One key issue highlighted in the latest Centre for Maternal and Child Enquiries (CMACE) Report (Draycott, Lewis, and Stephens, 2011) was the importance for all staff who dealt with maternity women to be able to identify the 'ill woman', which would help prevent morbidity. The report also emphasised the importance of good communication amongst all team members right from the outset of the women entering the maternity services (Draycott, et al, 2011). In everyday clinical practice registered professionals require to use teaching and coaching skills with a diverse range of people in a variety of clinical contexts. Continuous professional development (CPD) is integral to registered practitioners maintaining their skills and competence to keep updated as required by the professional bodies. Whilst we should have an understanding of behavioural and cognitive modes of learning, it is the humanistic adult-centred learning which is conducive with learning today. It is no longer appropriate to think that one course will set up the person for life in the working environment. The pursuit of excellence in care has led to healthcare professionals becoming enquiring practitioners.

Within the SMMDP courses the development of professional issues are taught such as concepts of quality assurance, risk management and evidence / research-based

care. In order to maintain a high standard of healthcare practitioners are required to keep up-to-date with ideas and issues that impact on their working life. The concept of lifelong learning is synonymous with keeping up-to-date in the workplace. Cross, Moore, Morris, et al (2006) refer to effective CPD as the maintenance and enhancement of knowledge, expertise and competence of professionals throughout their careers according to a plan formulated with regard to the needs of the professional, employer, profession and society.

Adults possess an accumulation of experience which provides a resource for their own learning and that of others. Their interests tend to focus on problem solving rather than abstract content or theory. Adults are motivated to learn when they perceive the activity as being directly related to their own activities and when they perceive a need to know something. The SMMDP aims to address this by focusing on the needs of service but at a level which suits the workforce.

Furthermore teachers need to motivate the student. Cross, et al (2006, p.38) highlight that *"As a teacher you are first and foremost to be a motivator and enabler"*. However, teachers themselves must be motivated (Azer, 2005) and have the energy and enthusiasm to teach. They need to be skilled communicators, have a teaching style that engages the student and they require to be very knowledgeable about the subject or skill they are teaching (Harden and Crosby, 2000). The SMMDP recruit instructors who have passed generic instruction training after first being nominated by existing instructors who have observed these qualities.

Adults learn best, in a non-threatening environment which allows them time and space for reflection (Quinn, 2007). The SMMDP is structured and systematic but also informal. The main methods of teaching within the SMMDP are a few core lectures but mainly small group work stations and role play simulation. According to Fry, Ketteridge and Marshall (2009), the lecture is best used to provide background information and basic concepts. The SMMDP use lectures to give the participants substantial information around key subject areas. The lectures are detailed and evidence-based. The small group workstations, scenarios and role play simulation forms the majority of any course on the SMMDP. Beaubien and Baker (2004) stress the value of using case studies and role play to enhance the learners' attitudes towards the importance of teamwork and knowledge of teamwork concepts.

Small group teaching is viewed by many as being the best way to teach, as it facilitates much better interaction between the participants and the teacher therefore enhancing the learning experience (Jacques, 2000). Although groups take time to form and develop and go through the stages of formation as indicated by Tuckman and Jensen (1977) this does not happen during real life emergency clinical situations. Therefore whilst teaching emergency scenarios this sudden group formation for one or two days can work as long as there are clear learning outcomes identified (Marquis and Huston, 2010). Ongoing assessment of individuals within the

group helps the group gel and work together to support each other and get the most out of the learning situation (Willis, Jones, Bundy, et al, 2002). Willis, et al (2002) also found that intra-group relationships were an important aspect of small group learning. Their participants revealed that they felt protective of the group and its members, valued each other's opinions and supported each other's learning needs.

Springer, Stane and Donovan (1999) in their meta-analysis of small group learning from 1980 onwards (n=39 studies) found that women and members of under-represented groups had a greater opportunity to be heard in small groups, especially if the groups were kept to less than twelve members per group. Also there was noted to be much more interaction between the facilitator / teacher and students during sessions. High academic success was also noted when small group teaching was used.

Furthermore within small groups it is much easier to apply a deep approach to learning especially if it is performed in a systematic way (Griffiths, 2006). Within the small groups teaching of the SMMDP the skill is always performed in the same way involving set, dialogue and closure. The skills are taught using a four stage technique; first the instructor carries out the skill silently, then the instructor carries out the skill with commentary, next the instructor carries out the skill with the participant(s) providing the commentary and finally the participant(s) carries out the skill on their own. Also, Cross, et al (2006) advocate that teaching must be performed in a logical sequential manner for the learner to get the best out of the experience. Small group learning also means it is also much easier to adapt the role play scenarios to meet the needs of each individual within the group (Midmer, 2003)

The role play simulation is based on the concept of experiential learning (Kolb, 1984), it is utilised within the SMMDP to provide an educational environment similar to that of the clinical area. Thus it is expected that simulation will enable practitioners to apply their learning more easily when they return to the workplace (Wilford and Doyle, 2006). Role play simulation allows complex teaching and learning situations to be 'acted' out in a non-threatening environment (Keyser, 2000). It allows the theory to be tested in an active learning environment without the demands of caring for an actual patient (Gaberson and Oermann, 1999). Marcy (2001) found that students benefited greatly from using equipment in role play scenarios that they would use in real life.

Many studies have reported that role play / clinical simulation improves students' / participants' critical thinking, knowledge base, confidence and competence in dealing with complex clinical situations back in the workplace (Schaefer and Zygmont, 2003; Wolf, 2008; Kaddoura, 2010). Comer (2005) found that 96% of participants in her study reported that they favoured this method of teaching / learning (n=60). Conversely, as already mentioned, role play scenarios can be adapted and controlled by the instructor to suit individual needs which most students like.

However, this does make the experience unpredictable and can be unnerving for some students. Some reporting that it spoiled their learning experience (Schaefer and Zygmont, 2003). Also some students dislike role-play as they do not seem to be able to get into the 'role' finding it difficult to communicate with manikins or actors. Nestel and Tierney (2007) reiterate these findings and stress that some students do find role play difficult and feel embarrassed, intimidated and anxious, which ultimately hinders learning.

However, according to Nehring, Ellis and Lashley (2001) patient care clinical simulation embraces the cognitive psychomotor and affective domains of learning, and effectively accommodates the preferred learning preferences of healthcare students. Furthermore studies have shown that healthcare workers tend to be visual learners therefore as simulation and role-play are performed in real–time this provides an interactive experience which provides visual learners with the opportunity to observe and participate in clinical situations. This is also highlighted by Fisher, Bernstein, Satin, et al (2010) who concluded that simulation training was superior to traditional lectures alone for teaching clinical skills for the optimal management of both eclampsia and magnesium toxicity in life threatening obstetric emergencies. Reflection is also necessary component of this teaching / learning strategy and Kaddoura's (2010) study highlighted that participants valued receiving feedback at the end of each session on which they can reflect.

Assessment is also an important concept when dealing with teaching and learning. Fry, et al (2009) highlight that assessment influences learning and that feedback is an important part of assessment which focuses not only on the practice of how to improve student learning, but also to determine what the student should learn. Beaubien and Baker (2004) previously stressed the importance of post-simulation de-briefing to reinforce the lessons to be learnt from the training and also to help generate strategies for team self-development. Fry, et al (2009) stresses that the method of assessment, which is utilised is the most important and should be in relation to the learning outcomes. Therefore it is important that the format of assessment used is appropriate to the teaching and learning methods. This is utilised throughout the SMMDP training courses in the form of ongoing summative assessment, formative assessment on skills and pre-course multiple choice question test to illicit the candidates knowledge base and continual instructor and peer group feedback.

The purpose of this project was to review the current SMMDP internal course evaluations, undertake an overall evaluation about the SMMDP and assess the impact the programme has had on practice since it was established in 2003. The project specification included evaluating the perspectives of the key groups who had been involved with the SMMDP and the changes in practice and cost benefits from the SMMDP training courses.

A clearly defined and robust evaluation of the impact of the course is now required to inform future programme development so that the programme remains contemporary and continues to provide improved maternity care for woman and their babies across Scotland and the south of England. The evaluation should engage with both past participants and clinical managers to determine the holistic impact of the efficacy of the SMMDP. Issues that require investigation include the impact the programme has had on maternity services in terms of staff competence and confidence, changes to practice and also a cost / benefits analysis. The University of the West of Scotland (UWS) is delighted to undertake an evaluation of the SMMDP, which has been commissioned by NHS Education for Scotland. This evaluation will explore how the SMMDP has fulfilled these recommendations.

Plan of Evaluation

This project measured the impact on maternity services following the introduction of the SMMDP and to provide examples of any changes in practice (effectiveness of training). A key area of interest was to explore the staff's experience, perceived knowledge base following attendance at clinical skills training and to provide an analysis of the benefits both in quality, output, cost savings and time savings of the SMMDP.

For this evaluation the Kirkpatrick model was used. This model was appropriate for this project as it has been utilised to measure the effectiveness of training programmes since the 1950s (Kirkpatrick, 1996) and is a goal-based model (Eseryel, 2002). It provides a taxonomy for training evaluation criteria (Alliger and Janak, 1989) and the chief purpose of the model is to clarify the meaning of evaluation and to be a source of guidance for conducting an evaluation (Kirkpatrick, 1996).

To achieve this evaluation, research activity was divided into several key stages which were:

- Phase one: Analysis of the pre-existing SMMDP internal course evaluations, which addresses level one of the Kirkpatrick model.
- Phase two: Evaluation of the individual who was involved with the SMMDP and how this impacted on their practice and the benefits of undertaking this training, which addresses levels one, two and three of the Kirkpatrick model.
- Phase three: Evaluation of the impact on practice and cost benefits from a wider perspective, which addresses levels three and four of the Kirkpatrick model.

As the study progressed there was regular contact between the research team and the NES steering Group to ensure that the specified aims and objectives of the project were going to be met within the proposed research design and agreed timescale.

SECTION TWO

RESEARCH METHODS

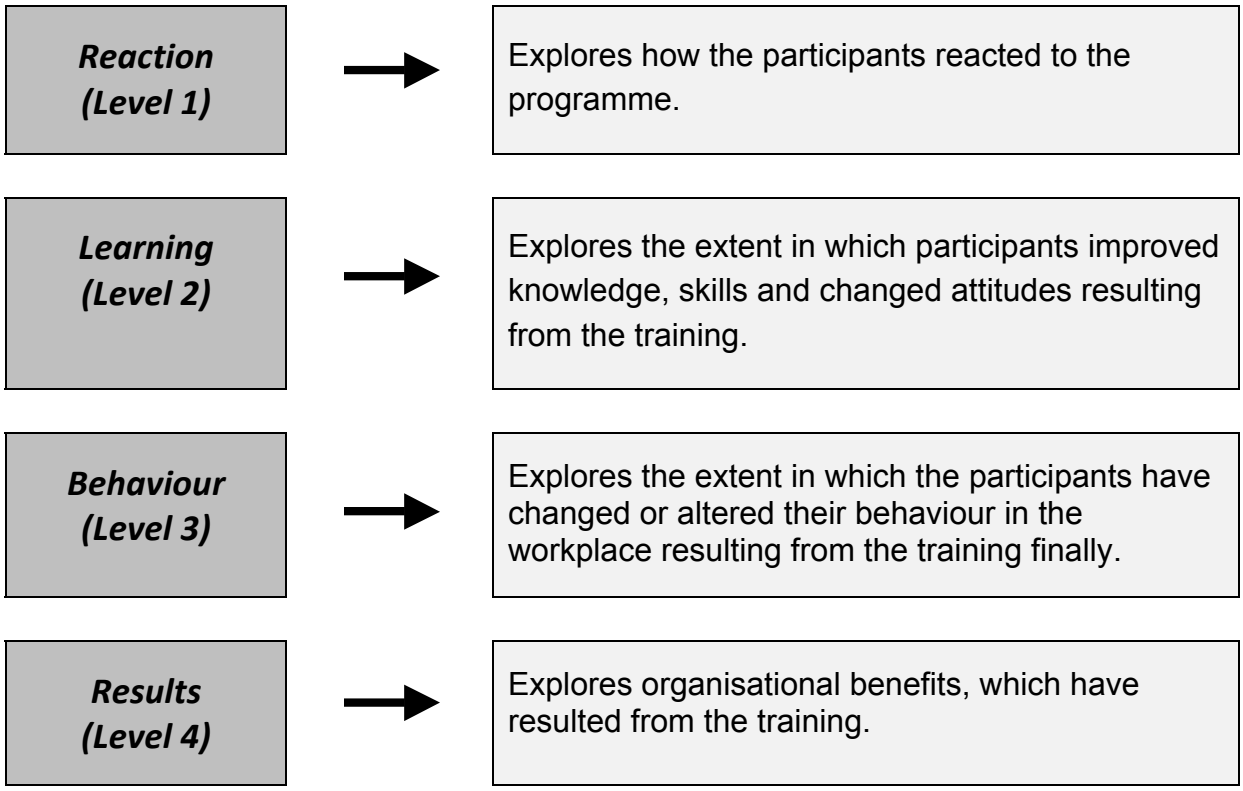
Working within the National Health Service (NHS) it is extremely important to evaluate not only the service provided, but also the training, which impacts on service delivery, both of which ultimately impact on the outcome for the service users and help ensure the maintenance of high quality uniform standards across the healthcare professions. The objectives set out by NES lend themselves to evaluate the worth and value of the SMMDP therefore evaluation methodology was utilised for the project.

Evaluation is a type of research which attempts to assess the worth or value (Robson, 2006) of some innovation, intervention, service or approach. Evaluations are undertaken to assess if the current methods are appropriate and also to establish if changes are required (Polit and Beck, 2006). Evaluation research can have a variety of designs utilised and the use of different methodologies depending on the questions required to be answered (Robson, 2006). It is therefore an adaptable and useful form of research methodology in exploring the provision of the SMMDP training courses.

Evaluation Model for Study

The Kirkpatrick model (Kirkpatrick, 1996) comprises four stages or levels of training outcomes: reaction, learning, behaviour and results (Bates, 2004), which is demonstrated below.

Kirkpatrick Model



(Business Performance, 2010)

Bates (2004) also advocates the Kirkpatrick model and states that *"it addresses the needs of training professionals to understand training evaluation in a systematic way".* Although this model is not without its limitations, which have also been highlighted (Bates, 2004). However, the research project team established that this is still an appropriate model to utilise as the benefits outweigh the limitations. The overall outcome for evaluation of training programmes is to establish if the training programme should be continued, if the training programmes require to be developed and improvements made for future programmes and also validate the existing professional trainers (Kirkpatrick, 1996).

Ethical Considerations

Conducting any form of research it is important that ethical considerations are taken into account. This protects not only the participants, but also the researchers. The main ethical issues such as beneficence, non-maleficence, confidentiality, anonymity and data protection (Polit and Beck, 2006) are important to be addressed, therefore procedures were in place to ensure this happened. Following discussion with the West of Scotland Research Group and inline with UWS ethical guidelines, ethical approval was not deemed to be required as this project was an evaluation of a current service.

All participants in the study were sent an electronic information sheet informing them of the evaluation. The questionnaire was situated on a secure online site with the project team being the only ones with access to the data. Assumed consent was acceptable for the online questionnaire and the participants were asked to email the researchers if they wished to take part in a telephone interview. However, the researchers still adhered to the main ethical principles and assured all participating staff of the confidentiality of data collected, anonymity of all participants' quotes and right to withdraw from the evaluation study at any time without reprisal (Polit and Beck, 2006). Access to all the participants was through NHS.net email account and contact details from the existing SMMDP database. The project team abided by the rules governed by the Data Protection Act (2003) regarding handling and storage of all data collected.

Methods

Quantitative and qualitative data collection methods were used for the study. Triangulation methods gathered a richer source of data for analysis (Polit and Beck, 2006). The methods utilised for this study were: an online self-completion questionnaire, telephone interview and the existing results from the current SMMDP course evaluations. For phase one of the study the pre-existing SMMDP internal course evaluations were analysed and a summary compiled.

For phase two of the study data collection methods were a self-completion online questionnaire via Survey Monkey. This online questionnaire comprised four sections:

- Section 1 asked demographic data about the participant;
- Section 2 asked about how the participant felt before and after participating in the individual SMMDP courses;
- Section 3 asked about the format and content of the SMMDP programmes - specifically exploring the teaching and learning strategies;
- Section 4 allowed the participant to identify the strengths of the SMMDP programme and future recommendations.

The different sections of the online questionnaire comprised both closed and open questions. The closed questions were utilised for ease of completion for the participant. The open questions allowed the participant to further expand on responses from the closed questions but also enabled richer qualitative data to be gathered.

Phase three of the study was a structured telephone interview using a preset interview schedule. This method was chosen as it was a more efficient use of time and resources and due to the challenge of the very diverse and large geographical spread of the proposed population.

Population and Sample

The data were collected from the different populations in the different NHS Board regions across Scotland and Plymouth in the south of England. The population for this evaluation was varied and included all healthcare professionals who had taken part in the SMMDP training both as participants and instructors. This included: heads of midwifery / lead midwives, midwifery managers, consultant midwives, practice development midwives, midwives, Scottish Ambulance Service training officers, medical directors, medical practitioners, nurses, neonatal nurses and allied health professionals. For phase two of the study the target population for the online questionnaire was all participants from the current SMMDP database of active email addresses (n=2,000). The sample was a non random convenience sample.

For phase three of the study the target population for the telephone interviews was taken from consultant midwives, heads of midwifery / lead midwives, practice development midwives, medical directors, medical practitioners and Scottish Ambulance Service training officers. This sample was a voluntary sample in response to the questionnaire and also following an email invitation to participate. This volunteer sample (n=15) consisted of lead midwives, practice development midwives, Scottish Ambulance Service training officers. Only one medical practitioner volunteered to participate in this phase of the study. This might add bias to this sample as it is under represented.

Recruitment

Prior to data collection in November 2010 an information flyer (Appendix 1) and information sheet (Appendix 1) was distributed via email to all potential participants throughout the relevant NHS Board areas across Scotland and England informing them about the forthcoming evaluation. For phase two of the study the convenience sample was obtained over a three month period between December 2010 and February 2011. In December 2010 an email was distributed to all contacts on the

current SMMDP database list who had taken part in the SMMDP. The participants could access the questionnaire directly by clicking on the hyperlink. The email had the information flyer (Appendix 1) and information sheet attached (Appendix 2) and included the hyperlink to the online Survey Monkey questionnaire. One reminder was emailed to the target population (Appendix 3) during January 2011. The initial sample response rate was slow so to assist with the recruitment another email was also sent to the RCM Lead Midwives Scotland Group to be distributed within their clinical areas.

For phase three of the study the participants volunteered by confirming their intention to be involved in the telephone interview by email to the Lead Investigator. The contact details for the Lead Investigator were on all information sheets and at the end of the online Survey Monkey questionnaire. A further reminder for telephone interview participant volunteers was distributed via email in February 2011 (Appendix 4) and through the RCM Lead Midwives Scotland Group. This recruitment process was used to incorporate a varied mix of staff from a variety of regions across Scotland and England.

Access to Participants

Prior to data collection an electronic information sheet and information flyer was created and distributed by email throughout the relevant NHS areas across Scotland and England. This increased awareness about the forth coming evaluation and aimed to encourage participation. All participants and instructors who attended the SMMDP were sent an electronic information sheet and letter informing them about the study via the existing SMMDP contacts database and NHS.net email address. The email had an online address for the participants to access the questionnaire. Follow up and final reminders about the online survey with the web address for ease of access for participants were sent at selected time intervals to the target population. Participants from the online questionnaire were asked to email the Lead Investigator to volunteer for the telephone interviews, which would be scheduled at a convenient date and time for participants.

Data Collection Tools

The project team agreed that it would be valuable to conduct different types of data collection to enhance the robustness of the evaluation project and enhance confirmation of data (Parahoo, 2006) and validity (Polit and Beck, 2006). Mixed-methods of data collection and data sources were utilised thus achieving triangulation (Parahoo, 2006). The different methods of data collection, which will be used for this phase of the evaluation, are now described.

The SMMDP had a rigorous evaluation process since it commenced. Therefore part of the data collection process for this evaluation has already been conducted. The data from existing internal course evaluations and information stored within the SMMDP database were analysed and helped inform the questionnaire content, which was also adapted from the evaluation of the Flying Start NHS™ Programme with permission of Professor Pauline Banks at UWS. The main data collection tool was an online self completion questionnaire. The participants' responses to the online questionnaires were explored and helped influence the telephone interviews topic questions.

Due to the diversity and geographical spread of the NHS Board regions the project team felt that structured telephone interviews was the most appropriate method of data collection and would yield a greater response rate and richer data than just a self completion questionnaire. The structured telephone interview used a preset interview schedule to enhance consistency and reliability of the data collection process (Parahoo, 2006). Two of the research team who conducted the interviews also listened to previous interviews to ensure uniformity of questioning (Parahoo, 2006). The researchers contacted the volunteers and arranged a convenient date and time to conduct the interview. The duration of the telephone interviews ranged from 17-25 minutes. All interviews were recorded to ensure auditability and credibility of data collected. The researchers also took notes from the respondent's replies in case any problems arose with the tape recorders, which also aided with confirmability.

Strengths And Weaknesses Of The Data Collection Tools

This evaluation study used an online questionnaire and a telephone interview and both these data collection tools have strengths and weaknesses. Explanation of how the project team addressed these weakness is highlighted below.

Strengths of questionnaires

- Cost effective.
- Ease of administration to large geographical areas.
- Anonymity can be maintained.
- No researcher bias.

Weaknesses of questionnaires

- Poor response rate.
- Participants can have difficulty filling them in.
- Participants are forced to answer questions in a certain way.
- No contact between researcher and participant to clarify questions.
- Illiterate cannot take part in the questionnaire.

- Participants can answer the questions in any order which can introduce an element of bias.
- Limited to those with a computer.

(Murphy-Black, 2000; Goodman and Evans, 2006; Parahoo, 2006)

The response rate was initially low for the online questionnaire and therefore an email reminder was issued and a further follow up reminder, which increased the response rate. In relation to the ease of filling in the questionnaire a contact number for the Lead Investigator was included in all distributed information and on the questionnaire. This only happened on a few occasions. As the majority of the participants were health professionals in some capacity, illiteracy was not deemed to be an issue for this evaluation. Since the majority of participants could either access a computer via home or work, this issue was also not a concern.

Strengths of structured telephone interviews

- Less expensive than face-to-face interviews.
- Less time consuming than face-to-face interviews.
- Convenient for the participant.
- No travel involved.
- Minimal equipment required.
- More sensitive and less threatening.

Weaknesses of structured telephone interviews

- Only accessible for those with access to a telephone.
- Difficult to ascertain who is speaking to the researcher.
- Response rate can be lower than face-to-face interviews.
- Not always guaranteed privacy or being interrupted.
- Unable to gauge emotional implications.
- Limited to information being asked.

(Parahoo, 2006; Tod, 2006)

To address the weakness of telephone interviews and to add rigour and credibility to the data collection a telephone recorder was used to capture the telephone interview along with a interview schedule of open and closed questions. The project team felt that the use of triangulation for this phase of the project will help decrease any potential weaknesses of the data collection tools and add to the overall rigour of the study.

Conducting the Project

The Project Team developed the data collection tools. The questionnaires were peer reviewed by Professor Pauline Banks and a research assistant to ensure face and content validity, which added to the rigour of the study (Cormack, 2000; Newell and Burnard, 2006) and addressed any ambiguity of questions. Comments from the peer

review were addressed by amending the format and structure of some of the questions. Members of the project team were already experienced in facilitating questionnaires and conducting structured interviews, therefore minimal training was required. Two team members conducted the telephone interviews and all team members were involved in the data analysis stages. The interview data were peer reviewed to enhance inter-rater reliability and auditability.

Storage and Analysis of Data

All data were stored as per Data Protection Act (2003). Online questionnaires were collated in an online site only accessible by the project team. All the questionnaires were anonymous and no http or email addresses were able to be identified. The interviews were all given a study number and any identifiable geographical areas or distinguishable information were removed to ensure anonymity and confidentiality. The closed questions from the questionnaire were initially analysed using Survey Monkey analysis system for descriptive statistics and further analysis was undertaken through Excel software. Statistical advice was sought for this phase of the study from a statistician. The open questions from the questionnaires were analysed to determine themes. These themes informed some of the topic questions introduced in the telephone interviews.

The telephone interviews were transcribed verbatim and thematic analysis conducted, which was appropriate for qualitative data (Goodman and Evans, 2006). This was conducted by the researchers in the project team individually and then mutual agreement was made on the emerging themes and sub themes. All members of the project team were involved in the analysis therefore ensuring inter-rater reliability, and development of an audit trail which enhanced the rigour of the analysis process (Grbich, 1999). An independent reviewer peer reviewed the interviews and development of themes for confirmability. A sample of the transcribed interviews was emailed back to the respondent for review and comment. The findings from the themes are displayed in narrative form with anonymous participant's quotes throughout demonstrating the credibility of data collected (Parahoo, 2006).

SECTION THREE

DATA ANALYSIS OF THE INTERNAL SMMDP COURSE EVALUATIONS

NHS Education for Scotland (NES) SMMDP offers nine approved clinically relevant courses which are evaluated by candidates on the last day of each course. The evaluation uses a 4-point Likert scale to rate aspects of the course as being 'very good', 'good', 'satisfactory' or 'poor'. On completion of each course, the course leader forwards the evaluation forms to the SMMDP Administrator who compiles a report of the evaluations within twenty eight days. The evaluation report is distributed to all instructors involved in the relevant course.

The format of the evaluation forms are designed to rate the candidates' reactions to:

- Teaching methods.
- Teaching and learning materials.
- Instructor's helpfulness and knowledge.
- Appropriateness of assessments.

Various teaching methods are utilised in the format of lectures, presentations, demonstrations and discussions. A number of courses also focus on developing skills, therefore practical skill-based methods including workshops, skill stations and problem-solving scenarios are utilised as required to achieve the specific learning outcomes. There is a variation in the design of the evaluation forms depending on the components of the course. This depends on the choice of teaching, learning and assessment methods utilised within each course.

This section presents an overview of previously collated internal course evaluations by SMMDP candidates. The data available from the NES Research Officer was for two combined years 2008/2009 and one year for 2010. A cross section of examples is presented from the range of SMMDP course evaluations available to the research team.

Teaching Methods

Overall the presentation of lectures was scored positively across all course evaluations. The majority of all course candidates (between 50% and 90%) rated the presentation of lectures as being 'very good' for all courses. Figure 1 demonstrates the distribution of evaluations from the Scottish Generic Instructor Training Course. When evaluation details for 2008/9 and 2010 are compared it can be seen that candidates' evaluation ratings have improved annually in this area. These ratings are typical across all SMMDP course evaluations.

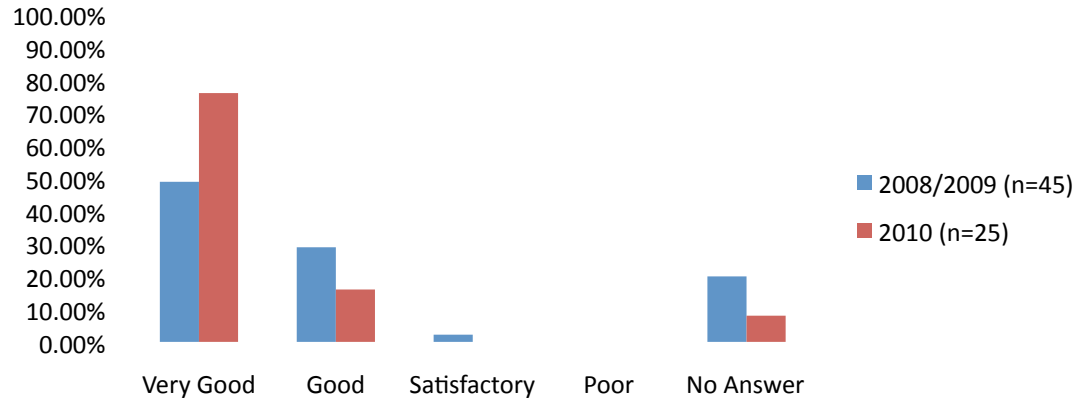


Figure 1: Scottish Generic Instructor Training Course rating of Presentations - Introduction to SMMDP

Workshops were positively evaluated by candidates across the seven courses including workshops. The majority of candidates (between 60% and 80%) rated the workshops as being 'very good' for all workshops across the relevant courses. Figure 2 presents the evaluation of one workshop from the Scottish Core Obstetric Teaching and Training in Emergencies (SCOTTIE) which is similar to the evaluation of workshops across all relevant courses.

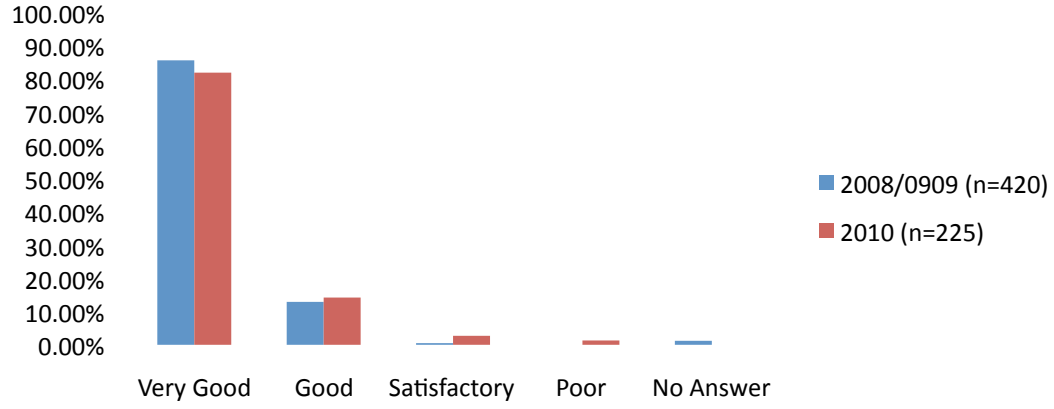


Figure 2: Scottish Core Obstetric Teaching and Training in Emergencies - Rating of Eclampsia Workshop

Skill stations and discussions are teaching methods specifically evaluated in three courses. Overall these components were positively evaluated with the majority of candidates (between 72% and 92%) rating these teaching methods as being 'very good'. Figure 3 presents the evaluations of a skill station in the Scottish Routine Examination of the Newborn Course. Whilst this evaluation remains positive it is an exception to other course evaluations as it shows a small decrease in the 'very good' ratings with a corresponding increase in the 'good; and 'satisfactory 'ratings between 2008/09 and 2010. This is a minor point but is noted as the evaluations from the other skills station and other courses consistently demonstrated improved ratings over this period.

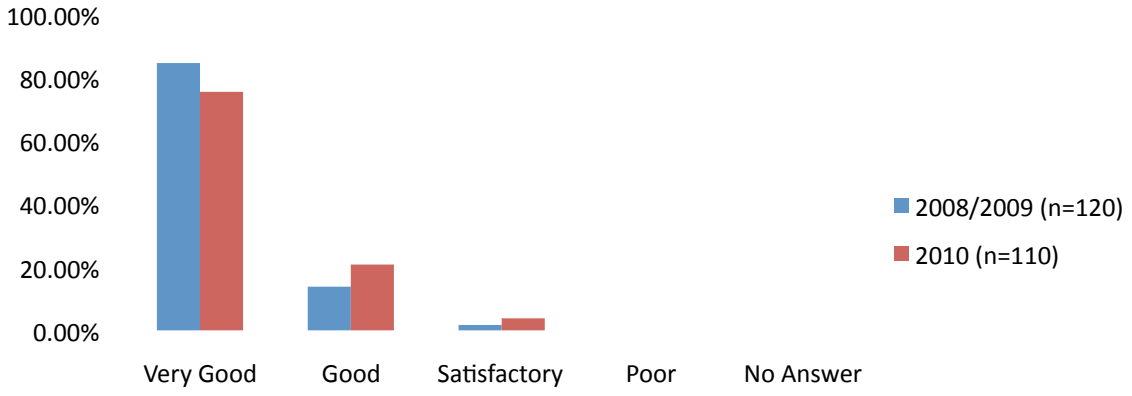


Figure 3: The Scottish Routine Examination of the Newborn Course - Heart Sounds Skill Stations

Problem-solving scenarios are specifically identified in the Scottish Neonatal Pre-Transport Care Course as one of the teaching methods. All responses available were consistently positive with the majority of candidates (between 81% and 87%) rating the scenarios as being 'very good'. This is demonstrated in Figure 4 which is typical of the ratings for the other problem solving scenarios in the course. However, there was a small but noticeable increase (from 2% to 7%) in the number of candidates who did not answer this question in the 2010 evaluation.

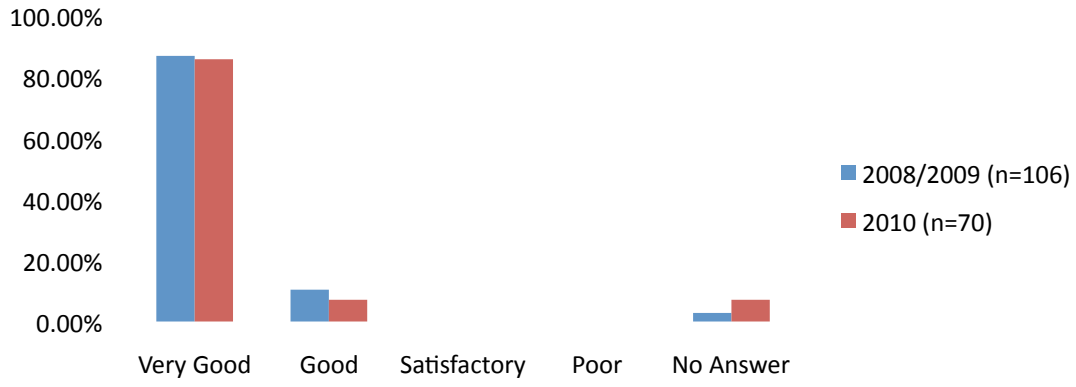


Figure 4: Scottish Neonatal Pre-Transport Care Course - Congenital abnormalities to include surgical and airway problems

Appropriateness of teaching and learning methods across all SMMDP courses was consistently rated positively by all course candidates. Figure 5 presents the evaluations for the Scottish Emergency Maternity Care Courses (for Non-Maternity Professionals). These findings are typical of the evaluations for this component from all SMMDP courses.

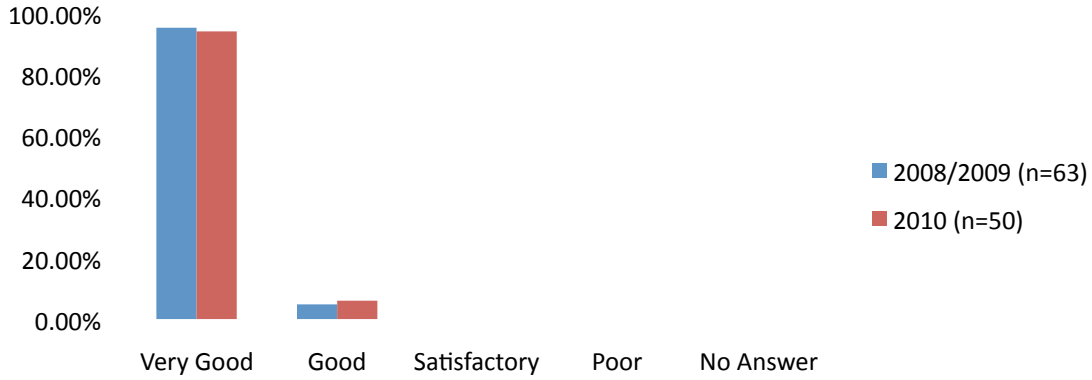


Figure 5: Scottish Emergency Maternity Care Course (for Non-Maternity Professionals) - Course teaching and learning methods were appropriate

Teaching and Learning Materials

The majority of candidates (between 68% and 90%) positively rated both the pre-course and course administration. SMMDP administrators send out pre-course materials to all candidates registered for courses six weeks but no later than two weeks prior to commencement of courses. Figure 6 presents the evaluations of pre-course administration for the Scottish Neonatal Resuscitation Course which is typical of the ratings for the eight courses requiring pre-course materials sent out two weeks in advance of the course.

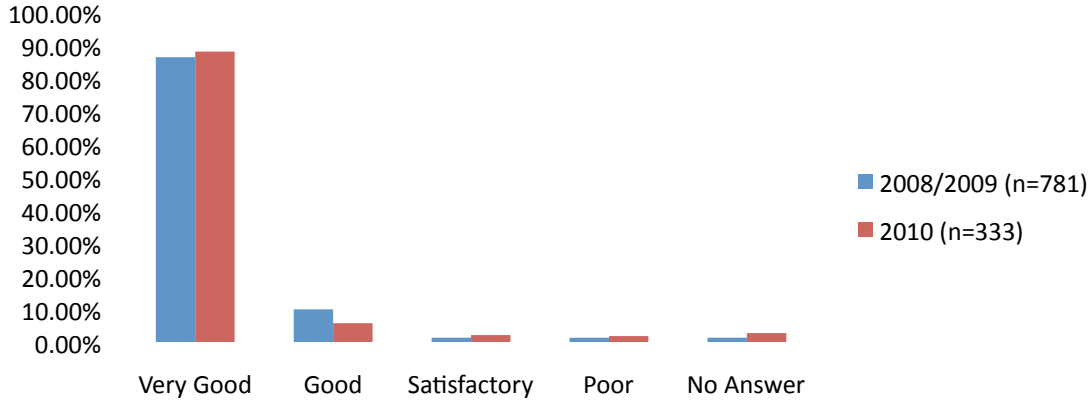


Figure 6: Scottish Neonatal Resuscitation Course - Pre-course materials sent out two weeks prior to course

One exception is the Scottish Emergency Maternity Care Course (for Non-Maternity Professionals) where course materials were sent out three months in advance to course commencement in 2008/09 and then six weeks in advance for courses in 2010. The range in evaluation rating shows an increase in the rating of 'very good' but also a small increase in the rating of 'poor' from the course candidates.

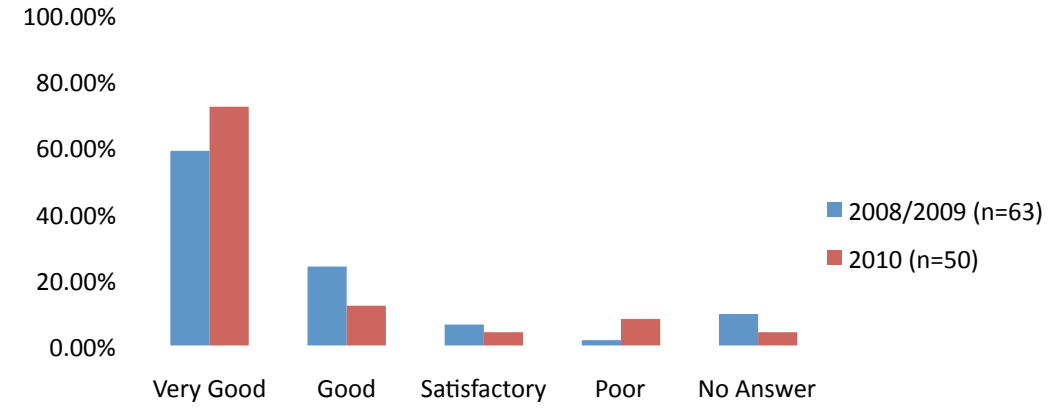


Figure 7: Scottish Emergency Maternity Care Course (for Non-Maternity Professionals) – Pre-course administration 3 months prior to course 2008/9 and 6 weeks prior in 2010

Course study guide / materials were consistently rated as being 'very good' in preparing of all candidates (between 62% and 91%) for the six course evaluations specifically evaluating this component of the course. Figure 8 presents the evaluations for the Scottish Neonatal Resuscitation Course which is typical of the remaining courses evaluating this component.

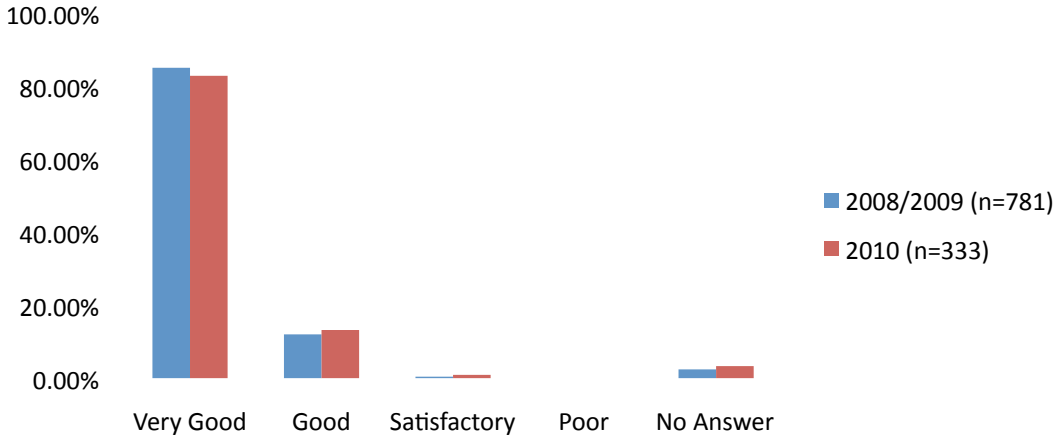


Figure 8: Scottish Neonatal Resuscitation Course - The study guide / course materials adequately prepared me for the taught element of the course

Instructor's helpfulness and knowledge

Candidates consistently positively evaluated the instructors' helpfulness and knowledge of course content across all of the courses. Candidates rated instructors' as being 'very good' (between 80% and 90%) for both helpfulness and knowledge across the courses provided in 2008/09 and 2010. Figure 9 presents the evaluations for the Scottish Neonatal Pre-Transport Care Course which is the typical trend of positive evaluations reported across the other courses.

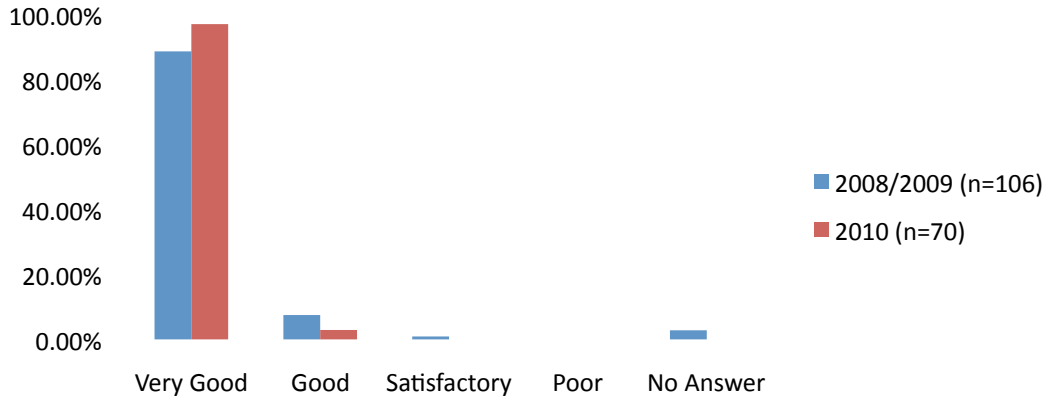


Figure 9: Scottish Neonatal Pre-Transport Care Course - Instructors were knowledgeable about course content

Appropriateness of Assessments

The majority of all course candidates (between 86% and 95%) positively rated the appropriateness of assessments as being 'very good'. Figure 10 presents the ratings for the Scottish Generic Instructor's Training Course which is the typical trend in the evaluation from the majority of all courses. One exception was the Scottish Generic Instructors Training Bridging Course in 2010 where 84% of course candidates gave 'no answer' to this question. This may be due to this course not including an assessment for candidates unless they were presented for instructor status.

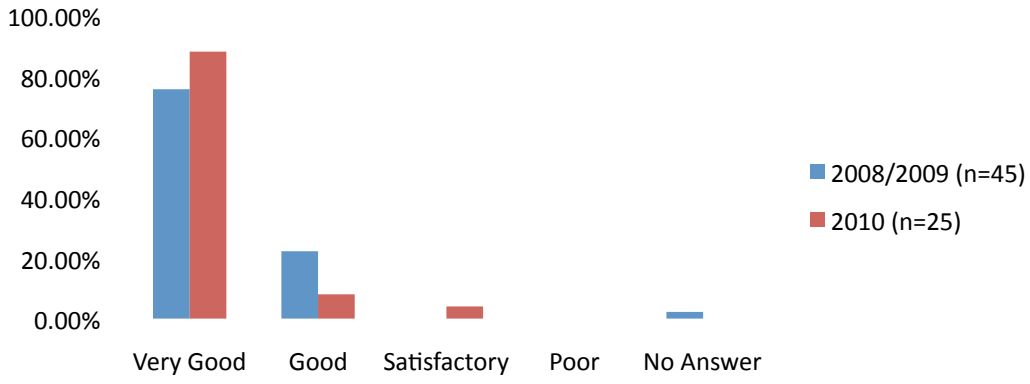


Figure 10: Scottish Generic Instructors Training Course - Course assessment was appropriate

Achieving learning objectives was rated 'very good' by the majority of candidates (between 80% and 95%) across all courses. Figure 11 presents the ratings of candidates in achieving the learning objectives for the Scottish Generic Instructors Training Bridging Course. These ratings are similar to the Scottish Maternity REACTS Course (69% rated 'very good', 19% rated 'good' and 12% 'no answer') which was offered for the first time in 2010. The evaluations from the remaining courses had consistently higher and more positive ratings for this component.

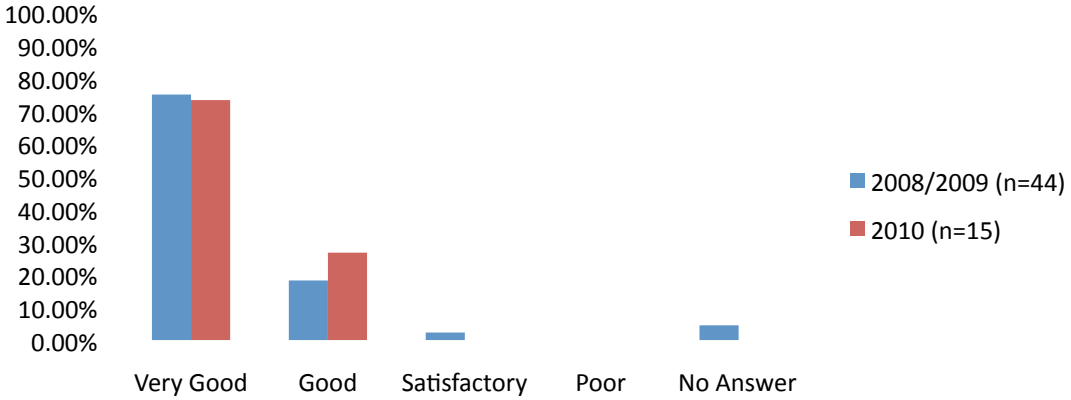


Figure 11: Bridging Scottish Generic Instructors Training - Meeting learning objectives

Conclusion

Following the analysis of course candidates' evaluation for 2008/2009 and 2010 it is clear that candidates consistently rate the SMMDP courses highly and positively. In most cases an annual improvement in the evaluation from the course candidates was noted between 2008/2009 and 2010.

When the candidates' evaluations were examined on a content-specific basis there were only two minor areas where no annual improvement was noted. This included using the communication tool SBAR (Situation, Background, Assessment, Recommendations) in the SCOTTIE and 'heart sounds' work station in the Scottish Routine Examination of the Newborn Course.

When the candidates' evaluations were examined on a profession-specific basis it was clearly noticeable that General Practitioners (GP) / GP trainees, medical / medical trainees and paramedics tended to consistently rate components of the course as being 'satisfactory'. This was in contrast to the higher and more positive ratings from other professionals on the same courses.

There is a section available within the internal course evaluation forms to obtain further feedback or comments from the candidates to substantiate the findings. However, this is often not utilised and the findings cannot be explained.

Although the SMMDP uses a variety of instructors the standard of training across all courses is maintained. This is confirmed by the positive course evaluations which demonstrate that the national programme is evidence-based and of a high quality.

The consistent positive ratings across all aspects of the SMMDP courses by candidates should be commended. The overall positive evaluations account for over 90% of all candidates' course evaluations.

SECTION FOUR

DATA ANALYSIS OF THE ONLINE QUESTIONNAIRE

This data analysis section will display the information from the different sections of the online questionnaire. Figures are used to inform the reader. However, there is also the participant quotes from the open-ended questions and comments boxes, which support and enhance the quantitative data results. It is worthy of note that the samples sizes vary in the different sections due to the response rate and due to the different courses the participants attended.

Section one of the online questionnaire explored the participant's job role and about their views on the different SMMDP courses they had attended.

The professions who responded to the questionnaire are outlined in Figure 12. The majority of participants were midwives, which is in keeping with the percentage of participants who have attended the SMMDP courses.

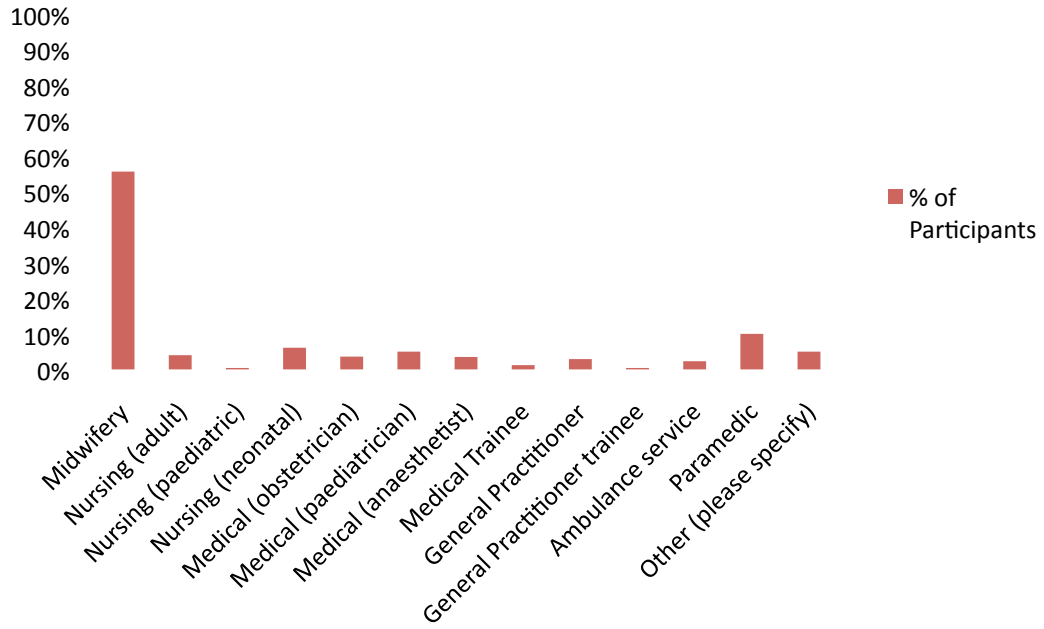


Figure 12: Professional role of participants (n=521)

The professional roles (n=26) identified within the 'other' category in Figure 12 of the total participants were:

- Advanced neonatal nurse practitioner (n=5).
- Resuscitation officers (n=5) .
- Neonatologist (n=2).
- Accident and emergency (n=1).
- Midwife neonatal unit (n=1).
- Medical student on elective and paramedic (n=1).

- Superintendent physiotherapist in women's health (n=1).
- Midwifery trainer (n=1).
- ANNP neonatal transport (n=1).
- GP with inpatient paediatric responsibilities (n=1).
- Triple duties, (not specified what these were) (n=1).
- GP with special interest in obstetrics (n=1).
- Return to midwifery practice (n=1).
- Medical (foundation doctor) (n=1).
- Practice nurse / midwife (n=1).
- Nurse practitioner general practice (n=1).
- Senior community nurse covering island without GP (n=1).

The participants (n=517) were from a good geographical distribution of areas and the NHS Board areas varied as presented in Figure 13.

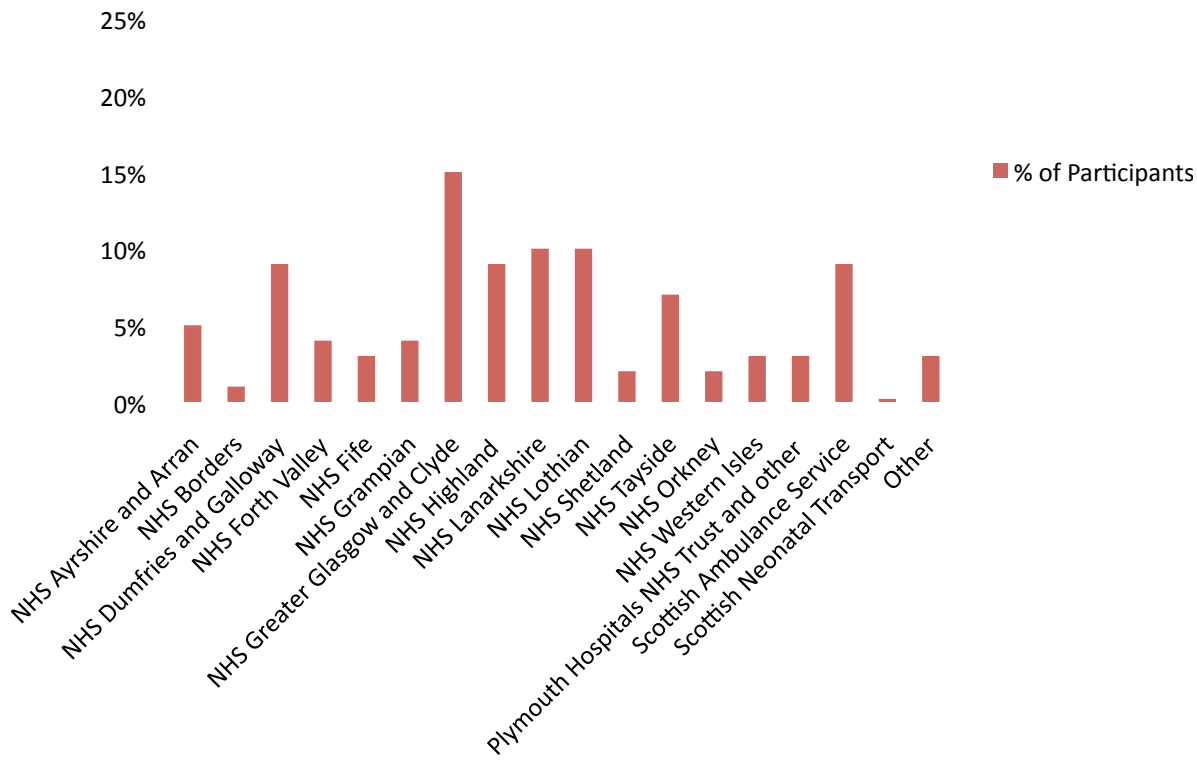


Figure 13: The NHS Boards and geographical areas of work of the participants

The length of time participants (n=517) had been in post within their NHS Board are demonstrated in Figure 14. Most (33.5%) of the participants had been in post for >20 years and 26.9% in post for 11-20 years with the least percentage of participants from <1 year (3.9%).

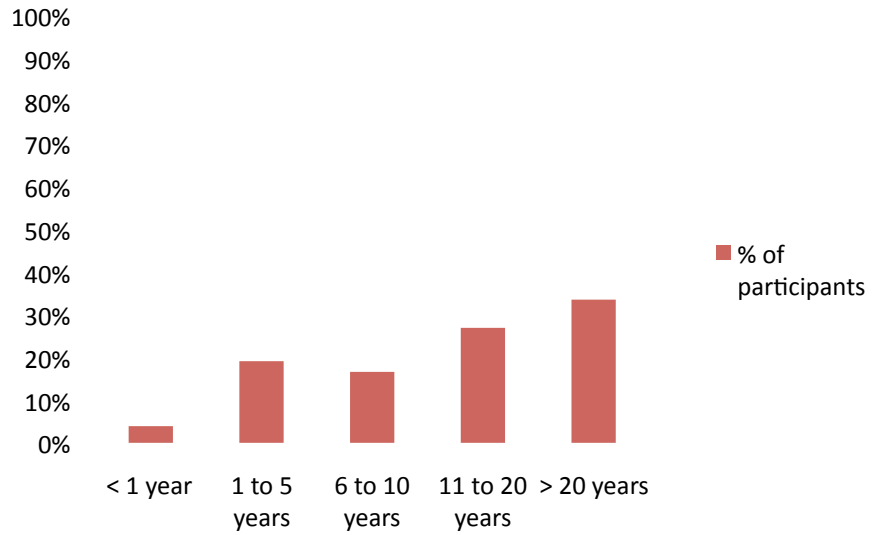


Figure 14: Length of time participants have been in post (n=517)

The type of contract the participants had was explored (n=520). Most of the participants were in a full time contract (69.4%) with the fewest participants being agency (0.4%) or bank (2.1%) (Figure 15).

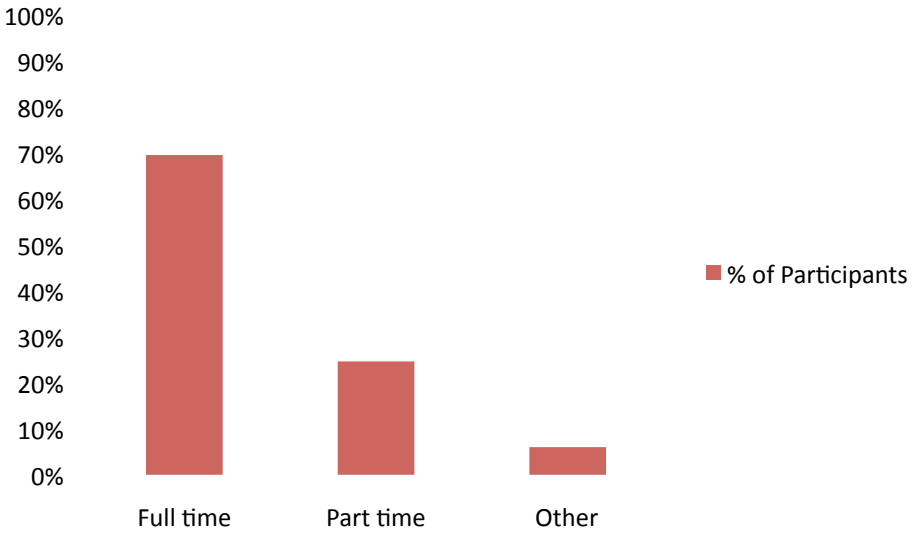


Figure 15: Type of contract (n=520)

The participants in the 'other' category (n=31) included agency, bank, self employed, not employed, locum, GP Principal, honorary, temporary, student, working full time abroad, full time contract but part time as a midwife, part time as a Senior Manager.

The settings the participants (n=520) primarily worked within are specified in Figure 16. The majority of the participants worked within a Consultant Led Unit / Community Midwife Unit (45.8%) with the least working within General Practitioner Practice (2.7%). Settings the participants specified within the 'other' category are detailed in Appendix 5.

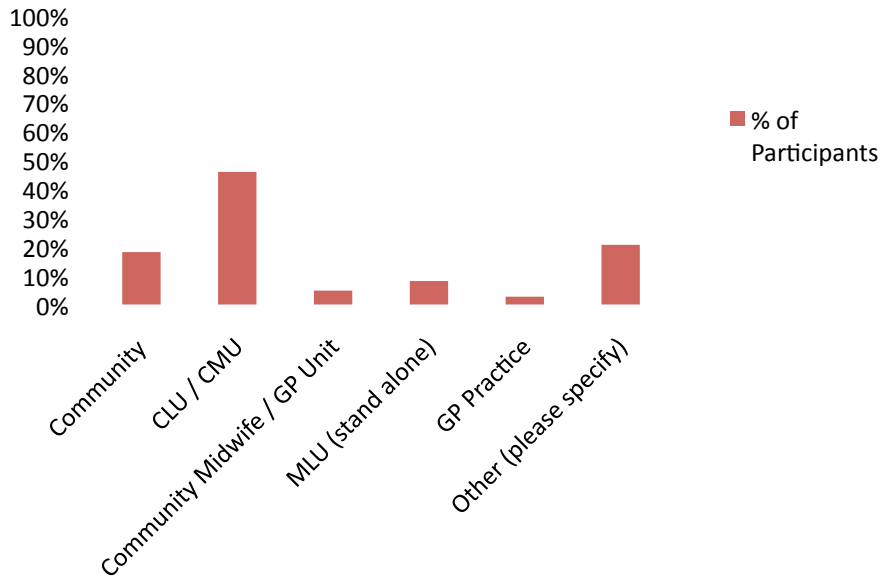


Figure 16: Settings participants primarily worked in (n=520)

The length of time the participants were qualified when they undertook their first SMMDP training course (n=507) is demonstrated in Figure 17. 5% of participants attended the course between 1 and 10 years of qualification.

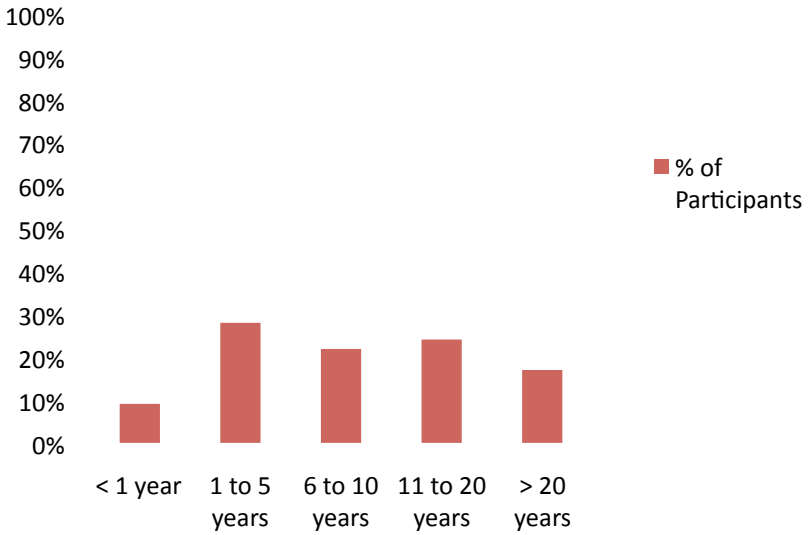


Figure 17: Length of time qualified (n=507)

The role the participants (n=514) had within the SMMDP was the following: candidate (attended a course) 69.5%, instructor (facilitates learning on the course) 26.1%, instructor candidate (in the process of being assessed as an instructor on a course) 2.5% (Figure 18).

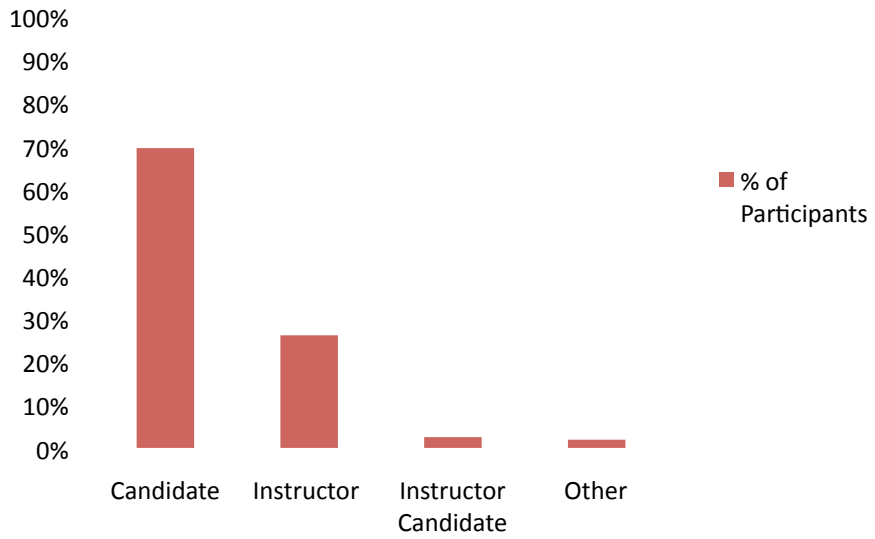


Figure 18: Present role within SMMDP (n=514)

Other roles stated by the participants included (n=10): organiser (n=4), member of the committee (1), previous instructor (2), guest trainer (1) and observer (n=2).

The percentage of participants who had attended the different SMMDP courses is outlined in Figure 19. N.B. Some of the participants may have attended more than one course.

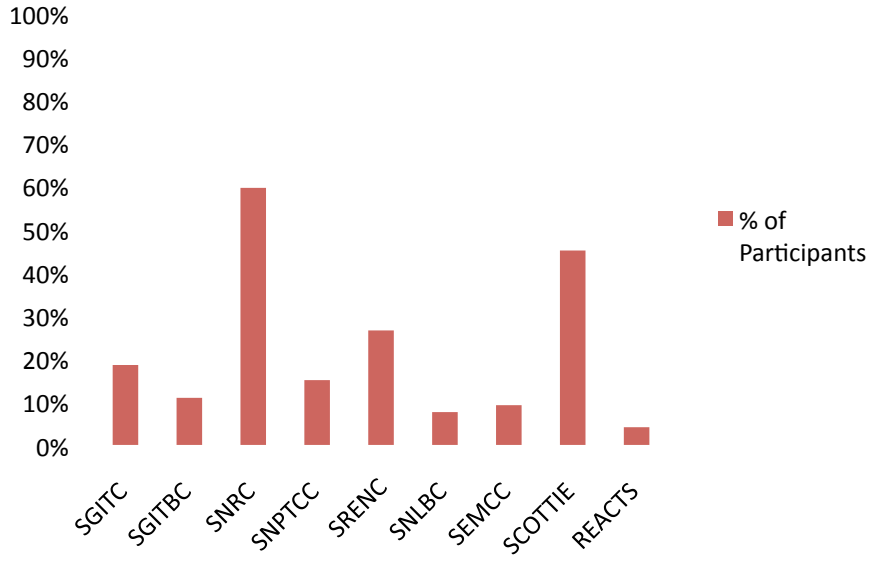


Figure 19: Percentage of participants who have attended the SMMDP courses (n=513)

The issue of funding and convenience was explored and the participants agreed that the SMMDP training was affordable, gave value for money, was local and convenient to attend and is displayed in Figures 21 and 22.

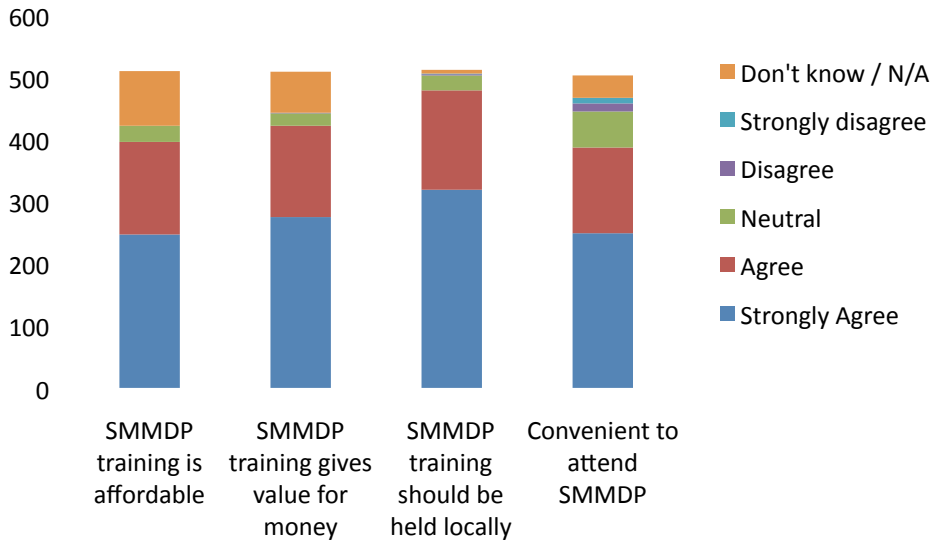


Figure 20: SMMDP courses are affordable, value for money, held locally and convenient (n=516)

The means scores for the issue on affordable, value for money, local and convenient are displayed in Figure 21. N.B. The reader should bear in mind that the higher score of 4 and 5 relates to a positive score.

The SMMDP training:		is affordable	gives value for money	should be held locally	was more convenient than off site venue
Strongly Agree		247	275	319	249
	%	48%	54%	62%	50%
Agree		149	147	160	138
	%	29%	29%	31%	27%
Neutral		26	20	24	58
	%	5%	4%	5%	12%
Disagree		0	1	2	13
	%	0%	0.2%	0.4%	3%
Strongly disagree		0	0	1	9
	%	0%	0%	0.2%	2%
Total (n=)		422	443	506	467
Mean		**4.52**	**4.57**	**4.57**	**4.30**

Figure 21: Mean scores for affordable, value for money, local and convenience.

One participant felt that there were other cost issues, which had to be taken into consideration.

> *"Its not the cost of the course stand alone but the cost of running the course with the outside trainers etc makes it expensive to run for the organisation."*

(This is an interesting comment as NES quality assurance process for the SMMDP courses only requires one external member of faculty whose costs are recompensed through NES when travelling out with the NHS Board region. This comment may relate to both internal and external instructors required for courses).

However, most of the qualitative data comments from the online questionnaire highlighted the positive responses to the question on affordable, value for money, local and convenient.

> *"All courses were excellent, so didn't mind travelling to attend."*

> *"Cost of courses are affordable and value for money, however when based on islands it is costly to go to mainland courses."*

> *"At any price the courses were value for money. I don't know the charges for the courses I attended. The courses I attended were off site but near enough to travel to and from comfortably in a day so that was good."*

> *"Ideally, yes, the courses should be held locally, since I am sure the uptake would be much, much higher, but I fully appreciate the logistical and financial difficulties of this! I think that the courses are so beneficial, that it is certainly worth travelling to attend."*

Section two relates to the online questionnaire and explored each individual SMMDP training course. Each part covered the participants' views about their knowledge, preparedness and competence in conducting their job role prior to and following attendance of the individual SMMDP training course(s). Participants were asked to complete only those courses attended. Although the data were collected for all nine SMMDP courses only the two courses particularly specified for review by NES will be presented separately in this section:

- The Scottish Emergency Maternity Care Course (for Non-Maternity Professionals).
- The Scottish Maternity REACTS (Recognition, Evaluation, Assessment, Critical Treatment and Stabilisation) Course.

The total sample of participants who have attended these two courses to-date is small. Therefore the data are displayed in numerical frequencies and percentages as percentages on their own would be misleading due to the small sample sizes.

In addition the open-ended question responses on changes in practice for all nine of the SMMDP courses are also included within this section.

N.B. The numbers of participants displayed in these two sections relates to the response of participants to each individual question. Therefore the reader may note minor discrepancies in the number of responses for individual questions. This is related to the response rate of the participants to each online question and this is the information presented by the researchers.

Scottish Emergency Maternity Care Course (for Non-Maternity Professionals) (SEMCC)

The first course to be explored will be the Scottish Emergency Maternity Care Course (for Non-Maternity Professionals). A total of 47 participants who responded to the questionnaire stated they had attended this specific course. This question identified what the participants felt before they attended the SEMCC course (Figure 22).

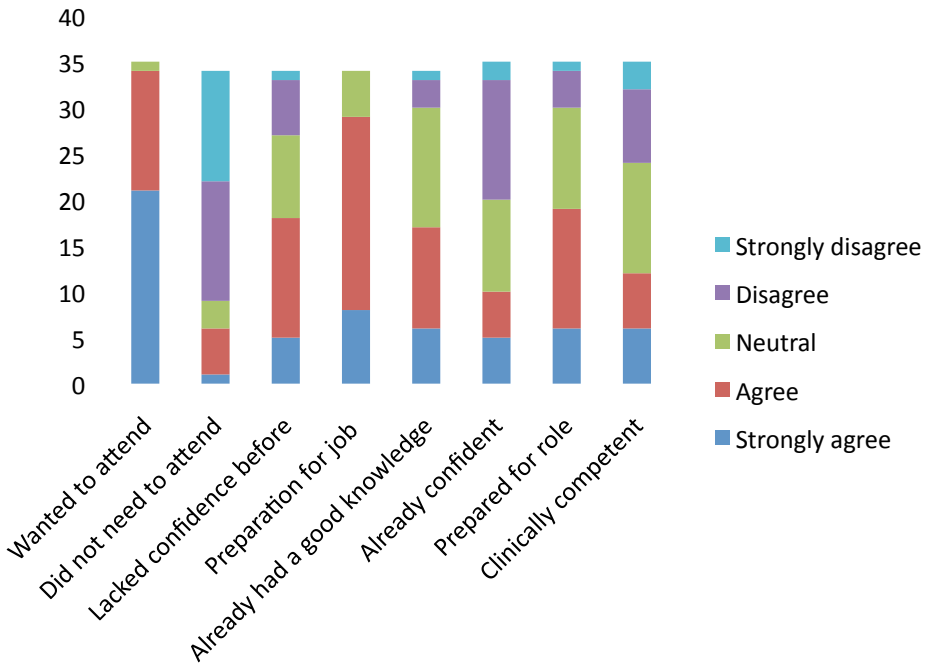


Figure 22: Perceptions of candidates before attending the SEMCC (n=48)

The mean scores on the perceptions of candidates **before** attending the SEMCC ranged from 2.12-4.57 (overall mean 3.42) (Figure 23).

Answer	Mean	n=
Did not need to attend	2.12	34
Already confident	2.94	35
Clinically competent	3.11	35
Overall	**3.42**	**276**
Lacked confidence before	3.44	34
Already had a good knowledge	3.53	34
Prepared for role	3.54	35
Preparation for job	4.09	34
Wanted to attend	4.57	35

Figure 23: Mean scores of perceptions of candidates before attending the SEMCC

This question explored how the participants felt **after** attending the SEMCC course (Figure 24).

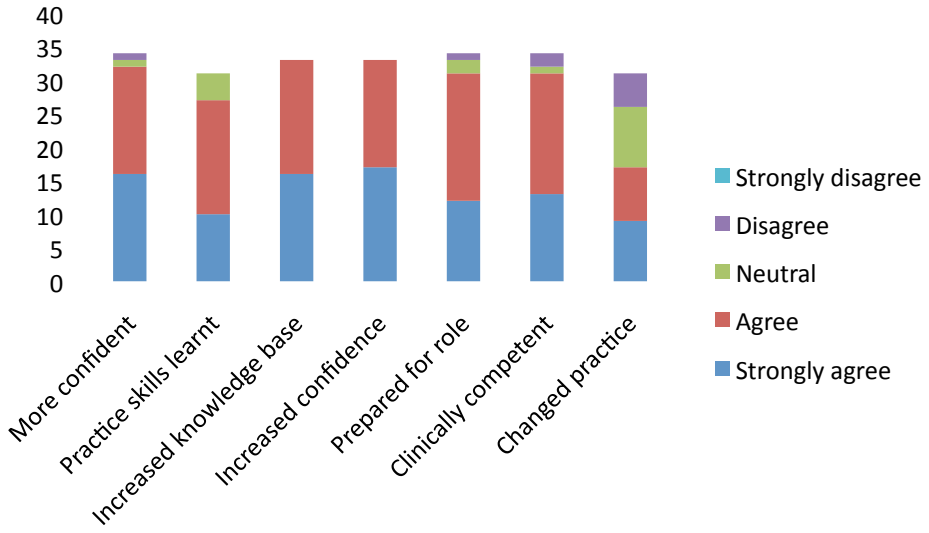


Figure 24: Perceptions of candidates after attending SEMCC (n=44)

The mean scores for the perceptions of candidates **after** attending the SEMCC ranged from 3.68-4.52 (overall mean 4.25) (Figure 25). N.B. The reader should bear in mind that the higher score of 4 and 5 relates to a positive score.

Answer	Mean	n=
Changed practice	3.68	31
Practice skills learnt	4.19	31
Prepared for role	4.24	34
Clinically competent	4.24	34
Overall	**4.25**	**230**
More confident	4.38	34
Increased knowledge base	4.48	33
Increased confidence	4.52	33

Figure 25: Mean scores of perceptions of candidates after attending SEMCC

Of the 44 participants who answered the question about the appropriateness of the assessment, the majority agreed that it was appropriate, with 15 (34.1%) who strongly agreed and 16 (36.4%) who agreed, Only 3 (6.8%) participants stated 'neutral' viewpoint and 10 (22.7%) opted for not applicable.

Participants were then asked to select from any of four statements how they felt the assessment had increased their confidence level, their preparedness for carrying out their role, increased their knowledge base, and increased their level of clinical competence. Of the 42 participants who responded 26 (62%) participants felt that the assessment increased their confidence level, 19 (45%) felt it increased their preparedness for carrying out their job role, 25 (60%) felt it increased their knowledge base, and 23 (55%) felt it increased their level of clinical competence.

Of the 33 participants who answered the question if they had attended the course during work time or own time, 25 (76%) attended the course during work time with only 8 (24%) during their own time.

Of the 33 participants who answered the question on having protected learning time to review pre-course material, only 5 (15%) had protected learning time within their working hours compared to the 28 (85%), who did not have protected time.

Of the 39 participants who answered the question of funding, 24 (62%) participants were funded by their employer, whereas 4 (10%) were not funded with a further 6 (15%) receiving a free gratis place and 5 (13%) had selected the other option which did not yield any supporting data.

A number of participants provided examples of changes which had been implemented in their practice area resulting from the SEMCC training (n=23) and these are outlined below. A common theme from the participants was that they felt better prepared and more confident in dealing with situations if they arose.

> *"Increased staff confidence in dealing with maternity cases. Ensured staff from different areas within service were aware of equipment and how to use it if required. Non Maternity Professionals willing to assist in maternity emergencies now."*

> *"I as a professional lone worker have gained in confidence and if presented with a maternity emergency I feel I could confidently cope until professional help was available. The island population expands during the summer months and many pregnant women visit. The course has been invaluable to my practise. I now know the reasons for keeping maternity drugs on the island, to be prepared and have them ready for any eventuality. This was also a very good networking exercise for me and although I would not of hesitated in contacting my nearest Obstetric Ward I feel the information I could furnish them would be of more benefit in the treatment of the patient. All literature from the course was excellent and a very good reference point in case of any maternity emergency."*

Other comments, which were related specifically to the changes to practice are listed below:

- Created emergency maternity box.
- Paediatric resuscitation trolley updated.
- Better awareness of local protocols.
- SBAR was used more readily.
- Greater understanding in assisting health professionals in maternity care.
- Improved history taking.
- Improved confidence in dealing with emergency maternity care.

Scottish Maternity REACTS (Recognition, Evaluation, Assessment, Critical Treatment and Stabilisation) Course

The second course to be explored within this section will be the Scottish Maternity REACTS Course (REACTS). A total of 21 participants who responded to the questionnaire had attended this specific course.

This question identified what the participants felt before they attended the REACTS course (Figure 26).

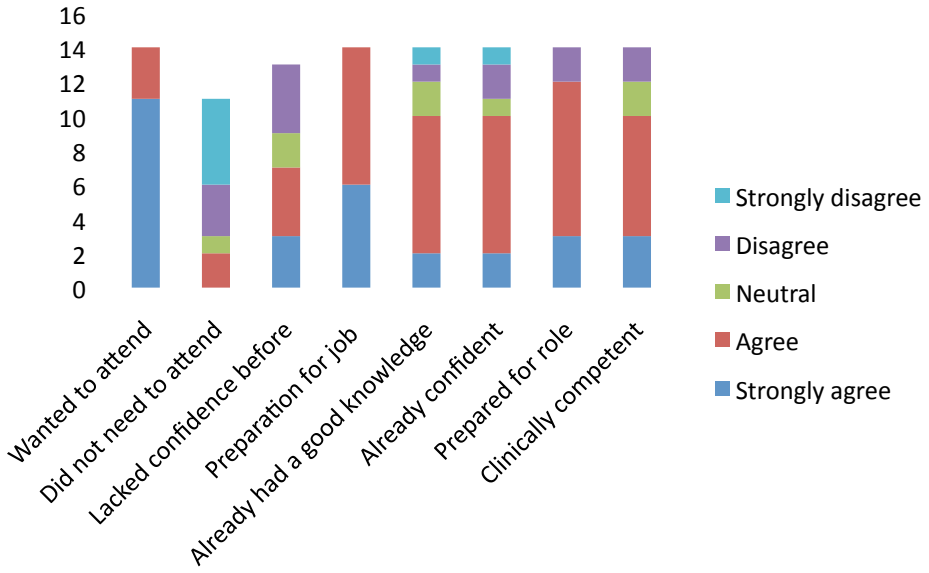


Figure 26: Perceptions of candidates before attending REACTS Course (n=26)

The mean scores for the perceptions of candidates **before** attending the REACTS ranged from 2.00-4.79 (overall mean 3.75) (Figure 27).

Answer	Mean	n=
Did not need to attend	2.00	11
Lacked confidence before	3.46	13
Already confident	3.57	14
Already had a good knowledge	3.64	14
Overall	**3.75**	**108**
Clinically competent	3.79	14
Prepared for role	3.93	14
Preparation for job	4.43	14
Wanted to attend	4.79	14

Figure 27: Mean scores of perceptions of candidates before attending the REACTS

This question explored how the participant felt after attending the REACTS course (Figure 28).

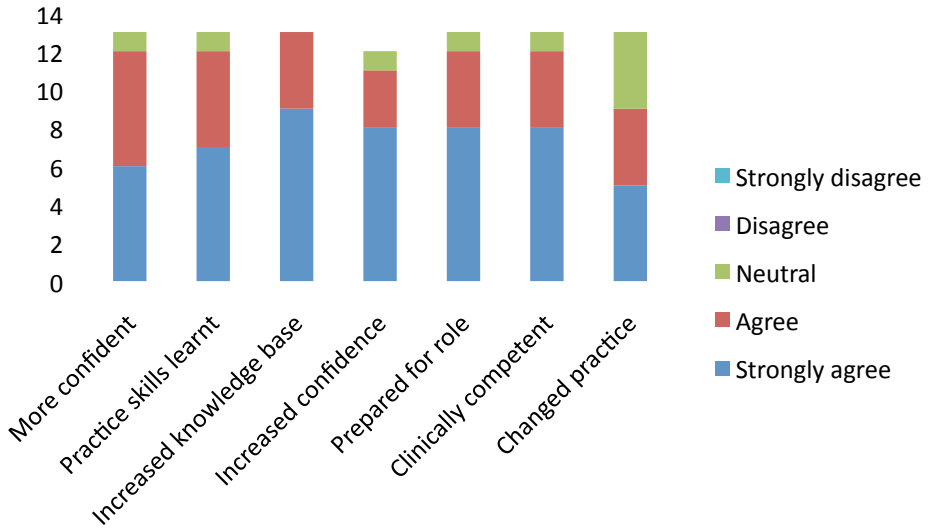


Figure 28: Perceptions of candidates after attending REACTS Course (n=22)

The mean scores for the perceptions of candidates **after** attending the REACTS ranged from 4.08-4.69 (overall mean 4.47) (Figure 29). N.B. The reader should bear in mind that the higher score of 4 and 5 relates to a positive score.

Answer	Mean	n=
Changed practice	4.08	13
More confident	4.38	13
Practice skills learnt	4.46	13
Overall	**4.47**	**90**
Prepared for role	4.54	13
Clinically competent	4.54	13
Increased confidence	4.58	12
Increased knowledge base	4.69	13

Figure 29: Mean scores of perceptions of candidates after attending REACTS

Of the 20 participants who answered the question about the appropriateness of the assessment, the majority agreed that it was appropriate, with 7 (35%) who strongly agreed and 6 (30%) who agreed, Only 1 (5%) participants stated 'neutral' viewpoint and 6 (30%) opted for 'not applicable'.

Of the 14 participants who answered this question about the assessment covering the learning outcomes, the majority agreed that the assessment did cover the learning outcomes, with 13 (93%), who agreed and only 1 (7%) did not. Only 3

comments were received for this question. However, they did not yield any supporting data.

Participants were then asked to select from any of four statements how they felt the assessment had increased their confidence level, their preparedness for carrying out their role, increased their knowledgebase and increased their level of clinical competence. Of the 20 participants who responded 10 (50%) participants felt that the assessment increased their confidence level, 10 (50%) felt it increased their preparedness for carrying out their job role, 9 (45%) felt it increased their knowledge base, and 7 (35%) felt it increased their level of clinical competence.

Of the 14 participants who answered the question on if they had attended the course during work time or own time, 12 (86%) attended the course during work time with only 2 (14%) during their own time.

Of the 16 participants who answered the question on having protected learning time to review pre-course material, all 16 (100%) of participants had no protected learning time within their working hours.

Of the 18 participants who answered the question of funding, 9 (50%) participants were funded by their employer, whereas 4 (22%) were not funded with a further 2 (11%) receiving a free gratis place and 3 (16%) had selected the other option, which did not yield any supporting data. (Information available from NES indicated that candidates on the first pilot course were all free gratis places whilst candidates on the second course were funded by their employer).

A number of participants provided examples of changes which had been implemented in their practice area resulting from the REACTS training (n=9), and these are outlined below. A common theme from the participants was that they felt better prepared, had increased knowledge and were more confident in dealing with situations if they arose.

> *"Early recognition of the critically ill patient commencing treatment earlier rather than later."*

> *"This course was brilliant, but for me at a much deeper level of knowledge that I would be expected to carry out for my role at our island hospital . We would use some of the skill very rarely however as an instructor I was delighted to participate and gain the depth knowledge that was provided so that I can incorporate that into the training updates we do locally. As always we all come away with having learnt something new on these course and working with the multidisciplinary team is always beneficial."*

> *"Better trained colleagues working to the same script makes everything easier and safer / better care / communication."*

One of the changes in practice, which had been specified was:

- The implementation of an emergency trolley.

Changes in Practice From SMMDP Courses

All of the individual SMMDP course sections within the questionnaire had a question for the participant to identify any changes in practice. This was to highlight the effectiveness of the training through the implementation of new evidence-based practices. This section specifies the practice changes resulting from all the individual SMMDP training courses.

Scottish Generic Instructors Training Course

The participants were asked to give examples of changes which have been implemented in their practice area resulting from the Scottish Generic Instructors Training Course (n=79). Most of the participants highlighted that the main changes to practice following completion of the Generic Instructors Training Course or Bridging Course were that they now provided in house study days for staff on various topics, including for example, obstetric emergencies based on the contents of the SCOTTIE course. Many also indicated that they felt more confident in teaching in the clinical area and utilised the techniques learned during the programmes, such as the four stage technique, when teaching in clinical practice.

> *"Attending the instructors training course has given me more confidence in teaching clinical skills using the 4 stage technique. This was very beneficial."*

Only two respondents from the Generic Instructors Training Course / Bridging Course were unhappy that prior learning and experience were not taken into consideration and felt that the courses did not enhance their learning. (The SMMDP confirmed that they do acknowledge prior learning as instructors only attend a half day Generic Instructors Training Bridging Course as opposed to the two day Generic Instructors Training Course).

Scottish Neonatal Resuscitation Course

The participants were asked to give examples of changes which have been implemented in their practice area resulting from the Scottish Neonatal Resuscitation Course (n=95). Many of the participants commented on the increased confidence and competence they now felt in dealing with neonatal resuscitation. This appeared to be across disciplines.

> *"The more people who have attended the better the team works together ....Labour ward and Neonatal staff work much better together...new junior are better supported and learn from the midwives in the Labour ward....greater skills in the postnatal ward including ancillary staff who now have confidence in assisting at resuscitation...."*

Paramedics also felt better prepared.

> *"Responding with paediatric bvm (bag-valve-mask) for maternity jobs as to just infant bvm, switching on heater in ambulance on responding to a call, drying baby, things that I would have over looked in past and probably thought were of little importance prior to attending course"*

Comments were related specifically to the changes to practice and are listed below:

- Use of Yankeur suction rather than size 10 suction catheter.
- Updated practice for home births.
- Resuscitation with air instead of oxygen.
- No longer use smaller neonatal disposable bag and mask.
- Laryngoscopes on each resuscitaire.
- Increased use of airways.
- No longer practice suction of airways first.
- No suction of meconium at perineum.
- Putting heater on in ambulance.

Scottish Neonatal Pre-Transport Care Course

The participants were asked to give examples of changes which have been implemented in their practice area resulting from the Scottish Neonatal Pre-Transport Care Course training (n=32). Again many of the participants highlighted their increase in confidence and competence in managing and transferring the sick neonate.

> *"Reduced equipment carried in resuscitaire. No longer have ET (endo-tracheal) tubes as none of our staff have the experience to intubate but the neonatal rescus course and pre-transport courses have given us the confidence to manage airways appropriately...."*

Comments were related specifically to the changes to practice and are listed below:

- Development of a new neonatal observation chart.
- Review of resuscitation equipment: where it is kept as well as content.
- Updated and in some cases developed guidelines.
- Implemented use of heat pads and oximeter.
- Introduced use of SBAR.
- Using hats more.
- Introduction of regular drills.
- Stopping the inappropriate use of ET (endo-tracheal) tubes.

Scottish Routine Examination of the Newborn Course

The participants were asked to give examples of changes which have been implemented in their practice area resulting from the Scottish Routine Examination of the Newborn Course training (n=61). The majority of the participants commented that because they were carrying out routine examination of the newborn this had greatly improved the service to women and better continuity of care. Women were able to be

discharged home quicker and for home births did not need to attend hospital to have routine examination of the newborn done. Furthermore it freed up the time of paediatricians to focus on the ill neonates.

> *"Now a large proportion of these examinations are being undertaken by midwives. This is providing continuity of care for the women and in some cases expediting the discharge process from the ward area, thus providing an improved service for the women."*

> *"We now have several midwives trained in the examination of the newborn and this helps with the early transfer of women back to the care of the community midwives. The examination of the newborn course is a very valuable extension to the midwives role and has been embraced by the midwives in xxxx."*

Although most of the participants found that they were able to achieve and maintain their competencies some found this very challenging due to workload. Furthermore three participants indicated that they had been unable to attain their competencies on completion of the course, as they were unable to find an appropriately trained member of staff, who would be willing to act as a mentor/supervisor.

> *"....no support was given from consultants in my unit to allow us the chance to achieve the practical assessment required to complete the course"*

Comments were related specifically to the changes to practice and are listed below:

- Development of extended midwifery role.
- Advances in practice.
- Quicker discharge home for woman.
- Continuity of carer.
- Holistic care of the woman.

Normal Labour and Birth Course

The participants were asked to give examples of changes which have been implemented in their practice area resulting from the Normal Labour and Birth Course training (n=17). Many participants used this section, to comment on how attending this course had increased their confidence and competence in caring for women in normal labour as well as providing an update on alternative methods of pain management.

> *"Gave midwives more confidence when dealing with low risk labouring women and introducing alternative methods of pain relief"*

> *"Awareness of environment, use of waterbirth, encouragement of hands off approach, belief in birth as a normal process, encourage women to believe in their ability to birth their own babies"*

"Introducing SBAR to practice and updating staff and guidelines were also highlighted by the participants as changes to practice."

Scottish Core Obstetric Teaching and Training in Emergencies Course

The participants were asked to give examples of changes which have been implemented in their practice area resulting from the Scottish Core Obstetric Teaching and Training in Emergencies Course training (n=70). Again most of the participants used this section to comment on how attending this course had improved their confidence and competence in dealing with obstetric emergencies.

"This course increased my confidence in my own knowledge base and my ability to be a leader if a situation arose - which it did the following week, and only after the emergency was dealt with did I realise that as the midwife who was the lead carer for this woman who had a PPH. I had led the team and not deferred to coordinators or doctors - the outcome had been positive and appeared organised....it has made me a safer and more confident midwife"

"Improved communication and documentation and better outcomes for all clients and carers"

Only two participants out of the seventy positive responses indicated that attending this course had made them less confident. One participant indicated this was due to a conflict of interest with an instructor on the course, whilst the other highlighted lack of recognition of the course by their workplace colleagues.

Comments were related specifically to the changes to practice and are listed below:

- Prompt card in all rooms on how to deal with emergencies.
- Emergency protocols kept with obstetric emergency equipment in remote rural locations.
- Emergency delivery pack in the ward area to facilitate emergency Lower Uterine Segment Caesarean Section (LUSCS) in event of maternal collapse.
- Community midwives now carry indwelling foley catheters, giving sets and fluid to manage cord prolapse at home to assist with transfer of woman to hospital - this is also now available within CMUs for transfer to tertiary units.
- Uterine inversion kit available in labour ward areas.
- Regular emergency drills and teaching sessions/scenarios based on the SMMDP information.
- Implementation of SBAR.
- Updating of emergency drugs available for e.g. eclampsia.

Section three of the online questionnaire evaluated the format of the SMMDP courses and the teaching and learning methods. The mean scores across all the participants' responses for questions in each course are presented in a series of tables detailed in Appendix 6. Individual means in each category should be compared with the overall mean identified. The reader should bear in mind that a score of 4 and above is 'agree' to 'strongly agree' to the statements. The purpose of the following tables is to illustrate the variable means and to highlight the extremes for each question across the courses.

The majority of the participants strongly agreed or agreed that attending a local venue was more convenient (Figure 30). The mean scores for individual courses range from 4.17 – 4.62 with an overall mean of 4.45.

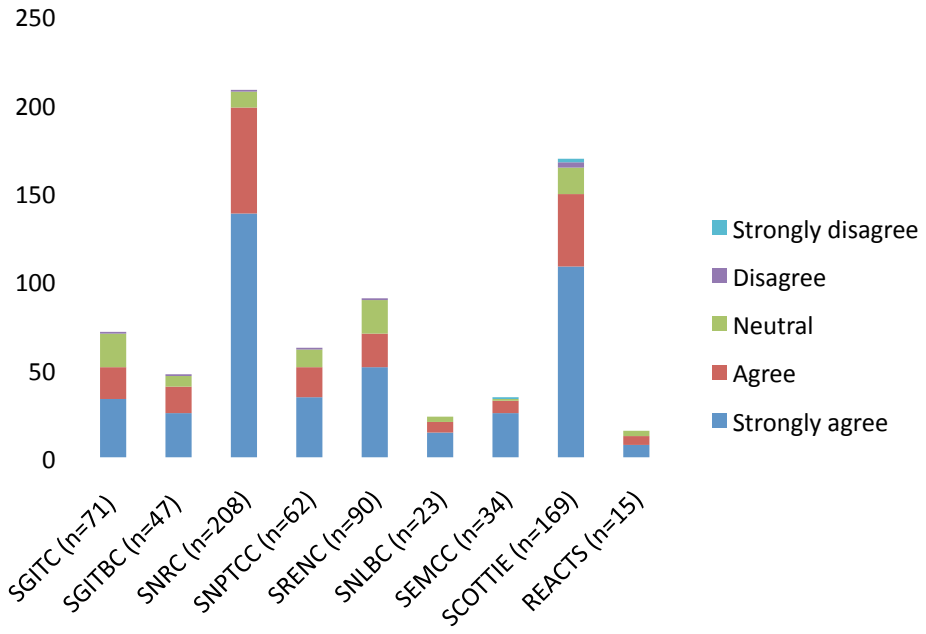


Figure: 30: Local venue was more convenient

Some of the comments received indicated that locality can be an important factor in attending the courses.

> *"Having local access for neonatal resuscitation course was key in my decision to attend"*

However, the majority of the comments received indicated that if the courses were not local the staff were willing to travel to attend them.

> *"It is more convenient to attend training locally, but do not mind travelling to attend a good course."*

"Obviously having courses in your own area is more convenient. However depending on the course it is often good to leave your own area and mix with people working in different areas as it widens your perspective."

"I did not attend at a local venue - I heard of a paid place available and went in my own time and at my own expense - very worthwhile and value for money - The full range of courses has not been available locally that I know of but I would like to attend more in the future if they continue. I would not always be in the position to pay £100 for petrol/room and meals."

The participants had mostly answered strongly agree or agree that the SMMDP course attended were evidence-based (Figure 31). The mean scores for individual courses range from 4.09 – 4.66 with an overall mean of 4.51.

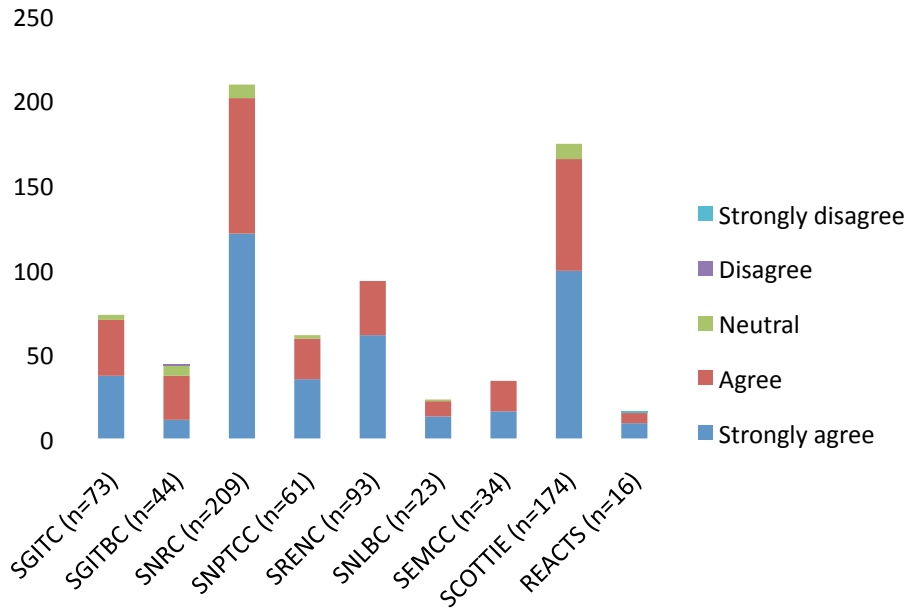


Figure 31: SMMDP courses were evidence-based

The participants had mostly answered strongly agree or agree that the SMMDP course used up-to-date and relevant materials (Figure 32). The mean scores for individual courses range from 4.11 – 4.70 with an overall mean of 4.50.

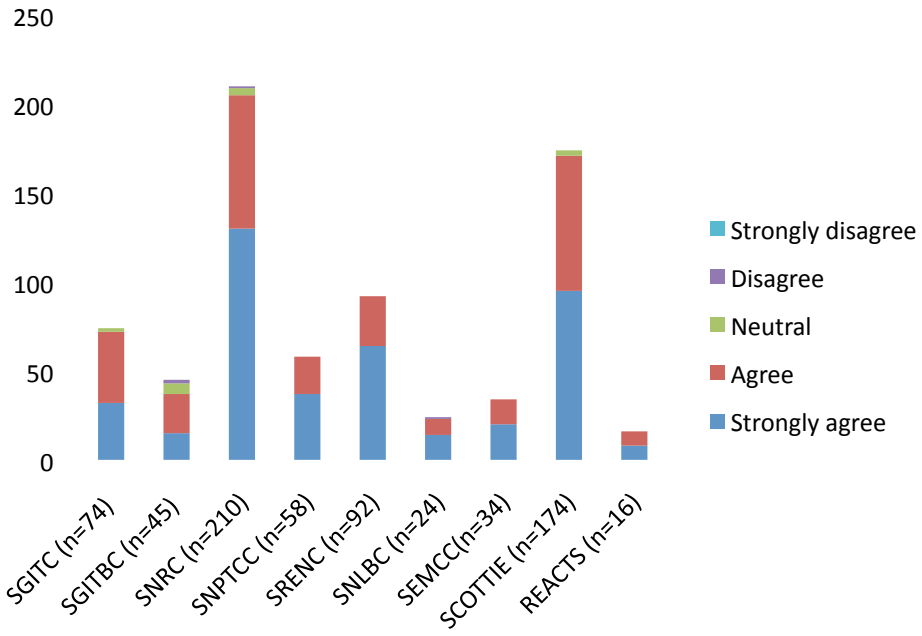


Figure 32: SMMDP courses used up-to-date and relevant materials

This was also reiterated by some of the comments received (n=26).

> *"Very good references and pre-course reading."*

> *"Excellent pre attend pack, continue to review it periodically."*

However, staff also highlighted areas for improvement.

> *"Up to date material used, some of the course interesting and informative, but not relevant to me in my clinical workplace as a paramedic."*

> *"SNRC physiology section is too long and detailed/repetitive."*

> *"Some aspects of the neonatal resuscitation course require an update as practice has changed."*

On the issue of having a multidisciplinary approach the majority of the participants stated strongly agree or agree (Figure 33). The mean scores for individual courses range from 4.07 – 4.94 with an overall mean of 4.59.

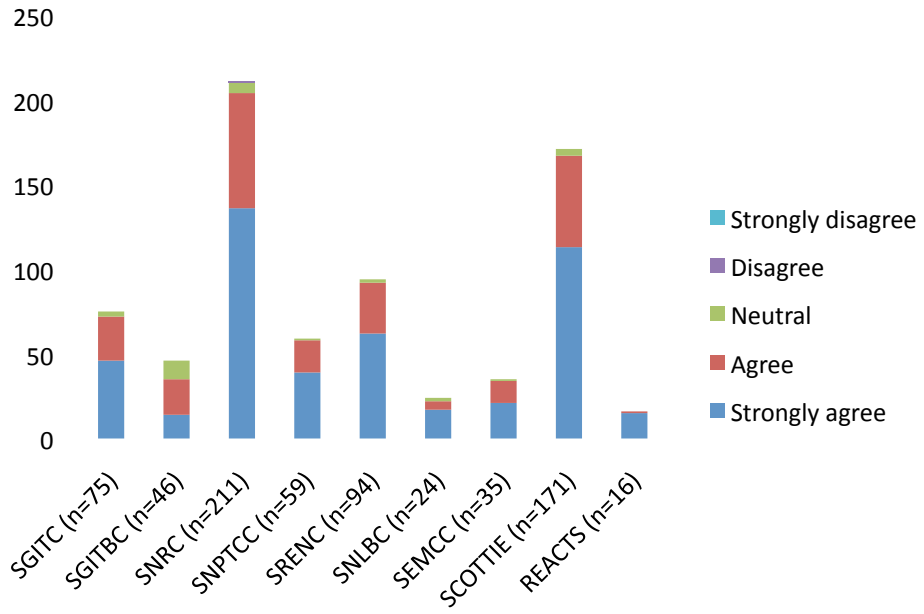


Figure 33: Multidisciplinary approach to the course was beneficial

The comments to support this were:

> *"I now dislike attending courses where all the participants are doctors (and try to avoid them)."*

> *"One of the most beneficial elements - midwives, paramedics and doctors all learning together - lets you appreciate each role and the difficulties which may occur in different situations."*

The majority of the participants strongly agreed or agreed that the amount of pre-course material / work was appropriate (Figure 34). The mean scores for individual courses range from 4.11– 4.52 with an overall mean of 4.46.

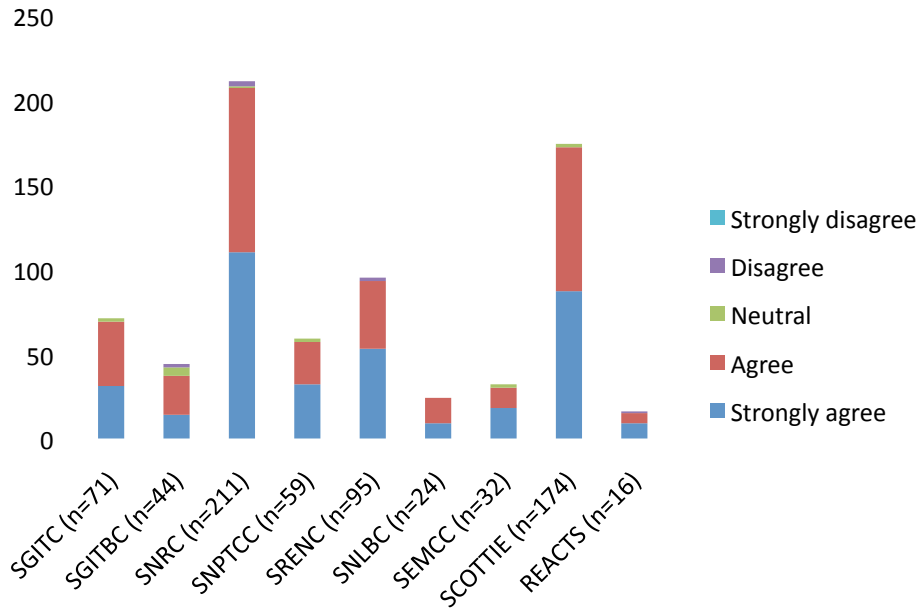


Figure 34: Appropriate amount of pre-course material

The majority of the participants strongly agreed or agreed that the amount of pre-course material / work was relevant (Figure 35). The mean scores for individual courses range from 4.07 – 4.63 with an overall mean of 4.51.

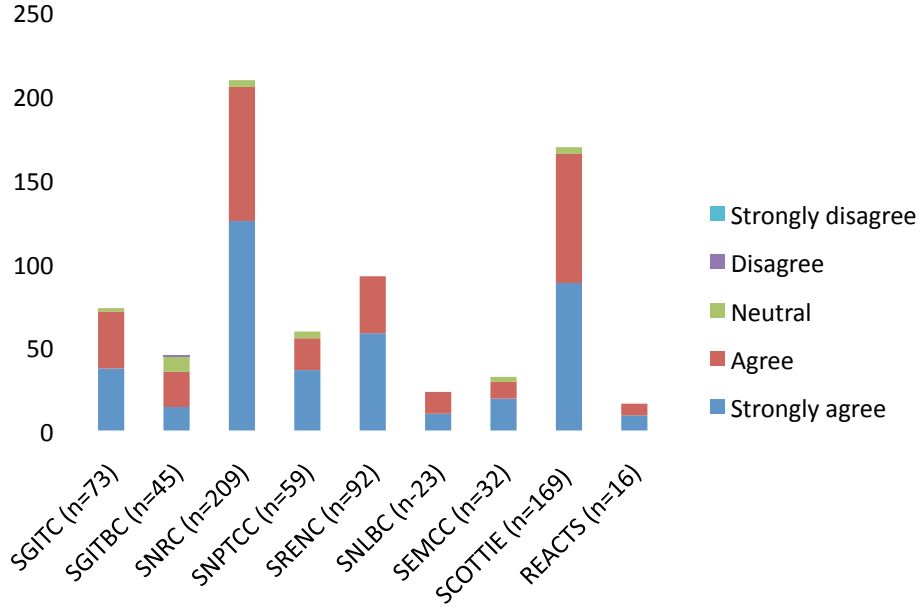


Figure 35: Pre-course material / work was relevant

From the qualitative comments (n=40), only two participants commented on the delay in receiving their pre course material in sufficient time to carry out the pre-course work.

Some participants highlighted that the pre-course material work helped them whilst they were on the course. Interestingly they commented that the resource material is still used as a reference source after the course has been attended.

> *“I still have a flick through pre course material on occasion.”*
>
> *“It was considerable! But worthwhile and will serve as good reference manual.”*
>
> *“Excellent, and useful for further reference.”*
>
> *“All course materials continue to be used - by me and others.”*

Participants were asked to select if they felt that the pre-course material / work had increased their confidence level, increased their preparedness for carrying out their role, increased their knowledge base and increased their level of clinical competence for each course attended (Figure 36). The responses to each question vary but the (n=) is the total number of participants who responded to each question on the different SMMDP courses attended.

SMMDP Course	n=	Increased confidence level	Increased preparedness for role	Increased knowledge base	Increased level of clinical competence
Scottish Generic Instructor Training	**95**	48 **(51%)**	36 **(38%)**	44 **(46%)**	23 **(24%)**
Scottish Generic Instructor Training Bridging	**56**	11 **(20%)**	18 **(32%)**	14 **(25%)**	4 **(7%)**
Scottish Neonatal Resuscitation	**305**	130 **(43%)**	123 **(40%)**	137 **(45%)**	97 **(32%)**
Scottish Neonatal Pre-Transport Care	**77**	38 **(49%)**	34 **(44%)**	42 **(55%)**	27 **(35%)**
Scottish Routine Examination of the Newborn	**136**	71 **(52%)**	52 **(38%)**	58 **(43%)**	46 **(34%)**
Scottish Normal Labour and Birth	**39**	15 **(38%)**	14 **(36%)**	13 **(33%)**	7 **(18%)**
Scottish Emergency Maternity Care Course (for Non-Maternity Professionals)	**47**	24 **(51%)**	18 **(38%)**	21 **(45%)**	15 **(32%)**
Scottish Core Obstetrics Teaching and Training in Emergencies	**231**	101 **(44%)**	94 **(41%)**	101 **(44%)**	67 **(29%)**
Scottish Maternity REACTS	**21**	8 **(38%)**	6 **(29%)**	10 **(48%)**	6 **(29%)**

Figure 36: Participants identified if the pre-course material / work had increased their confidence level, preparedness for carrying out their role, knowledge base, and level of clinical competence

The majority of the participants strongly agreed or agreed that the content of the lectures was appropriate (Figure 37). The mean scores for individual courses range from 3.88–4.67 with an overall mean of 4.49.

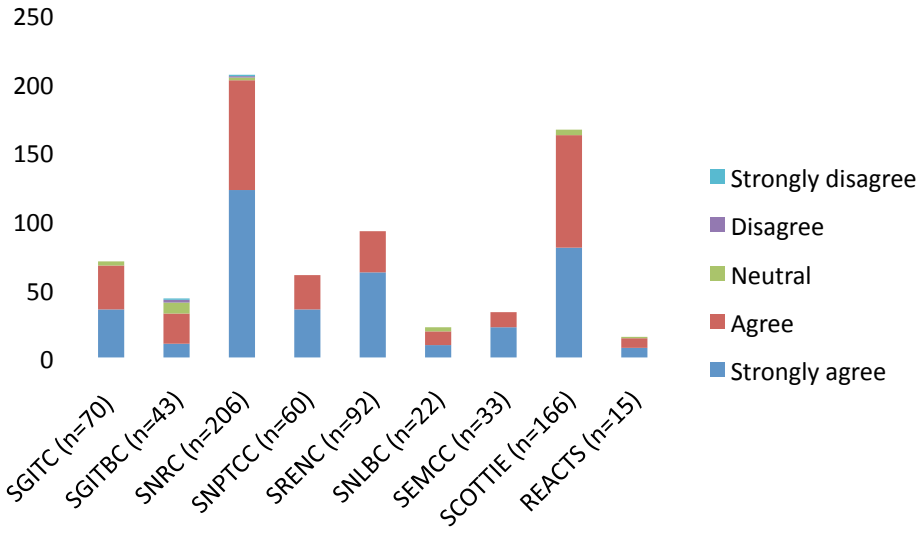


Figure 37: Content of lectures appropriate

The majority of the participants strongly agreed or agreed that the duration of the lectures was appropriate (Figure 38). The mean scores for individual courses range from 4.05–4.58 with an overall mean of 4.39.

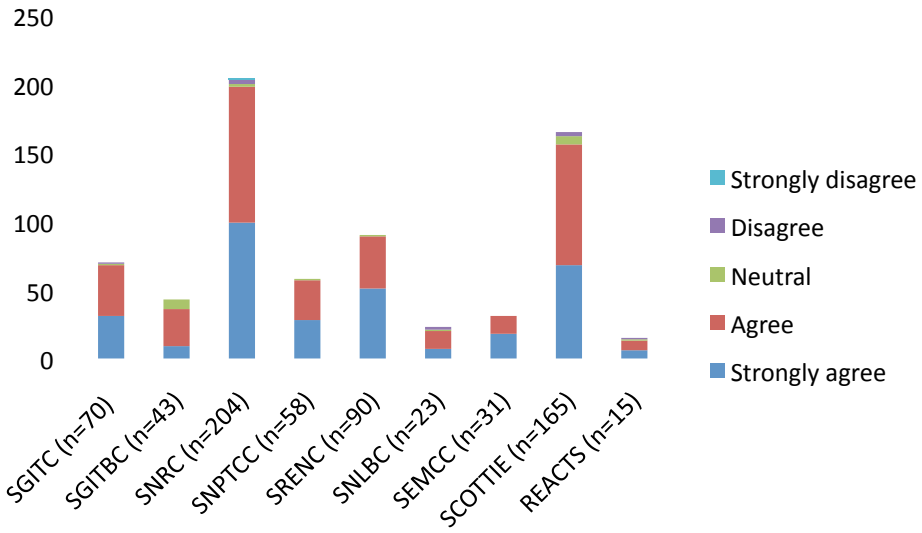


Figure 38: Duration of lectures appropriate

The comments on the duration of the lectures were mixed. Some participants felt they were of appropriate duration others felt they were too long or too short.

However, the majority of the supporting comments were positive for the lectures, which is highlighted below.

"Majority of lectures very well delivered."

"Well presented and well prepared. Timing and delivery was to schedule, so very professional."

The majority of participants strongly agreed or agreed that the lectures facilitated their learning (Figure 39). The mean scores for individual courses range from 3.86–4.60 with an overall mean of 4.40. The qualitative comments supported this and did not yield any further information.

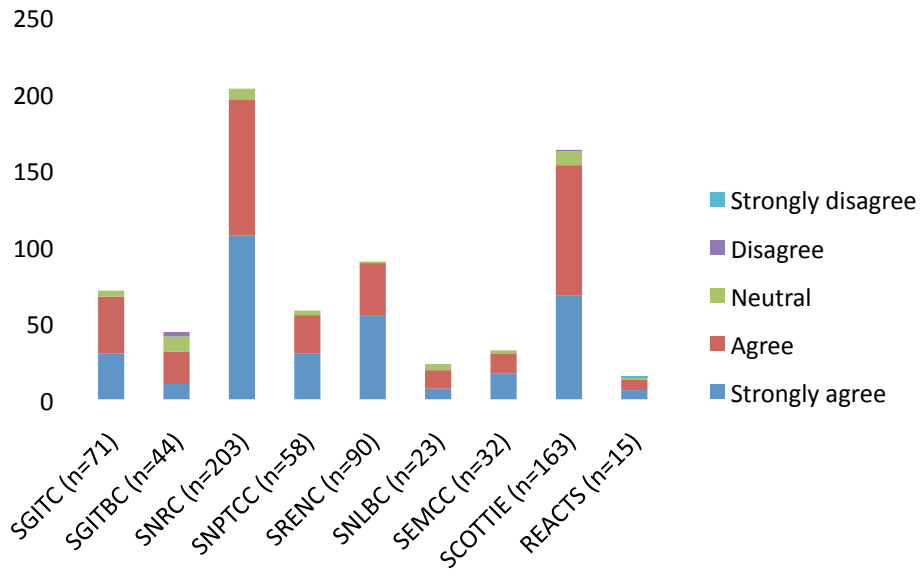


Figure 39: Lecture facilitated learning

Participants were asked to select if they felt that that the lectures had increased their confidence level, increased their preparedness for carrying out their role, increased their knowledge base and increased their level of clinical competence for each course attended (Figure 40). The responses to each question vary but the (n=) is the total number of participants who responded to each question on the different SMMDP courses attended.

SMMDP Course	n=	Increased confidence level	Increased preparedness for role	Increased knowledge base	Increased level of clinical competence
Scottish Generic Instructor Training	**95**	44 **(46%)**	42 **(44%)**	39 **(41%)**	24 **(25%)**
Scottish Generic Instructor Training Bridging	**56**	13 **(23%)**	20 **(36%)**	14 **(25%)**	5 **(9%)**
Scottish Neonatal Resuscitation	**305**	128 **(42%)**	128 **(42%)**	140 **(46%)**	103 **(34%)**
Scottish Neonatal Pre-Transport Care	**77**	40 **(52%)**	38 **(49%)**	44 **(57%)**	30 **(39%)**
Scottish Routine Examination of the Newborn	**136**	70 **(51%)**	60 **(44%)**	62 **(46%)**	52 **(38%)**
Scottish Normal Labour and Birth	**39**	14 **(36%)**	12 **(31%)**	16 **(41%)**	9 **(23%)**
Scottish Emergency Maternity Care Course (for Non-Maternity Professionals)	**47**	20 **(43%)**	21 **(45%)**	20 **(43%)**	15 **(32%)**
Scottish Core Obstetrics Teaching and Training in Emergencies	**231**	96 **(42%)**	98 **(42%)**	104 **(45%)**	74 **(32%)**
Scottish Maternity REACTS	**21**	8 **(38%)**	9 **(43%)**	8 **(38%)**	6 **(29%)**

Figure 40: Participants identified if the lectures had increased their confidence level, preparedness for carrying out their role, knowledge base, and level of clinical competence

The majority of participants strongly agreed or agreed that the small group teaching facilitated their learning (Figure 41). The mean scores for individual courses range from 4.00 – 4.61 with an overall mean of 4.50.

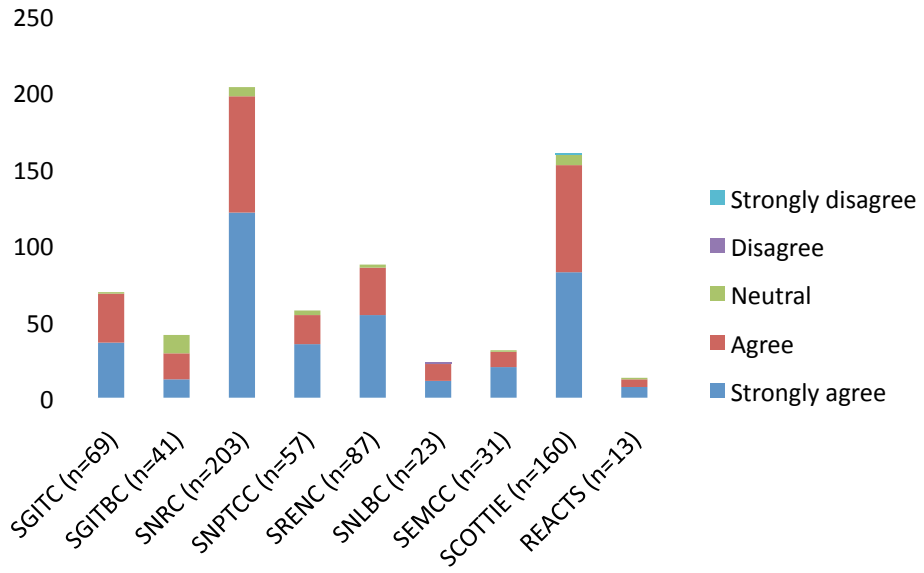


Figure 41: Small group teaching facilitated learning

Only n=13 participants gave further comments. Only two of the participant's comments expressed their negative experiences about how the instructors had affected their small group teaching.

> *"A couple of the leaders were so passionate about their subject - it was not possible to have a discussion and disagree about comments made - the points were valid and in time I have agreed with them but would have appreciated either more patient explanations, or the opportunity to discuss why I was uncomfortable with what was being discussed (slightly obstructive)."*

> *"The small group meant that the treatment meeted out to me by that one instructor stood out even more, was embarrassing and undermining. As the course was only two days, there was insufficient time for the psychology of a group to kick in properly. Consequently, there was minimal support available."*

However, the majority of comments were in favour of the small group teaching, which is outlined below.

> *"Smaller group work gave more time to practise different and varied scenarios.*

> *Less confident candidates get more out of the interaction in smaller groups - they can't hide."*

> *"Small group learning is essential as people just would not participate or enjoy the sessions due to being self conscious or judged. Small groups are supportive of each other."*

“A large group would be quite intimidating.”

“Small group teaching = (equals) one of the major strengths of these courses ensuring individuals actively take part (bearing in mind some candidates will hate scenarios need supported through this experience to ensure +ve (positive) learning outcome.)”

“Very well facilitated: calm and supportive. More practice would have been welcome especially in maternal CPR (cardiopulmonary resuscitation).”

“Small group learning is a good concept as participants feel more able to express themselves in small groups rather than with the entire group.”

Participants were asked to select if they felt that that the small group teaching had increased their confidence level, increased their preparedness for carrying out their role, increased their knowledge base and increased their level of clinical competence for each course attended (Figure 42). The responses to each question vary but the (n=) is the total number of participants who responded to each question on the different SMMDP courses attended.

SMMDP Course	n=	Increased confidence level	Increased preparedness for role	Increased knowledge base	Increased level of clinical competence
Scottish Generic Instructor Training	**95**	50 **(53%)**	38 **(40%)**	34 **(36%)**	27 **(28%)**
Scottish Generic Instructor Training Bridging	**56**	16 **(29%)**	16 **(29%)**	9 **(16%)**	3 **(5%)**
Scottish Neonatal Resuscitation	**305**	145 **(48%)**	127 **(42%)**	123 **(40%)**	110 **(36%)**
Scottish Neonatal Pre-Transport Care	**77**	46 **(60%)**	38 **(49%)**	37 **(48%)**	32 **(42%)**
Scottish Routine Examination of the Newborn	**136**	70 **(51%)**	58 **(43%)**	54 **(40%)**	49 **(36%)**
Scottish Normal Labour and Birth	**39**	14 **(36%)**	11 **(28%)**	14 **(36%)**	11 **(28%)**
Scottish Emergency Maternity Care Course (for Non-Maternity Professionals)	**47**	21 **(45%)**	18 **(38%)**	19 **(40%)**	15 **(32%)**
Scottish Core Obstetrics Teaching and Training in Emergencies	**231**	112 **(48%)**	84 **(36%)**	90 **(39%)**	78 **(34%)**
Scottish Maternity REACTS	**21**	9 **(43%)**	9 **(43%)**	8 **(38%)**	8 **(38%)**

Figure 42: Participants identified if the small group teaching had increased their confidence level, preparedness for carrying out their role, knowledge base, and level of clinical competence

The majority of participants strongly agreed or agreed that the four staged technique facilitated their learning (Figure 43). The mean scores for individual courses range from 3.58 – 4.24 with an overall mean of 4.10.

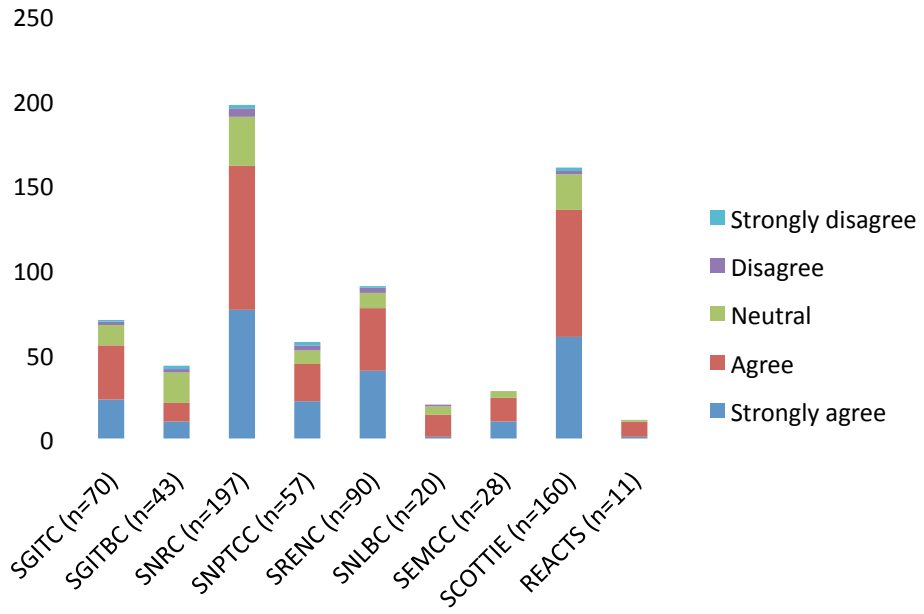


Figure 43: Four stage technique facilitated learning

Comments were received from n=15 for this question. Interestingly a third of participants stated that they were unaware of what this teaching method was. Comments indicated that in some of the courses this method of teaching was not deemed to be relevant or appropriate for the subject matter.

> *"Instructor on SCOTTIE and feel four stage approach is not suitable for short sessions."*

> *"The 4 stage technique was not followed for all courses. It does not (lend) itself well for many scenarios and there is not enough teaching time to use it. I personally do not find it useful."*

> *"I feel the 4 stage technique is overrated and time consuming and can be truncated to utilise time more effectively."*

> *"4 stage good but takes too long!"*

However, one participant felt this method was a good way to learn.

> *"This technique was new to me, I found it very encouraging way to absorb and learn, and have since used it within my own workplace whilst mentoring others."*

Participants were asked to select if they felt that that the four staged technique had increased their confidence level, increased their preparedness for carrying out their role, increased their knowledge base and increased their level of clinical competence for each course attended (Figure 44). The responses to each question vary but the (n=) is the total number of participants who responded to each question on the different SMMDP courses attended.

SMMDP Course	n=	Increased confidence level	Increased preparedness for role	Increased knowledge base	Increased level of clinical competence
Scottish Generic Instructor Training	**95**	44 **(46%)**	39 **(41%)**	29 **(31%)**	25 **(26%)**
Scottish Generic Instructor Training Bridging	**56**	12 **(21%)**	18 **(32%)**	7 **(13%)**	3 **(5%)**
Scottish Neonatal Resuscitation	**305**	125 **(41%)**	111 **(36%)**	111 **(36%)**	109 **(36%)**
Scottish Neonatal Pre-Transport Care	**77**	33 **(43%)**	29 **(38%)**	29 **(38%)**	30 **(39%)**
Scottish Routine Examination of the Newborn	**136**	52 **(38%)**	45 **(33%)**	39 **(29%)**	43 **(32%)**
Scottish Normal Labour and Birth	**39**	10 **(26%)**	8 **(21%)**	11 **(28%)**	9 **(23%)**
Scottish Emergency Maternity Care Course (for Non-Maternity Professionals)	**47**	19 **(40%)**	17 **(36%)**	17 **(36%)**	14 **(30%)**
Scottish Core Obstetrics Teaching and Training in Emergencies	**231**	98 **(42%)**	85 **(37%)**	80 **(35%)**	80 **(35%)**
Scottish Maternity REACTS	**21**	7 **(33%)**	7 **(33%)**	8 **(38%)**	7 **(33%)**

Figure 44: Participants identified if the four staged technique had increased their confidence level, preparedness for carrying out their role, knowledge base, and level of clinical competence

Scenarios were used throughout the SMMDP course. The comments (n=66) received were varied and the main concepts identified were that scenarios were very helpful and beneficial in making situations realistic and also helped consolidate learning from the pre-course work and course. However, some of the participants gave negative comments to the scenarios and stressed they did not enjoy role play, felt self conscious, daunted, and even threatened, which hindered their learning and the enjoyment of the course. Other comments about scenarios were the lack of uniformity or structure of them and would have preferred set generic scenarios but others preferred them tailored to their area and found that beneficial.

> *"Skills and disciplines in individual groups were different so the scenarios in the 'SCOTTIE' course were tailored to the individual. Personally, I would have gained more if the scenarios were universal. i.e. paramedic completing scenarios to a similar standard/same learning outcomes as the midwives present."*

> *"Only disadvantage is that I feel very self conscious and uncomfortable but can also appreciate the value of them."*

> *"I hate role play of any kind and found it difficult to pretend that the situations were real. I did work through them but felt uncomfortable at times. The instructors however were very relaxed and understood. I don't mind talking through scenarios but I cannot act as if they are real."*

> *"The scenarios are very good and practical. The problem I noted was the dummies and other equipment was not sufficient needing a lot of improvisation making the scenarios less real."*

However, most participants felt the scenarios enhanced their confidence and encouraged candidates to link the situation to their practice and demonstrated the multidisciplinary approach, which is highlighted in the comments below.

> *"Scenarios are a great way of increasing confidence in practice and learning/correcting mistakes in a safe environment."*

> *"The advantages of these are they help to think through different situations that we may have in a practical way and how we may approach them and deal with them. Which has given me the confidence when faced with any of these scenarios to be able to deal with them in a calmer more confident manor as I have already practically dealt with them in a controlled situation."*

> *"Good to practice technique, and see how other inter professionals apply technique, highlights your weak points and how to improve, or highlights your strengths and allows clarification that you are competent in treatment you are applying, It was not boring or repetitive, it was interesting, kept you busy and interested."*

“Scenarios bring the knowledge to life in as realistic a way as possible without going through the real thing. They help to consolidate the skills learnt in the various lectures and skills stations.”

“Scenarios allow the participants to think in different ways. Role-play can be beneficial to learning, as long as the participants feel safe.”

Section four of the questionnaire allowed the participants to identify the strengths of the SMMDP and make future recommendations. The participants were asked to rate how they felt about the courses. The response rates are different for each course as the participants were asked to complete only the courses in which they had attended. The section on "did not attend" has been removed for the final data analysis. The Scottish Normal Labour and Birth Course (SNLBC), Scottish Emergency Maternity Care Course (for Non-Maternity Professionals) (SEMCC) and the Scottish Maternity REACTS Course (REACTS) have much lower response rate figures. However, this is in keeping with the amount of times these courses have been delivered and the number of attendees at the courses. Appendix 8 provides information on the number of training courses the instructors are required to do to maintain instructor status and Appendix 9 details the duration of each course. This information will help the reader to contextualise some of the participants' responses within this section.

The participants were asked to give a rating of the overall quality of the SMMDP courses. The majority of the participants strongly agreed or agreed that the courses were excellent and good (Figure 45). The mean scores for individual courses range from 3.71 – 4.83 with an overall mean of 4.59.

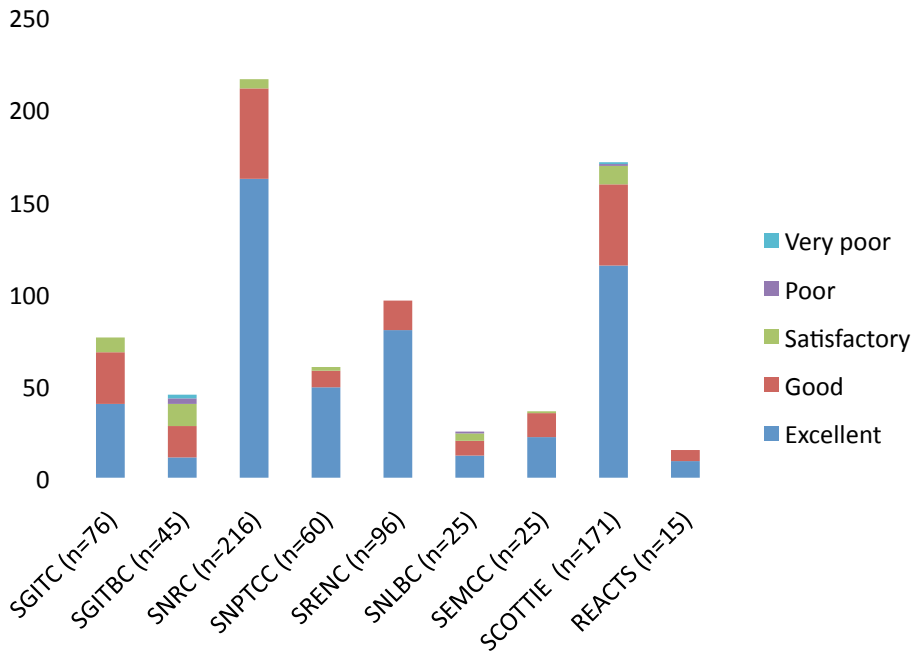


Figure 45: Overall rating of SMMDP training courses

All the courses were well evaluated with excellent to good being the main areas identified. Some participants gave a supporting comment (n=24), some of which are outlined below. The majority of the comments are positive. However, some of the participants highlighted some issues about the courses, which are demonstrated below.

“Courses would be much improved if there was more quality control of how the courses are delivered. A pre-course meeting where each workstation is "run through" with all instructors present is necessary as different people teach in different ways. Also varying levels of experience and preparedness are often evident. It is not good enough to "wing it" as I was told by one instructor when I asked how we would run the work station!”

“As an instructor, for me the biggest challenge on the day is to train/teach/assess/ (and for the candidate to learn) amongst a group of different knowledge and skills level, sometimes widely different e.g. midwives and trainee obstetricians / paramedics whose job roles are different in the multidisciplinary team.”

“A long day for what felt like just different peoples views on what we were meant to be learning. The intensity of the 'exam' at the end was a bit much.”

“Each section was very different, learned well and increased confidence and clinical practice in some areas but not all. Think dependent upon tutors and delivery of information prior to assessment.”

“I would have said excellent if there was more reference to the pre-hospital setting which paramedics work in.”

The positive comments about the course are highlighted below.

“Excellent courses and programmes.”

“Sensibly presented, taking into account existing experience of attendees. Willingness to be flexible to accommodate learning needs and move quickly through what was already known made it an enjoyable and interesting experience rather than an exercise in endurance and being taught what we already knew. Well done!”

“I believe I have benefited greatly from these courses and they have challenged and extended my practice.”

“The course has enhanced my confidence within my scope of practise.”

“The information that you receive from the minute you register until you finish the course is of a excellent nature, the instructors are all very experienced and willing to go that extra mile for the students, when I qualified as an instructor I had been fully supported by the faculty on the courses I had attended as a IC (instructor candidate). The support from the office is second to none and nothing is ever too much of a problem.”

“Really enjoy teaching on these courses and participating on them as a candidate too.”

The majority of the participants felt that the SMMDP courses were affordable. (Figure 46). The mean scores for individual courses range from 4.09 – 4.64 with an overall mean of 4.37.

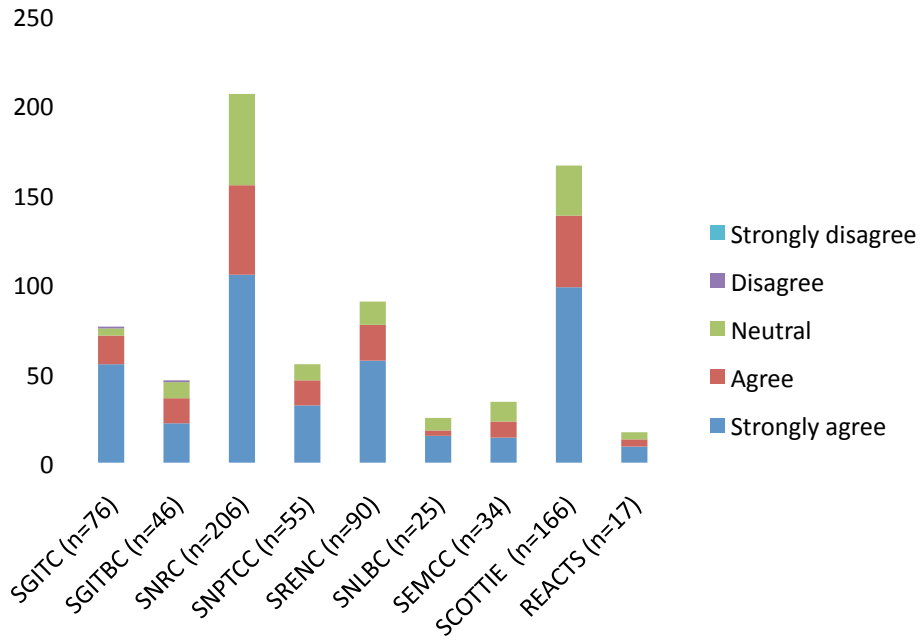


Figure 46: SMMDP courses were affordable

Within the comments section (n=40) the majority of the participants seemed to be unaware of the costing for the courses as their employer paid for them to attend. However, some comments reflected that the courses were affordable.

> *"As the courses are affordable I was happy to attend at my own cost and in my own time. The longer courses are better value."*

> *"They are all affordable."*

> *"Unsure of exact cost, I only paid partial amount as it was subsidised, so affordable subsidised."*

> *"I did not pay for my courses but feel if I wished to attend a course in my own time it would be very affordable."*

Some of the participants did not just relate it to monetary value.

> *"As my employers paid for this course I do not know the actual cost in money terms but it is invaluable as far as my practise is concerned."*

> *"The cost of staff being out of the workplace has to be factored into the cost."*

"I feel this is proved by the fact that every midwife in our unit has been funded to attend a SCOTTIE and a Neonatal Resuscitation course. The added value is the skills you bring back to the workplace which enhance your practise and the patients' experience. The long term hidden benefit could be in reducing litigation."

One participant raised the issue about who should pay for staff attending the course(s) and only two comments felt the costing was expensive.

"GPs no longer receive any payment for involvement in maternity care but in remote areas cannot avoid participating, particularly in emergency situations - the GPs on the island take the view that the least the CHP should do is pay the course fees - we have not had formal confirmation of this but nor have we had invoices."

"Affordable is relative! On a lower salary than mine, they would be expensive."

"Employers paid for both courses, think I would have answered very differently if had to pay for by self!"

The majority of the participants felt they had been given value for money in attending the SMMDP training courses (Figure 47). The mean scores for individual courses range from 4.13 – 4.64 with an overall mean of 4.44.

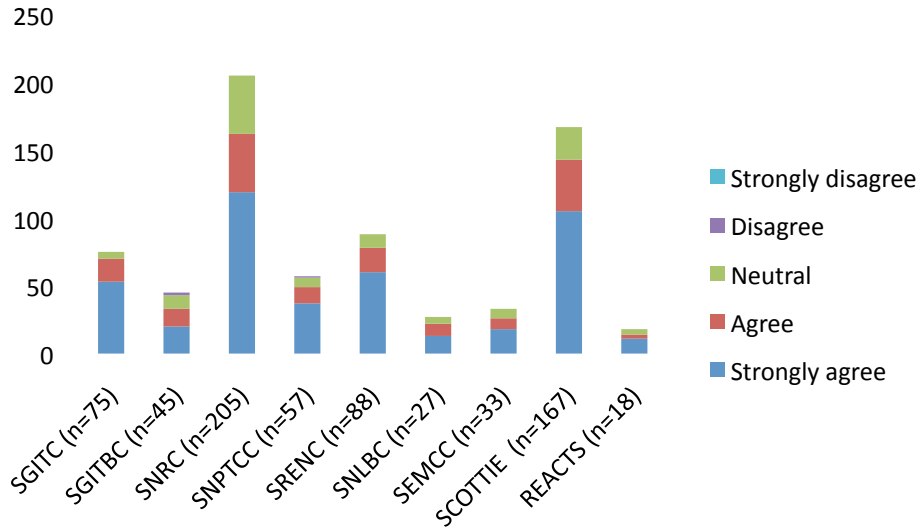


Figure 47: Value for money

Some participants elaborated further by giving a supporting comment (n=27), which demonstrated how they felt.

"Compared to many courses and conferences these courses are incredibly valuable and low-cost."

"Don't know the cost but I learned so much I think it would be good value for money."

"I do not know how much the course cost but I found it beneficial."

"I feel this is an excellent provision."

However, two participants stressed the importance of support to enable people to go on the courses and also to be able to practice the skills once they have been on them.

"The health boards should recognise this and give us more support for these courses especially for the instructors who often do all this in there (their) own time especially the midwives."

"Only if staff complete and achieve their assessments. Also ensure they are on a rota to roll out their skills."

The participants were asked an open-ended question to specify what were the strengths of the SMMDP course(s) they attended? The main themes from the comments (n=205) highlighted that it was multidisciplinary with friendly approachable instructors. The courses were also deemed to be practical, relevant, excellent value and inspiring. They were well delivered and well presented in a relaxed atmosphere with good pre-course and study material. There was good example of uniform evidence to enhance practice with clear and precise teaching in a variety of venues. The courses were interactive, well run with well devised skill stations and the small groups contributed to an enjoyable learning environment.

The quotes below demonstrate some of the comments.

"Locally administered is advantageous. Enhanced working with colleagues who may be present at real emergencies with you. Support for each other afterwards and after course scenarios, helps to debrief. Makes you feel that you could cope with anything thrown at you the next time you are on shift."

"The SCOTTIE course is the best course I have attended. The instructors are great and make you feel calm and able to participate. The small groups enable you to ask questions and participate. Every part of the 2 day course was interesting and definitely increased my confidence levels."

"The combination of theoretical and practical skills training is hard to beat, especially for a skills and research-based profession such as midwifery. The use of small groups encourages group identity and mutual support. The use of local instructors has the benefit that they understand the local set-ups and the issues faced locally."

“Practical, relevant, excellent value, inspiring, real team building experiences with skills that can be practised and shared.”

The participants were asked to identify areas for improvements for the SMMDP. The main themes from the comments (n=127) have highlighted that they wanted more availability of local courses.

“Greater advertising of courses, I tell all my colleagues to attend many of whom are unaware of the existence of the SMMDP.”

However, it was also important to network and mix with other disciplines across different geographical areas to develop a community and benefit from others experience.

“Although I agree that having such good courses locally is very convenient, I feel local attendees are missing out on the chance to meet other people across Scotland and therefore increase this sense of "commonality" in maternity services. This uniformity is also lost by vastly increasing the instructors' pool is, as individual centres' differences in practice, and/or peculiarities are reproduced and reinforced.”

There were comments made in relation to feedback and the difficulty and appropriateness of assessment. Some felt it was too easy and others felt that it was stressful at the end of an already busy day.

“The participants need to be made more aware of their weakness areas and mistakes should be corrected (tactfully and professionally of course without causing embarrassment etc.).”

“…I would like to see a more open approach to the scenario teaching sessions. For example, run a scenario, then do the feedback as usual, then show them the marking tool / tick list of items that the instructor has in front of them. This may further help to illustrate the consistent nature of the practice points that are being applied to the various situations. It may also improve the consistency of the feedback, in fact, which is sometimes very vague if the instructors feel pushed for time or don't want to hurt someone's feelings. If this happens for even just one of the scenarios during the learning sessions, I do not think it could possibly undermine the assessment mechanism. It would be more like a visual aid for the teaching scenario; and it would not be the actual assessment scenario, only the one teaching scenario. I strongly suggest trying this.”

“…The final assessment on neonatal resuscitation programme can be very intimidating for candidates and many are unable to relax throughout the day because of the pressure at the end of the day. Perhaps continuous assessment similar to SCOTTIE would help this.”

"The assessments should be more thorough and more difficult. The teaching had already facilitated this, however the assessment was straight forward and not particularly challenging."

One participant highlighted the impact of conducting the practical assessment. (NES confirmed that a practical assessment is only undertaken on the Scottish Routine Examination of the Newborn Course).

"The one stumbling block seems to be with the time needed for practice assessments with midwives and facilitators / assessors finding time to undertake them. Most have had to be done in our own time which is difficult given the busyness of peoples work lives. Time cannot be taken out of the clinical areas easily as the workforce and commitments does not allow for this. This then leads to assessments not being undertaken in the allotted time and puts pressure on all concerned."

Many of the participants emphasised the need to relate the course to the different environments the participants worked in and less focus on hospital environments.

"To try and adapt the course for staff who don't work in a hospital environment."

"Some of the instructors seemed reluctant to deviate from the hospital environment. I would have loved a course specifically aimed at the pre-hospital setting. Particularly now that there is not the same availability of a midwife and doctor to attend obstetric emergencies pre hospital."

"Be aware of the paramedic role in the lectures as we have no access or knowledge to certain hospital based equipment i.e. resuscitare."

One area raised by a few participants was the credibility of certain disciplines teaching on certain course. They stressed the importance that to maintain credibility instructors need to be seen as skilled practitioners in their field.

"I think that sometimes people are recommended as an I.C. (instructor candidate) who are not credible to teach on some of the courses, as they are not doing that role as part of there (their) normal work. For example a paramedic teaching on neonatal resus, might never in this work life ever have to do it. They maybe competent on the course but unless that is part of there (their) normal role there is no credibility. There should be an introduction of a scoring system for I.C. (instructor candidate) and they should be nominated and seconded."

The issue of resources was also highlighted and participants felt that it was important to have good and realistic resources.

"Better support from host units when equipment is needed."

"Possibly more investment in technology. More equity in funding from NES."

"Better simulation models. The inverted uterus is too cheap and unrealistic. There is a more elaborate shoulder dystocia model available also."

The duration of the courses was also highlighted and some felt they should be increased whilst others felt they should be decreased.

"Some one day courses such as the SCOTTIE course have a very tight schedule and I sometimes think that this course could be a two day to give candidates more support and time for scenario practice."

"Newborn examination course could be adapted to perhaps 2 days for GP trainees and/or junior doctors in paediatrics."

The participants were asked to give any further comments about the SMMDP and any other changes, n=63 comments were received. The main themes identified were improved confidence and competence especially surrounding obstetric emergencies and neonatal resuscitation and being prepared for these emergencies. Improvement in skills and knowledge-base and reinforcement of evidence-based practice and advancing roles were also key themes.

"I am able to perform at a higher standard, for example checking the babies and performing their standards, passing for home etc, this gives a more rewarding level to the job, as you can "complete" all the care for your lady. As I gain more confidence I also feel I am more equipped to do these checks than some of the paediatricians!"

"As a consultant obstetrician I believe these courses have helped junior medical staff and midwives to develop skills previously unavailable to them. I have seen midwives who have been on the course taking control of breech births and assisted deliveries when with inexperienced junior medical staff."

Other comments

- Keep up the good work.
- Like to see simulations performed in actual work settings.
- More pre-hospital settings.
- Consistency of faculty, instructors, experience.
- Feedback to candidates, correct errors.
- Advertise SMMDP more.
- Develop aide memoire cards for all professionals to use.
- Develop approach for undergraduate students.
- Course for physiotherapists / those working with babies under a year.
- Ensure assessments in some courses are fair to all disciplines i.e. paramedics' expected to have a working knowledge of resuscitaire.

SECTION FOUR

DATA ANALYSIS OF THE TELEPHONE INTERVIEWS

The interviews were transcribed verbatim and samples of the transcribed interviews were sent to the respondents for member checking to confirm accuracy and conformability of the data. This enhances the credibility of the data results (Polit and Beck, 2006). The project team immersed themselves in the interview transcript data and conducted thematic analysis. The qualitative data analysis was peer reviewed to confirm auditability of the process of the development of the themes and subthemes. The main themes and subthemes identified were:

- **Positive feedback** – Beneficial, meets the needs of the service, excellent use of resources, enjoyable.
- **Quality** – Programme, instructor, candidates' performance in practice.
- **Cost** – Value for money, cost to service users and time costs (instructors, participants, locations).
- **Practice Changes and Developments** - Practice changes, changes to candidates practice, organisational changes, areas for future development, SMMDP.
- **Peer / Multidisciplinary –** Understanding of roles, building of relationships.

However, some of the responses crossed different themes but have been placed within the key theme or subtheme from the interview response.

Positive Feedback

All interview respondents have emphasised the positive feedback they have received from the candidates in their clinical areas or from their own involvement with the SMMDP training courses. The positive areas identified that it is a flexible programme, excellent use of resources, really beneficial and addresses the needs of the workforce and service.

> *"We get a really good service from them, an excellent use of resources and it meets our needs in the service."* **(Interview 6 Lead Midwife)**

> *"…I have had no staff that I have sent on any courses that have come back and said that it hasn't met their clinical requirements…I mean I have to say it's an excellent resource for all maternity units across Scotland. Certainly, if it was not available and I could not access it, it would have a huge detrimental effect on our ability to provide training to the staff and I am really pleased that it is there."* **(Interview 15 Lead Midwife)**

Quality

The theme quality produced three subthemes which were quality of the programme, quality of the instructors and quality of the candidates' performance in practice.

Quality of the Programme

The overall quality of the programme evaluated well. However, two interviewees identified the assessment as being the least popular element of the course

> *"…sometimes have staff reluctant to come forward and I think that's because of the method of assessment, especially some of the older staff. They're a bit reluctant to come along because of the method, because of constantly being assessed, I think that kind of puts staff off."* **(Interview 13 Lead Midwife)**

The quality of the programme was strongly identified through being a national course, which is widely recognised and respected across Scotland. The quality aspect of the approach to the course was evident from the analysis, which identified that it was uniform, systematic, relevant to every day working practice and well evaluated by the candidates. Furthermore the format and structure was highly praised as the subject matter is evidence-based and the type of training is practical, scenario driven workstations, which has a strong multiprofessional focus.

> *"Well, it ticks all the boxes basically, the Governance stuff, the quality, you know, it's all national drivers there's no getting away from it, we have to make sure that practitioners are safe to practise and you know, that sits within supervision, it sits …and the SMMPD (SMMDP) have used all of that that's why they are taking the courses in the direction they're taking them in. I have thoroughly enjoyed my input and long may it continue, it's a great thing."* **(Interview 3 Practice Development Midwife)**

> *"I think because it's very clinically orientated and provides an example of evidence based approach to clinical care where the theory is adapted to the clinical needs, it's multi disciplinary, it's very democratic in that the training is for all those involved in a particular area of practice and it's at a level that I think helps clinicians to feel comfortable….I think knowing that they are working to a national standard rather than a local standard is reassuring for people."* **(Interview 14 Consultant Neonatologist)**

> *"Well, because of the multi agency remit that it's got, also the staff seem to like the actual work stations, the staff face to face part and the practice sessions so I think the methods that they use are very good and that's including the pre-course work and the actual attendance and the interaction that they get from other professionals that are there are of benefit to them."* **(Interview 6 Lead Midwife)**

Quality of the Instructors

The quality of the instructors was demonstrated throughout the analysis as being professional, credible and friendly which facilitated a relaxed conducive environment in which to learn.

> *"…It's well run, although they are professional, they are quite friendly and quite relaxed and I think it's a good environment for learning, plus of course, you are networking with people from other areas."* **(Interview 2 Midwife Manager)**

Although, two interviewees found it difficult to obtain faculty members to run the programmes and one interviewee commented on the lack of organisation of role play scenarios, which ultimately detracted from the learning, the majority of the interviewees were happy with the faculty and organisation.

> *"…I am struggling to get faculty members, it's really, really difficult because you need so many members on the faculty…it would be much easier if SMMDP said right, we have the faculty here, you just find us a venue and we'll bring all the equipment…"* **(Interview 13 Lead Midwife)**

> *"Sometimes they've not really got their act together with the performance, if you like, so it can be a bit frenetic and you end up as a candidate sitting watching this piece of what's like organised chaos going on and you can't watch everybody at the same time, so I feel that it's not an ideal way of learning."* **(Interview 10 Practice Development Midwife)**

The SMMDP Edinburgh team were commended throughout as being helpful, accommodating and pleasant with efficient administration of the course.

> *"…I think having people that are running them, ... and all the people that are involved, I mean they are very, very helpful and accommodating so from that perspective, I think it's excellent."* **(Interview 9 Lead Midwife)**

Quality of the Candidates' Performance in Practice

The quality of the candidates' performance in practice was highlighted throughout the interviews. The candidates obtained evidence-based theory, which informed evidence-based practice, which was uniform and then tailor made to suit individual needs. Candidates from the course identified that in turn the SMMDP training increased their confidence, competence, knowledge and skills and gained invaluable experience and greater understanding of managing complex care situations. The candidates also felt less apprehensive in dealing with emergencies and were more confident to challenge practices, which were not evidence-based.

> *"It's actually using the experience, knowledge and skills gained or improved (from the SMMDP) when teaching students."* **(Interview 4 Scottish Ambulance Service Training Officer)**

I think that it has increased their knowledge, their skills, their confidence and also helped them to maintain their competence." **(Interview 8 Lead Midwife)**

"I think that midwives are much more confident in their practice.. neonatal staff as well, ambulance staff. I think that the l Course has impacted on.. they are much confident in Neonatal Resuscitation, they're not frightened any more about standing back and letting someone else take over. They will actually initiate the resuscitation and I think it's given them that confidence to be able to do that. You know, because it's given them the knowledge, the background theory and it's also given them, you know, the practical skills." **(Interview 11 Course Organiser)**

"…and there's just an increase in general confidence in being competent in the skills. It's a very reassuring way for people to know that they are still maintaining their skills…so I think if somebody has walked into a new work environment I think it helps them personally to feel a lot more confident that they know how to do the essential tasks and it helps the people that they are working with to be able very quickly to work with them as a team if that whole team has been trained in the same way…" **(Interview 14 Consultant Neonatologist)**

"Definitely, it improves their confidence and therefore it improves how they deliver care to our service users so I think there is a real knock on benefits… and I think it also gives staff the confidence to challenge somebody else if they feel something isn't appropriate because they have that background training behind them where they can say, well actually, no, that's not how we should be doing this…I think every time staff come back, then they come back with the confidence to challenge somebody, anybody, about why they're doing something and move away from "well, that's the way I do it, that's the way I was taught to" actually, this is what the evidence tells us we should be doing so…" **(Interview 15 Lead Midwife)**

Interestingly, some managers expressed the opinion that if staff were underperforming in practice the SMMDP was deemed appropriate to re-skill and update these practitioners even if training was available in-house.

Cost

The theme 'cost' produced three subthemes such as 'value for money', 'cost to service users' and 'time costs'.

Value for money

The SMMDP training courses were considered to be excellent value for money compared to other forms of similar training available. The cost of £40 per course irrespective of how many days was deemed to be excellent. The needs of the service were met, which was also considered as a value. The facility of free gratis places for candidates, the multiprofessional in-house ready-made instructors and the ability to address personal development needs added value to the organisations.

> *"Well, it's not as expensive, it meets the needs of the service providers as well as the professional needs of the staff…if you think about what you're paying, it's not expensive at all, they've pared it down as far as they can I would say because some of the studies, I mean, some of the study days, I mean, the prices are ridiculous. … and you actually get more out of the work stations you know SCOTTIE ..."* **(Interview 6 Lead Midwife)**

> *"…there's monetary costs, there's time costs, there's all sorts of costs and I think bringing everybody together to concentrate on a given obstetric emergency or whatever it is, neonatal stuff, whatever it is, you know bringing everybody together has to be cost effective, not just in a monetary sense but time and all that, so without doubt, yes, in comparison to previous approaches to this type of thing over the years, like xxxx courses, the xxxx course…"* **(Interview 3 Practice Development Midwife)**

Cost to service users

None of the respondents could provide hard evidence about reduction in clinical risk incidents as most of the organisations have stringent risk management systems already in place. However, they were able to report that more of these incidents were being appropriately managed. Some of this they related to the training available to the workforce. They highlighted that their workforce had a change in attitudes and perspectives and were more confident in reporting adverse events and related this to patient outcomes and safety.

> *"…more and more these incidents are being well handled – that in itself is bound to have a cost benefit in terms of maternal and fetal mortality and morbidity, it's bound to have a cost effectiveness."* **(Interview 10 Practice Development Midwife)**

> *"I think the quality assurance aspect maybe has some kind of financial benefit for us as well…I think because of the positive feedback that has come back and changed attitudes and perspectives that some of our staff have come back with, I think that has made it value for money."* **(Interview 1 Lead Midwife)**

"I think to be honest with you I always worry about cost benefit in terms of. I'm much more down the line of patient outcome, and if it makes a difference to patient outcome and the costs must be tens of 50 million then there is a cost benefit." **(Interview 4 Scottish Ambulance Service Training Officers)**

"…in the long term, it has got to be beneficial to the quality of the service that we deliver and the more staff who are all taught on the same method and that we can put through the course, then, you know, the better we become within the Unit and that has to be better for patient safety." **(Interview 15 Lead Midwife)**

"No I think cases are still probably the same but I think they are seeking feedback and looking at how best practice has changed and the management so risk management, yes ,in that there is more willingness to look at preventative interventions after an event." **(Interview 14 Consultant Neonatologist)**

Time costs

The respondents highlighted the issue about the time releasing the staff from the areas was not the main issue in some instances. However, it was the resources to back fill this post, which incurs cost and some areas of concern and there is a restricted funding budget. This was also highlighted from the instructor's perspective as releasing the instructor to maintain the instructor status could have an impact on the service. Within some areas staff self-funded and attended in their own time. However, it was reported that some staff were then able to get time back at a later date.

"I suppose the cost challenge that I have found with SMMDP is having to provide trainers and I know we get a benefit from having a course here that we can get places for that but the fact that trained trainers have to do so many sessions to keep their credibility or to keep their accreditation, that sometimes feels like a bit of a cost pressure, you think, oh gosh, we could do without these people being out, but that said, if you want something good you are either going to have pay more for it because someone will pay trainers or you play your part and contribute some of the training." **(Interview 1 Lead Midwife)**

"I have known staff to travel across the country to go to a 20 minute lecture on post partum haemorrhage because they know now. One, we don't have the old Flying Squad so basically the whole core about land and ambulance staff in terms of field work if it goes wrong so basically yes, staff are up for it, they will do it and any courses they can either come up with or go to, they'll go to." **(Interview 4 Scottish Ambulance Service Training Officer)**

"If we could have our staff who are better able to cope with these kinds of emergencies and I'm talking as specific here about neonatal resuscitation, then that would help us a great deal. However, given the time to release them and the number of occasions when that skill would be used a paramedic, then the cost benefit ratio is quite suspect." **(Interview 5 Scottish Ambulance Service Training Officer**

"…staff are very enthusiastic to undertake the training therefore are happy to undertake it in their own time and have the day back further down the line". **(Interview 15 Lead Midwife)**

Travel and accommodation costs were also an area of concern as some candidates do not get travel or accommodation costs. The benefit of having local convenient courses required less funding. However, this also created a problem in the number of staff which can be released from these areas at any one time. In the remote and rural areas locality was not so convenient due to diversity of geographical areas and number of feasible participants to attend courses. The issue of travelling long distances within large geographical NHS Board regions without being reimbursed for travel expenses was highlighted. The number of days staff had to be released was also identified for some as being problematic. However, other respondents felt that it was not an issue and were happy with the length of courses.

"The training has been great, the disappointing part from our point of view is that we haven't had any support, financial backfill etc. We have taken on another extra task without any support." **(Interview 2 Midwife Manager)**

"Well, it's only $1^1/_2$ days so that's perfect – you know, if I want to take away 14 or 15 staff out of an area, I know I only need backfill for $1^1/_2$ – 2 days in effect as opposed to a whole week. Backfill for a whole week would cost us a fortune, and it's probably something we would never consider…" **(Interview 13 Lead Midwife)**

Practice Changes and Developments

Practice changes

Changes to practice since the candidates attended the SMMDP were highlighted. Two subthemes emerged: changes to the candidates practice and changes to the organisation.

Changes to candidates practice

As already mentioned candidates improved confidence and competence in performing a skill such as neonatal resuscitation were widely cited.

> *"I think, certainly for us, the biggest change that I have seen here is in the Neonatal Resuscitation and the Approach to Resuscitation. It's just that everyone appears to be consistent in their approach to resuscitation and when I am speaking to the level of competence and confidence in the midwifery staff over and above the GP's who are coming in to help us with resuscitation if required." ...then the care of the families and the babies that they're looking after, has to be effective."* **(Interview 8 Lead Midwife)**

Organisational changes

Many respondents highlighted that in-house training has now been developed in line with the SMMDP therefore producing a more uniform and consistent approach which is evidence-based. This was enhanced because many of the in-house instructors were instructors on the SMMDP. Also noted was the fact that major organisational changes in relation to direct patient care were being introduced more swiftly. Furthermore the information given to service users was more consistent. Some respondents highlighted that their organisation was now using SBAR to improve communication.

> *"....we have adapted our in house training to be in line with that (SMMDP) and to ensure that it is consistent with the national training approach and we have also developed more joint in house training where members of different teams come together for scenario training or fire drills and they are aware of what the other team is likely to need....thinking some examples (of change of practice) might be where meconium practice had changed quite dramatically and it had been introduced as a change of practice through the previous internationally based courses which are a very high cost and would be attended only by specialists and it took a long time whereas when it was brought in at the SMMDP type level it became acceptable and no-one questioned it because it had the evidence put into practice . I think that it has improved the consistency of information to parents where they gain confidence from seeing a consistent approach that people are confident with."* **(Interview 14 Consultant Neonatologist)**

Other respondents highlighted that their organisation was running more efficiently due to their extended skills such as examination of the newborn.

"...we do the baby check and we get them home which means that we can keep things ticking over up in this department…" **(Interview 2 Midwife Manager)**

Areas for future developments

Respondents highlighted two key areas for development, courses and the SMMDP itself.

Courses

- Continue to develop courses such as normality.
- Courses for non-clinical and pre-clinical staff.
- Community - newborn babies, early years care.
- Developing courses like REACTS to meet service and population demands.
- Breast feeding due to failing target.
- Ventouse practitioners / advanced role in labour ward.
- Remote and rural practitioners.

SMMDP

Many respondents highlighted the need to raise the profile of the SMMDP by adopting a more aggressive marketing strategy and developing "out of Scotland" links further.

"If Scottish Multi Professional Development may be upped their profile a little bit they are great courses and everyone who is involved in them realises how good they are and how much there is to be gained by being part of that group because it is multi disciplinary but I think they could up their profile a bit more throughout Scotland." **(Interview 2 Midwife Manager)**

Some respondents indicated that the excellent peer support, which was established on these courses could be an area for further development.

Peer / Multidisciplinary

Overall the respondents highlighted the positive aspects of the multidisciplinary training. They felt it was a cost effective way of providing training. They enjoyed the networking and the ability to freely ask questions within the group. They enjoyed the peer support which extended beyond the training days e.g paramedics visiting hospitals and vice versa. One respondent indicated they were concerned that some candidate groups were under represented and this may impact on the equity of feedback received about the courses. They also mentioned that there were different training needs for different disciplines which can be challenging

"I think one of the advantages of what currently happens is that people practising day to day are using the skills that they practise day to day and it's different for someone who has never used those skills in real life – they need to learn how it's done but they are not taking the same from a training course

as somebody who is day to day I think it can dilute the value of a course to try to mix them, although the content of the course can be the same it needs to be applied in a sensitive way… I suppose my area of most uncertainty is the representation from different disciplines. I think we - we do get the evaluations back but I think sometimes the leaders within different professional groups may or may not have their voices heard in a way that we need to hear them, and both positive and negative." **(Interview 14 Consultant Neonatologist)**

However, most respondents indicated they appreciated the uniform approach to the training. They worked as a team in practice so they felt it made sense to carry out their training as a team. It also gave them a better understanding of each others roles and improved communication when they were back in practice. Furthermore it gave them an insight into other disciplines challenges and concerns. Although many respondents indicated that the SMMDP produced a growing multiprofessional faculty within their organisation for some their faculty was composed of only midwives. Although the obstetricians were supportive of the SMMDP some were reluctant to join the faculty.

"It probably does because we're all carrying out the procedures the same way, and understanding the same way and even being taught the same way. So yes, it probably does." **(Interview 2 Midwife Manager)**

"Team working is just reinforced when they're working in the actual clinical setting. They are aware of the roles and responsibilities of the different members of the team and the contribution they should be making." **(Interview 13 Lead Midwife)**

"...part of that reason being that we have multi professional trainers and therefore because they're used to doing the multi professional training there is less sort of protectionism around them – oh I'm the midwife, I'm the obstetrician, I'm the, you know, whatever, the anaesthetist, the paediatrician, there is much more sharing..." **(Interview 15 Lead Midwife)**

"...cross party groups appear, it's not only, you know, non if you like specialists, in the field actually learning something but everybody brings, as they say, their own carryout to the party and it varies with the Ambulance Service or the specialists and that idea can be brought in… I think it is a bit what I call the Lourdes effect, you might not get cured, but at least you see someone worse than you. I think the benefit in many ways, I think that the benefit is if you like is the pre-hospital providers actually meet, you know, people who provide care in hospital and that cross pollination of ideas can occur and people see that people who work in hospitals don't have horns and vice versa, we don't have tails and pitchforks and we get that idea that there is just one Health Service and one aim which is the patient." **(Interview 4 Scottish Ambulance Service Training Officer)**

SECTION FIVE

This section displays the discussion of the findings, identifies the strengths and limitations of the evaluation, presents conclusions and makes recommendations.

DISCUSSION

Overall there has been a very positive evaluation of the SMMDP courses. This has been confirmed across all data sources through triangulation. The Kirkpatrick Model was found to be an appropriate and effective model (Kirkpatrick, 1996) to evaluate the SMMDP courses in a pragmatic and systematic way. The summary of key results and findings obtained from the internal course evaluation, online questionnaire and telephone interview will now be discussed in relation to the literature.

Participants have clearly found the format, structure and content of the different SMMDP training courses to be enjoyable, beneficial and an excellent mode of learning for professional practice. The multidisciplinary approach was deemed to be an important aspect as it meant that the different professionals not only learnt from one another, but also had a greater understanding of what each others' roles were when situations arose, which is reiterated by Pirrie, et al (1998) and Marquis and Huston (2010). This collaborative learning also leads to collaborative care (Goble, 2004). However, it was also discussed that it was a better learning experience if staff were not only from different disciplines but were also from different NHS Board areas. This tended to create a more inter-professional cross boundary learning environment, where staff could share ideas with one another and understand that there were other areas that encountered the same challenges or issues.

The key strengths of the training programme were related not only to the multiprofessional approach to learning, but also to the multiprofessional faculty of instructors involved in the teaching. The faculty of instructors was considered credible and knowledgeable in their field and were therefore relevant and appropriate instructors to deliver these courses. To enhance teaching and learning the teacher must be very knowledgeable in the subject area or skill that they are teaching (Harden and Crosby, 2000). Generally the instructors on the SMMDP were deemed to be knowledgeable, credible and approachable and created a positive learning environment. The continuing positive evaluations across all the courses emphasises the consistency of the instructors within the SMMDP who come from a variety of professional backgrounds and regions. This finding confirms a rigorous and robust quality assurance mechanism within the SMMDP.

In relation to the format of learning, teaching and assessment it was identified that the small group teaching was a key strength of the SMMDP training courses. This made the participants feel at ease and they were able to get involved with the

learning scenarios. Willis, et al (2002) highlight that intragroup relationships were an important part of small group learning and that group members not only felt protective of each other, but they also valued each other and supported each others learning needs. This format of teaching also highlights the relationship the candidates felt they had with the instructors which was more noticeable within these small group teaching sessions. Jacques (2000) and Springer, et al (1999) reiterate these concepts and explain that small group teaching facilitates better interaction between participants and teacher and therefore enhances the learning experience and increases academic success. Griffiths (2006) emulates these findings and stresses that small group teaching leads to deeper and meaningful learning. Whilst the general consensus supported the use of scenarios it was noted that it would be helpful to extend the variety of scenarios to be relevant to all disciplines and reflect all locations within the maternity service to include rural, remote and community as well as hospital environment.

There was a dichotomy in the evaluations as some accepted the role play and some found it inhibited their learning and were nervous and self-conscious in taking part. Nestel and Tierney (2007) reiterate these findings and stress that some students do find role play difficult and feel embarrassed, intimidated and anxious, which ultimately hinders learning. This might be due to group dynamics and the time it takes for groups to form and become cohesive (Tuckman and Jensen, 1977). However, Marquis and Huston (2010) stress that it is not necessarily the time it takes for group cohesion that is an issue as groups can form effectively in one or two days as long as there are clear learning outcomes to the learning experience. Role play can be a part of experiential learning (Kolb, 1984), which is a useful tool for adult learners. It also allows the learner to apply the simulated practice to their own environment within the workplace (Wilford and Doyle, 2006), which is beneficial and a more meaningful learning approach.

On the use of pre-course work / resources it was pertinent to notice that the resources not only served as a useful learning tool for attending the course but they were also used as a future reference tool for both the participants and their colleagues in their practice area creating uniform dissemination of evidence-based resources. Assessment was one component of the courses which was not viewed as favourable and was the least enjoyable part. Although assessment does seem to cause stress and anxiety to some it was overall recognised to be a necessary component to be included in the courses. Willis, et al (2002) stress that ongoing assessment not only helps the group become more cohesive in working together and supporting each other, but it also enhances the learner situation. However, it would be important to inform the participants at the time of their on going progress, in the form of a formative assessment to support the overall final summative assessment. Beaubien and Baker (2004) and Fry, et al (2009, p.132, p.134) also reiterate these finding and explain that feedback is an important tool to improve student learning and identify what should be learnt through the reinforcement of key points. One

finding from the evaluation highlighted that if the candidates were to conduct assessment out with the training days they should be within the participant's area of practice as it makes it more meaningful and relevant. An interesting point which was raised by the managers was the lack of formal feedback on their candidate's performance throughout the course especially if they had not been successful. This is an important point to take cognisance for future consideration.

Locality and frequency of courses due to geographical location was advantageous. Black and Brocklehurst (2003) and Draycott, et al (2006) identify the issue of locality and stress that local courses can be more cost effective and allow greater access and increased attendance from staff. From the findings of the evaluation the availability of courses was increased in the more populated areas with large inner city teaching hospitals. This was highlighted more where there were many courses within these areas compared to remote and rural, where there was still a challenge of the issue of locality, especially if the participants attending the SMMDP training had to travel to attend them. However, participants expressed that they didn't mind travelling to the courses as the courses were well worth it.

The increased improvement of critical thinking, increased knowledge-base, confidence and confidence through role play and clinical simulation was stressed by Schaefer and Zygmont (2003), Wolf (2008) and Kaddoura (2010). This was a major theme consistently running through the evaluation in relation to the increased confidence and competence of the participants who felt more confident and competent to deal with situations they might come across in clinical practice which was also identified by Black and Brocklehurst (2003) from their systematic review. Participants from the evaluation felt more prepared and tended not to fear the situation as much. Another interesting point raised was that staff who worked in remote and rural areas felt they were more confident in dealing with situations until they could transfer their clients to the mainland or tertiary units. This was also evident from the Scottish Ambulance Service perspective, where they identified the relevance of knowing more about how to deal with neonatal resuscitation or an obstetric emergency as there were no flying squads anymore and they were front line management for these clients in the community until they were transferred into the maternity unit. The ambulance participants felt more confident in being able to deal with these situations and were also better prepared in the ambulance environment. Another interesting point about the issue of confidence was that even the Scottish Generic Instructor Training Course and Scottish Generic Instructor Training Bridging Course had encouraged staff to further develop and deliver training in their own practice, thus ensuring continual dissemination of the training received through the SMMDP and is certainly beneficial for the practice areas. However, it might also have an impact on the future uptake of the SMMDP course provisions.

Staff highlighted that they practiced more cohesively with confidence and competence compared to what was previously done in their environments. Staff

were also deemed confident to be able to challenge practices, which were not evidence-based. This was highlighted both by participants and managers / leads. Changes in practice have been clearly identified from all the SMMDP courses. Some participants reported that their practice areas were already practising in this way and it was reassuring and reinforced their practice. However, the main changes in practice have clearly been demonstrated from all courses and were related to updating of protocols, guidelines or development of guidelines from the evidence-based practice on the course. New drugs or new equipment were now being introduced and implemented. Other changes in practice were to stop practices, which had been conducted but were not evidence-based. This demonstrates that safe and effective practice is being implemented, which is in alignment with the Healthcare Quality Strategy for NHSScotland (Scottish Government, 2010) which focuses on safe patient care. Therefore having this national, quality assured training impacts on improved maternity care for woman and their babies across Scotland.

Interestingly this evaluation was not able to assess the level of the reduction in adverse outcomes as a result of the staff attending the SMMDP training. Most practice areas had stringent risk management systems in place but there was not any supporting evidence to suggest that the SMMDP courses had helped to reduce the incidents as there were too many extraneous variables to take into consideration. However, in the future it might be worthy of investigation and assess if staff who are involved with adverse outcomes are cross-referenced to attendance of SMMDP training or other training courses. The evidence on this issue is also sparse, however, one retrospective observational study by Draycott, et al (2006) identified that multidisciplinary training in obstetric emergencies had a significant effect on neonatal Apgar scores. More research is required to discuss this finding.

The cost benefit of the SMMDP training was consistently deemed throughout not only to be viewed in monitory value but also in value to the participants and service. The cost of the programme was felt to be of excellent value and delivered quality relevant education at a much cheaper cost to the service compared to similar courses, which delivered the same content and skills-based training. The cost effectiveness of interprofessional learning for complex care needs was also identified by the Scottish Executive (1999), who endorses this form of training. However, more cost / benefit analysis is required to be conducted to evaluate this outcome.

From a service managers perspective the cost benefit greatly impacted on the increased amount of staff that can be put on the SMMDP training courses as they were held locally. Locally accessed multidisciplinary training is reiterated by Black and Brocklehurst (2003) and Draycott, et al (2006). However, one concept not explored in the literature is the issue of back filling these staff's positions whilst they are out of the clinical areas. This is required to be considered and is a costing factor also to be taken into consideration. After conducting the interviews it was established that none of the organisations had a database or log of training and the cost benefits

of the SMMDP compared to other training courses. This might be worthwhile to consider as it would create a benchmark for ascertaining the number of staff who have attended the course, the cost of the back fill of the post and indicate outgoings for travel and accommodation for training and development.

Participants highlighted this could be an opportunity for SMMDP to review the length of the individual courses and the distribution of these courses as this had an impact on both candidates and instructors released from the work place. In effect courses which comprised half days generally equated to a full day out of the practice environment. A small number of the participants emphasised that remuneration would be beneficial as this would increase the release of candidates and more importantly instructors, who also had to maintain their instructor status. However, they also felt that the organisation benefitted by having these skilled instructors, which could then be utilised to provide local training within their own organisation. In summary it was established that the cost value of the SMMDP was really an important point both in monetary value and value to the participants and service. Interestingly, a lot of the participants were unaware of the actual costing and extent of the different availability and locations of courses. This would be of benefit to review advertising and marketing strategies.

CONCLUSIONS

This evaluation of the SMMDP courses has built on a previous evaluation conducted by Robert Gordon University, Aberdeen (Gibb, Ireland and West, 2007). Gibb, et al (2007) reported that learning together seemed to have a positive impact on team working, sharing and collaboration resulting in improved patient care. Their recommendations for the SMMDP included the need to have clear learning outcomes for the courses, in addition to team working being supported in the work place. They also highlighted that selection and training of facilitators was important. This present project provides a robust evaluation of the impact of the programme to build on this previous evaluation (Gibb, et al, 2007) and in alignment with the Healthcare Quality Strategy for NHSScotland (Scottish Government, 2010). This will inform future programme development so that the SMMDP remains contemporary and continues to provide improved maternity care for woman and their babies across Scotland.

In conclusion the outcome of this project has been a highly positive evaluation of the SMMDP. It has been established that the cost effectiveness of the SMMDP training courses is not only value for money, but also considered to be of value to the participants and service. The courses were deemed to be high quality and evidence-based. The format and structure were also agreed to be appropriate. Participants found the small group teaching and scenarios very beneficial. However, some were apprehensive of the role play.

The format, structure and resources were also considered to be excellent and these resources could be further utilised within the organisations of the participants creating a continual learning resource. Assessment is utilised throughout the SMMDP training and this was an area where the candidates did not particularly enjoy. Another point to consider about the assessment aspect from a service managers perspective is that there is no feedback on the outcome of the assessment to the practice areas. Therefore if a member of staff has performed poorly and not achieved a pass for the assessment this was never fed back to the appropriate manager in the practice areas.

The multidisciplinary faculty was also considered to be a key strength as the staff are deemed credible and knowledgeable to deliver these training sessions. However, there is still an area for future consideration is the amount of days the instructors have to do to keep updated (Appendix 8) and this might impact on the number of instructors able to consider this role due to the feasibility of staff away from the practice areas. The multiprofessional approach highlighted the importance of understanding the different roles the multiprofessional healthcare team have and the benefit of knowing each others remits when it comes to dealing with obstetric and neonatal emergencies. The SMMDP training has also shown to be beneficial for the remote and rural areas in increasing confidence and continual development of staff's skills, which ultimately impacts on the service.

It was reassuring that a key theme throughout the evaluation was the increase in confidence and competence. The majority of participants from the different disciplines felt more confident and competent to carry out their role in dealing with maternity situations following attendance on the SMMDP training.

LIMITATIONS OF THE STUDY

Although the online questionnaire explored how the participants felt before and after they attended the courses, the evaluation was all conducted retrospectively due to the restrictive time frame, which is a limitation to the study. Therefore a stronger evaluation would have been a pre-test / post-test evaluation to address level one and two of the model. Future evaluations of the SMMDP might utilise this methodology if it is feasible to conduct the study over a longer time scale.

The study sample was varied and comprised a large number of participants which were midwives, with smaller sample sizes of medical staff and ambulance personnel, therefore comparisons between the groups was not feasible. In future it might be worthwhile to undertake a comparative study comprising the different groups participating in the SMMDP.

Although the study had been well advertised across the participating regions and the data collection method was a convenient online questionnaire the final sample size was low, which was 27% of the target sample size (n=2,000). However, this was over 500 participants and was a good range of participants from the different courses so it was a representative sample.

Although there was information circulated about the telephone interviews from the start of the study to get volunteers and an email address at the end of the questionnaire the volunteer response for the telephone interview comprised mainly midwifery managers, lead midwives, practice development midwives, and ambulance training managers, with only one medical representative. Therefore this might be a limitation and the view from their perspective might be under represented.

MAIN FINDINGS

- Confirmability of data was through triangulation: research methods, data collection and data source.

- The SMMDP is relevant, up-to-date, evidence-based and a quality assured method of training multiprofessionals within the maternity services.

- The multiprofessional aspect to the programme was positively evaluated and endorsed the partnership approach to the work of the SMMDP.

- Participants reported that the SMMDP was an enjoyable, beneficial and effective mode of training, which increased their knowledge, confidence and competence and prepared them to carry out their role and advanced roles e.g. examination of the newborn.

- Participants reported numerous examples of evidence-based changes which have been implemented into their practice areas following SMMDP training.

- The current internal evaluation from the SMMDP has been an appropriate tool to evaluate the effectiveness of the model of SMMDP courses. However, some sections need to have an identical stem question to be able to readily conduct more rigorous comparative data analysis.

- The Scottish Emergency Maternity Care Course (for Non-Maternity Professionals) and the new Scottish Maternity REACTS (Recognition, Evaluation, Assessment, Critical Treatment and Stabilisation) Course were both positively evaluated by the small number of participants who have attended to-date.

- The SMMDP was perceived to be cost effective, value for money and an efficient use of time. However, there was no evidence provided by the practice areas to allow the researchers to quantify these findings.

- The participants acknowledged that the SMMDP should remain a national evidence-based training programme, which is utilised by all professionals and non-professionals involved in providing maternity care across Scotland. Whilst sustainability of the SMMDP was important at this time a challenge identified from some respondents was financial constraints within NHS Boards and attending local in-house training maybe an option.

- Managers stated that if staff were underperforming in practice then the SMMDP was deemed to be an appropriate training programme to re-skill and update these practitioners even when in-house training was available.

- The continuing positive evaluations across all the courses emphasises the consistency of the instructors within the SMMDP who come from a variety of professional backgrounds and regions. This finding confirms a rigorous and robust quality assurance mechanism within the SMMDP.

RECOMMENDATIONS

Based on the findings the following recommendations have been made for NHS Education Scotland and / or employers of professionals and non-professionals delivering different levels of maternity care in Scotland.

NHS Education for Scotland

- Continue to provide the SMMDP as a national evidence-based programme for all professionals and non-professionals providing maternity care in Scotland as the recognised standard for obstetrics and neonatal training.

- Continue to promote the multiprofessional and partnership approach by incorporating staff from other NHS Boards to enhance the shared learning across disciplines and NHS Boards in Scotland.

- Continue to maintain this high standard of national, quality assured, cost effective training, which remains aligned to the Healthcare Quality Strategy for NHSScotland and focuses on safe patient care.

- Continue the present format of core lectures and small group teaching. Continue to keep the focus of scenarios used in courses to accommodate the variety of healthcare provisions from remote, rural and community areas as well as hospital environments.

- Continue the present format and administration of internal course evaluations but include identical stem questions for each heading to enable more rigorous comparative data analysis.

- Review the format for assessments and the appropriate method of feedback to both the candidates and their line managers.

- Review policy on travel expenses for courses.

- Review current advertising and marketing strategy.

NHS Education for Scotland and / or employers of professionals and non-professionals delivering different levels of maternity care in Scotland.

- Continue to encourage all staff providing care within the maternity services to attend for continual professional development as the SMMDP enhances their knowledge, confidence and competence and prepares them for their roles and advanced roles.

- Explore options for resources to support healthcare staff to be released from the areas when they are away as candidates, instructors / instructor candidates.

Employers of professionals and non-professionals delivering different levels of maternity care in Scotland.

- Current employers should link the effectiveness of staff training to risk management outcomes through a mapping exercise or further audit or research project.

- Current employers should develop a database or log of training to identify the cost benefits of the SMMDP compared to other training courses and create a benchmark for continuous professional development.

- Current employers should take cognisance of the benefits and outcomes for the maternity services from the national approach of SMMDP training in supporting the uptake of staff attendance. This will enhance safe and effective practice and promote up-to-date evidence-based obstetrics and neonatal care in Scotland.

Points to Consider for Future Research Studies

- Pre-test / post-test design over a greater timeframe would be advantageous to illicit the exact impact of the training programmes to the individual.

- A comparative study would be beneficial to acquire in-depth information from the different groups' perspectives.

DISSEMINATION

The project team are keen to widely disseminate the findings from the study to relevant NHS Board regions across Scotland and the south of England. Findings will be submitted for presentation at regional, national and international conferences and for publications in relevant peer reviewed journals in collaboration with NES.

REFERENCES

Alliger, G.M. and Janak, E.A. (1989) Kirkpatrick's levels of training criteria: Thirty years later. Personnel Psychology. Vol.42, pp.331-342.

Azer, S.A. (2005) The qualities of a good teacher: How can they be acquired and sustained. Journal of the Royal Society of Medicine. Vol.98, pp.67-69.

Bates, R. (2004) A critical analysis of evaluation practice: The Kirkpatrick model and the principle of beneficence. Evaluation and Program Planning. Vol.27, pp.341-347.

Beaubien, J.M. and Baker, D.P. (2004) The use of simulation for training teamwork skills in healthcare: how low can you go? Quality and Safety in Health Care. Vol.13(Suppl 1), pp.i51-i54.

Black, R.S. and Brocklehurst, P.A. (2003) A systematic review of training in acute obstetric emergencies. BJOG. Vol.110, pp.837-841.

Comer, S. (2005) Patient care simulations: Role playing to enhance clinical understanding. Nursing Education Perspectives. Vol.26(6), pp.357-361.

Cormack, D. (2000) The Research Process in Nursing. Oxford: Blackwell Science.

Cross, V., Moore, A., Morris, J., Caladine, L., Hilton, R., Bristow, H. (2006) The Practice-based Educator – A Reflective Tool for CPD and Accreditation. Chichester: John Wiley & Sons.

Draycott, T., Sibanda, T., Owen, L., Akande, V., Winter, C., Reading, S., Whitelaw, A., (2006) Does training in obstetric emergencies improve neonatal outcome? BJOG. Vol.113, pp.177-182.

Draycott, T., Lewis, G. and Stephens, I. (2011) Executive Summary. Centre for Maternal and Child Enquiries. BJOG. Vol.118 (Suppl.1), pp.12-21.

Eseryel, D. (2002) Approaches to Evaluation of Training: Theory & Practice. Educational Technology & Society. Vol.5(2), [Online]. Available: http://www.ifets.info/journals/5_2/eseryel.html [Accessed 1/3/2011].

Fisher, N., Bernstein, P.S., Satin, A., Pardanani, S., Heo, H., Merkatz, I.R., Goffman, D. (2010) Resident training for eclampsia and magnesium toxicity management: Simulation of traditional lecture. American Journal of Obstetrics and Gynecology. Vol.203(4), p.379-384.

Freeman, M., Miller, C., Ross, N. (2000) The impact of individual philosophies of teamwork on multi-professional practice and the implications for education Journal of Interprofessional Care. Vol.14(3), p.2.

Fry, H., Ketteridge, S., Marshall, S. (2009) A Handbook for Teaching and Learning in Higher Education: Enhancing Academic Practice. (3rd ed). Oxon: Routledge.

Gaberson, K.B. and Oermann, M.H. (1999) Clinical Teaching Strategies in Nursing. New York: Springer Publishing.

Gibb, S., Ireland, J., West, B.J.M. (2007) An Evaluation of the Scottish Multiprofessional Maternity Development Programme (SMMDP): Full Report. Aberdeen: The Robert Gordon University.

Goble, P. (2004) Position Paper on Multiprofessional Education. Education for Health. Vol.17(3), pp.403-407.

Goodman, C. and Evans, C. (2006) Using focus Groups. In: Gerrish, K. and Lacey, A. (eds.) (2006) The Research Process in Nursing. (5th ed.) Oxford: Blackwell Publishing Ltd.

Grbich, C. (1999) Qualitative Research in Health; An Introduction. London: Sage.

Griffiths, S. (2006) in Fry, H., Ketteridge, S., Marshall, S. (2006) A Handbook for Teaching and Learning in Higher Education. (2nd ed). London: Routledge.

Harden, R.M. (1998) Multiprofessional Education: Part 1 – Effective multiprofessional education: A three dimensional perspective. Medical Teacher. Vol.20(5), pp.402-409.

Harden, R.M. and Crosby, J. (2000) The Good Teacher is More than a Lecturer–The Twelve Roles of the Teacher. [Online]. Available: http://med-fac.tbzmed.ac.ir/edo/resources/teaching%20and%20learning/AMEE20.pdf [Accessed 10/5/11].

Jacques, R. (2000) Learning in Groups: A Handbook for Improving Group Work. (3rd ed). London: Cogan Page.

Kaddoura, M.A. (2010) New graduate nurses perceptions of the effects of clinical simulation on their critical thinking, learning, and confidence. The Journal of Continuing Education in Nursing. Vol.41(110), pp.506-516.

Ker, J., Mole, L., Bradley, P. (2003) Early introduction to interprofessional learning: A simulated ward environment. Medical Education. Vol.37, pp.248-255.

Keyser, M.W. (2000) Active learning and cooperative learning: Understanding the difference and using both styles effectively. Research Strategies. Vol.17, pp.35-44.

Kirkpatrick, D. (1996) Great ideas revisited. Training and Development. January. pp.54-59.

Kolb, D.A. (1984) Experiential Learning. New Jersey: Prentice-Hall.

Marcy, V. (2001) Adult learning styles: How does the VARK learning styles inventory can be used to improve student learning. Perceptives on Physician Assistant Education. Vol.12(2), pp.117-120.

Marquis, B.L. and Huston, C.J. (2010) Leadership Roles and Management Function in Nursing Theory and Application. (5th ed). Philadelphia: Lippincott Williams & Wilkins.

Midmer, D. (2003) Role Playing. BMJ. Vol.326, p.28.

Murphy-Black, T. (2000) Questionnaire. In: Cormack, D. The Research Process in Nursing. Oxford: Blackwell Science.

Nehring, W.H., Ellis, W.E., Lashley, F.R. (2001) Human patient simulators in nursing education: An overview. Simulation and Gaming. Vol.32(20), pp.194-204.

Nestel, D. and Tierney, T. (2007) Role-play for medical students learning about communication: Guidelines for maximising benefits. BMC Medical Education. Vol.7(3), pp.1-9.

Newell, R. and Burnard, P. (2006) Research for Evidence-Based Practice. Oxford: Blackwell Publishing.

Parahoo, K. (2006) Nursing Research: Principles, Process and Issues. (2nd ed). London: Palgrave MacMillan.

Pirrie, A., Wilson, V., Elsegood, J., Hall, J., Hamilton, S. Harden, R., Lee, D., Staed, J. (1998) Evaluating Multidisciplinary Education in Health Care. (SCRE Research Report). Edinburgh: SCRE.

Polit, D.F. and Beck, C.T. (2006) Essentials of Nursing Research: Methods, Appraisal and utilization. (6th ed). Philadelphia: Lippincott Williams and Wilkins.

Quinn, F.M. (2007) Principles and Practice of Nurse Education. (5th ed). Cheltenham: Nelson Thornes Ltd.

Reeves, S. (2000) Community based interprofessional education for medical, nursing and dental students health and social care in the community. Vol.8, pp.269-276.

Reeves, S. and Freeth, D. (2002) The London training ward: An innovative interprofessional learning initiative. Journal of Interprofessional Care. Vol.16(10), pp.41-51.

Robson, C. (2006) Evaluation Research. In: Gerrish, K. and Lacey, A. (eds.) (2006) The Research Process in Nursing. (5th ed) Oxford: Blackwell Publishing Ltd.

Schaefer, K.M. and Zygmont, D. (2003) Analysing the teaching style of nursing faculty: Does it promote a student–centred or teacher-centred learning environment? Nursing Education Perspectives. Vol.24(5), pp.238-245.

Scottish Executive. (2001) A Framework for Maternity Services in Scotland. Edinburgh: The Stationary Office.

Scottish Executive. (1999) Learning Together - A Strategy for Education Training and Lifelong Learning for all Staff in the National Health Service in Scotland. Edinburgh: Scottish Executive.

Scottish Executive. (2002) The Expert Group on Acute Maternity Services Report. Edinburgh: Scottish Executive Stationary Office.

Scottish Government. (2011) A Refreshed Framework for Maternity Care in Scotland. Edinburgh: The Scottish Government.

Scottish Government. (2010) The Healthcare Quality Strategy for NHSScotland. Edinburgh: The Scottish Government.

Springer, L., Stane, M.E., Donovan, S.S. (1999) Effects of small–group learning on undergraduates: A meta-analysis. Review of Educational Research. Vol.69(1), pp.21-51.

The Data Protection Act. (2003). London: Her Majesty's Stationary Office (HMSO).

Tod, A. (2006) Interviewing. In: Gerrish, K. and Lacey, A. (eds.) (2006) The Research Process in Nursing. (5th ed) Oxford: Blackwell Publishing Ltd.

Tuckman, B.W. and Jensen, M. (1977) Stages of group development revisited. Group and Organizational Studies. Vol.2(4), p.419.

Wilford, A. and Doyle, T.J. (2006) The role of simulation. British Journal of Nursing. Vol.15(17), pp.926-930.

Willis, S.C., Jones, A., Bundy, C., Burdett, K., Whitehouse, C.R., O'Neill, P.A. (2002) Small group work and assessment in a PBL curriculum: A qualitative and quantitative evaluation of student perceptions of the process of working in small groups and its assessment. Medical Teacher. Vol.24(5), pp.495-501.

Wolf, L. (2008) The use of human patient simulation in ED triage training can improve nursing confidence and patient outcomes. Journal of Emergency Nursing. Vol.34(2), pp.169-171.

APPENDICES

APPENDIX 1

Dear Colleagues

Re: An Evaluation of the Scottish Multiprofessional Maternity Development Programme (SMMDP).

The SMMDP has been providing multidisciplinary training across Scotland since 2005 and has recently been extended to the South of England. Researchers from the University of the West of Scotland have been awarded funding by NHS Education Scotland to independently conduct 'An Evaluation of the Scottish Multiprofessional Maternity Development Programme'. This evaluation will take place from December 2010 to February 2011.

All staff who have attended, or are instructors on the SMMDP will be invited to take part in a short online Survey Monkey Questionnaire.

Further to this questionnaire, staff with the following titles will also be invited to participate in a short telephone interview to further explore the issues raised from the questionnaire and examine the cost benefits of the SMMDP:

- Consultant Midwives / Practice Development Midwives
- Heads of Midwifery / Lead Midwives / Directors of Nursing
- Medical Directors
- Scottish Ambulance Training Officers
- General Practitioner Managers

I have attached an advertisement flyer and would be very grateful if you could circulate this within your organisation.

An information leaflet has also been attached. If you would like more information about this evaluation study please contact:

- Lyz Howie (Lead investigator): lyz.howie@uws.ac.uk or 07767807768
- Jean Rankin (Co-investigator): jean.rankin@uws.ac.uk or 07857690625
- Jean Watson (Co-investigator): jean.watson@uws.ac.uk or 07794198024

We look forward to working with you on this evaluation and your support is greatly appreciated.

Kind regards

Lyz Howie
(Lead Investigator / Midwife Lecturer, University of the West of Scotland

Participants Wanted for An Evaluation of the Scottish Multiprofessional Maternity Development Programme (SMMDP)

If you are an SMMDP instructor/instructor candidate, or SMMDP participant and are a healthcare professional working within the maternity care setting you will be invited to complete an online questionnaire via Survey Monkey between December 2010 and February 2011.

Your contribution to this evaluation is greatly appreciated as this will lead to further development in this multiprofessional training programme.

For further information about this evaluation please contact:

Lyz Howie (Lead investigator): lyz.howie@uws.ac.uk **or 07767807768**

Jean Rankin (Co-investigator): jean.rankin@uws.ac.uk **or 07857690625**

Jean Watson (Co-investigator): jean.watson@uws.ac.uk **or 07794198024**

APPENDIX 2

Dear Colleagues

THE EVALUATION OF THE SCOTTISH MULTIPROFESSIONAL MATERNITY DEVELOPMENT PROGRAMME (SMMDP) IS NOW STARTING!

Please find attached an information sheet for you to read, which will inform you about the background to the evaluation.

If you are then happy to take part with the evaluation, click on the hyperlink below in this email. This will take you directly to the online SMMDP Evaluation Questionnaire. The time taken to complete this questionnaire will depend on the number of courses you have attended or taken part in. Completion time will take up to 20-30 minutes.

All staff who have attended, or are instructors on the SMMDP are invited to take part in this short online questionnaire.

Further to this questionnaire, staff with the following titles will also be invited to participate in a short telephone interview to further explore the issues raised from the questionnaire and examine the cost benefits of the SMMDP:

- Consultant Midwives / Practice Development Midwives
- Heads of Midwifery / Lead Midwives / Directors of Nursing
- Medical Directors
- Scottish Ambulance Training Officers
- General Practitioner Managers

If you would like more information about this evaluation study please contact:

- Lyz Howie (Lead investigator): lyz.howie@uws.ac.uk or 07767807768
- Jean Rankin (Co-investigator): jean.rankin@uws.ac.uk or 07857690625
- Jean Watson (Co-investigator): jean.watson@uws.ac.uk or 07794198024

We look forward to working with you on this evaluation and your support is greatly appreciated.

Kind regards

Lyz Howie

(Lead Investigator / Midwife Lecturer, University of the West of Scotland)
Please click on the hyperlink below to take you to the online questionnaire
http://www.surveymonkey.com/s/ZTMN8ZP

PARTICIPANT INFORMATION SHEET
(Study funded by NHS Education Scotland)

An Evaluation of the Scottish Multiprofessional Maternity Development Programme (SMMDP)

Since 2005, the SMMDP has provided a range of courses to address the recommendations in the report of the Expert Group on Acute Maternity Services (EGAMS) (Scottish Executive, 2002). This multiprofessional training is provided throughout Scotland and latterly in the south of England. To date over 3,000 staff have attended at least one SMMDP course.

The University of the West of Scotland (UWS) is delighted to undertake an evaluation of the SMMDP, which is required to inform future programme development so that the SMMDP remains contemporary and continues to provide improved maternity care for woman and their babies across Scotland and the South of England. This evaluation will need to engage with past participants and clinical managers to determine the holistic impact of the efficacy of the SMMDP. Issues that require investigation include the impact the programme has had on maternity services in terms of staff competence and confidence, changes to practice and also a cost / benefits analysis.

As part of the Maternity Services Team you are invited to take part in an evaluation of the SMMDP. Before you agree to take part it is important that you know why the evaluation is being done and what this will involve.

What is the purpose of the evaluation study?
The Research team within UWS are interested in evaluating the SMMDP and how this has impacted on practice within your area. The SMMDP has been involved with facilitating multiprofessional maternity training across Scotland since 2005 and latterly in the South of England since 2010.

The main objectives of the evaluation are:

1. To measure the impact on maternity services following the introduction of the SMMDP e.g. Does it provide staff with increased knowledge, preparedness, confidence and competences to carry out their role?
2. To provide examples of any changes in practice (effectiveness of training).
3. To explore the staff experience, perceived knowledge base following attendance at clinical skills training.

4. To identify a method to evaluate the effectiveness of the SMMDP model of course development.
5. To provide an analysis of the benefits both in quality, output, cost savings, time savings of the SMMDP.
6. To evaluate the partnership approach to the work of the SMMDP.
7. To evaluate the following courses, The Scottish Emergency Maternity Care (for Non-Maternity Professionals) Course and the new Scottish Maternity REACTS (Recognition, Evaluation, Assessment, Critical Treatment and Stabilisation) Course.

Why have I been chosen?

You have been chosen to take part in the study because you are either an instructor/instructor candidate on the SMMDP or have attended one or more of the SMMDP training courses. We are planning to conduct a short online self-completion questionnaire for all of these staff who are willing to participate.

In addition to this questionnaire, staff with the following titles will also be invited to participate in a short follow-up telephone interview to further explore the issues raised from the questionnaire and examine the cost benefits of the SMMDP:

- Consultant Midwives / Practice Development Midwives
- Heads of Midwifery / Lead Midwives / Directors of Nursing
- Medical Directors
- Scottish Ambulance Training Officers
- General Practitioner Managers

Do I have to take part?

It is up to you to decide whether you wish to take part in this evaluation. If you do take part you will be contacted by email, in December, to invite you to access the online Survey Monkey questionnaire. All the response are anonymous and are not linked to any individual.

What do I have to do?

If you are either an instructor/instructor candidate on the SMMDP or have attended one or more of the SMMDP training you require to respond to the email by accessing the http: survey monkey address supplied in the email and complete the online questionnaire.

If you are also one of the following practitioners: Consultant Midwives / Practice Development Midwives / Heads of Midwifery / Lead Midwives / Directors of Nursing / Medical Directors / Scottish Ambulance Training Officers / General Practitioner Managers and are willing to take part in the follow-up telephone interview then you require to click on the email address link at the end of the Survey Monkey questionnaire. Once the email screen has appeared you then enter your contact details so a member of the research team can contact you at a later date regarding the telephone interview. The researcher would phone you at a convenient time. The telephone interview would last for approximately 30 minutes. The conversation would be tape recorded so that the researcher can refer back to all the information

you have given. Once you have taken part in the online telephone interview the research will email you the responses so that you can review them and confirm that you are happy for them to be included in the study.

What are the possible disadvantages and risks of taking part?
There are very few disadvantages in taking part. The online survey monkey is anonymous and the telephone interviews will be tape recorded and transcribed for analysis. If you are unhappy with any of this then you should not participate in the survey nor volunteer for a follow-up telephone interview. If you are unhappy about your comments made during the telephone interview then you can inform the researcher and your comments can be withdrawn from the study.

What are the possible benefits of taking part?
The information from this study will inform future actions for the SMMDP to consider in relation to best practice ideas and used to enhance the quality of maternity care throughout Scotland and the South of England.

What happens when the evaluation study stops?
The study will finish in approximately 4 months time (March 2011). A report will be available detailing the findings and recommendations to inform future practice of the SMMDP.

What if something goes wrong?
Since this study does not involve any treatment or intervention then the risk of anything happening to you is minimal. However, if you have any concerns about the way you have been approached or treated you may contact Professor John Atkinson, University of the West of Scotland, 0141 849 4279.

Will my taking part in this study be confidential?
All the information gathered from this study will be kept strictly confidential. The questionnaire is totally anonymous and cannot be traced back to you or the computer you used. For the telephone interview all participants will have a study number for the researchers to create links and write notes. The numbers will be destroyed once the information has been collated and analysed. All quotes used within the final report will be coded to ensure anonymity. All information will be handled, stored and destroyed under the terms of the Data Protection Act (1998).

What will happen to the results of the research study?
The results of the study will be written in a report for NHS Education Scotland, prepared for publication in healthcare journals and presented at conferences by the Research team at the University of the West of Scotland, who undertook the evaluation.

Who is organising and funding the research?
The study has been developed and organised by the Research Team at UWS. The research study has been funded by NHS Education Scotland.

Who has reviewed the study?
The project team have procedures in place to assure confidentiality, anonymity and data protection are adhered to. Assumed consent will be acceptable for the online questionnaires and the participants will be asked to email the researchers if they wish to take part in a telephone interview. However, the researchers would still adhere to the main ethical principles and assure all participating staff of the confidentiality of data collected, anonymity of all participants' quotes and right to withdraw from the evaluation study at any time without reprisal. The questionnaire and the questions for the telephone interviews has been peer reviewed by Sheona Brown (Consultant Midwife, NHS Greater Glasgow and Clyde), Helen Kane (Researcher and postgraduate research student, UWS) and Professor Pauline Banks (Researcher, UWS).

Contact for further information.

- Ms Lyz Howie, Midwife Lecturer, University of the West of Scotland (Lead investigator): lyz.howie@uws.ac.uk or 07767807768
- Dr Jean Rankin, Senior Midwife Lecturer and Lead Midwife for Education, University of the West of Scotland (Co-investigator & grant holder): jean.rankin@uws.ac.uk or 07857690625
- Mrs Jean Watson, Midwife Lecturer, University of the West of Scotland (Co-investigator): jean.watson@uws.ac.uk or 07794198024

APPENDIX 3

Participants Needed for An Evaluation of the Scottish Multiprofessional Maternity Development Programme (SMMDP)

If you have been a participant or instructor / instructor candidate on the SMMDP please complete the online Survey Monkey questionnaire.

Please access the online Survey Monkey questionnaire through the distributed email http address.

Your contribution is essential to this national evaluation.

For further information about this evaluation please contact:

Lyz Howie (Lead investigator): lyz.howie@uws.ac.uk **or 07767807768**

Jean Rankin (Co-investigator): jean.rankin@uws.ac.uk **or 07857690625**

Jean Watson (Co-investigator): jean.watson@uws.ac.uk **or 07794198024**

This is a follow-up reminder to invite you to participate in this short online questionnaire.

Thank you to those who have already completed the questionnaire. However, the present response rate has been disappointing. It is really important that we increase the number of people who respond to ensure a meaningful evaluation for this very important national multiprofessional programme.

Please, click on the hyperlink below in this email. This will take you directly to the online SMMDP Evaluation Questionnaire.
http://www.surveymonkey.com/s/ZTMN8ZP

If you would like more information about this evaluation study please contact:

- Lyz Howie (Lead investigator): lyz.howie@uws.ac.uk or 07767807768
- Jean Rankin (Co-investigator): jean.rankin@uws.ac.uk or 07857690625
- Jean Watson (Co-investigator): jean.watson@uws.ac.uk or 07794198024

Your support is greatly appreciated.

Lyz Howie

(Lead Investigator / Midwife Lecturer, University of the West of Scotland)

APPENDIX 4

Dear Colleagues

R.E. An Evaluation of the Scottish Multiprofessional Maternity Development Programme (SMMDP).

The first phase of the Scottish Multiprofessional Maternity Development Programme evaluation is well under way as an online questionnaire. It is now time to conduct the second phase of the evaluation, to further explore the issues raised from the questionnaire and examine the cost benefits of the SMMDP. This part of the evaluation will be undertaken using a telephone interview.

If you are one of the following:

- Consultant Midwife
- Head of Midwifery / Lead Midwife
- Practice Development Midwife
- Medical Director
- Scottish Ambulance Training Officer

Your help is required to participate in a telephone interview to explore the issues raised from the online questionnaire and examine the cost benefits of the SMMDP

If you would like to take part please contact:

- Lyz Howie (Lead investigator): lyz.howie@uws.ac.uk or 07767807768

We look forward to working with you on this evaluation and your support is greatly appreciated.

Kind regards

Lyz Howie
(Lead Investigator / Midwife Lecturer, University of the West of Scotland)

Telephone Interview Participants Wanted for An Evaluation of the Scottish Multiprofessional Maternity Development Programme

If you are one of the following:

- Consultant Midwife
- Head of Midwifery / Lead Midwife
- Practice Development Midwife
- Medical Director
- Scottish Ambulance Training Officer

Your help is required to participate in a telephone interview to explore the issues raised from the online questionnaire and examine the cost benefits of the SMMDP

If you wish to take part please contact:

Lyz Howie: lyz.howie@uws.ac.uk **or 07767807768**

APPENDIX 5

Settings Participants Primarily Worked In

Settings the participants specified within the 'other' category are detailed below (n=107):

- Neonatal unit (24)
- Education / training / practice development (11)
- Pre hospital care (10)
- Neonatal transport (8)
- Accident and emergency (7)
- Ambulance service (4)
- Pre-hospital A&E (3)
- Community Midwifery Unit (3)
- Integrated team (3)
- Emergency pre hospital care (2)
- Acute general adult (2)
- Cottage hospital (2)
- GP Community hospital (2)
- Resuscitation services (2)
- Community midwifery (1)
- Homebirth team (1)
- Primary care (out of hours and A&E) (1)
- Rural General hospital (1)
- Emergency service (1)
- Acute care (1)
- Acute (1)
- Hospital based, but coordinate community service (1)
- Frontline emergency services (1)
- General practice and community hospital (1)
- Retired (1)
- Theatre and anaesthetics (1)
- Hospital and community based (1)
- Inpatient (1)
- Not working (1)
- Six moths acute hospital 6 months GP trainee (1)
- FY2 (1), Department of elderly medicine (1)
- Hosp (1)
- Ambulance duties (1)
- Maternity unit (1)
- Public health nurse (1)
- Not working (1)
- Remote rural and offshore (1)

APPENDIX 6

QUANTITATIVE DATA ANALYSIS TABLES

SECTION 1

Question 1

Profession: What was your main professional role when you attended the SMMDP course(s)? (Please tick one)		
Answer Options	**Response Percent**	**Response Count**
Midwifery	55.7%	290
Nursing (adult)	4.0%	21
Nursing (paediatric)	0.4%	2
Nursing (neonatal)	6.1%	32
Medical (obstetrician)	3.6%	19
Medical (paediatrician)	5.0%	26
Medical (anaesthetist)	3.5%	18
Medical Trainee	1.2%	6
General Practitioner	2.9%	15
General Practitioner trainee	0.4%	2
Ambulance service	2.3%	12
Paramedic	10.0%	52
Other (please specify)	5.0%	26
Answered question		**521**
Missing data		**6**

Question 3

How long have you been in post within that NHS Health Board / Primary Care?		
Answer Options	**Response Percent**	**Response Count**
Less than a year	3.9%	20
1 to 5 years	19.1%	99
6 to 10 years	16.6%	86
11 to 20 years	26.9%	139
Over 20 years	33.5%	173
Answered question		**517**
Missing data		**10**

Question 4

We are interested in the type of contract you have. Please indicate the nature of your current contract:		
Answer Options	**Response Percent**	**Response Count**
Full time	69.4%	361
Part time	24.6%	128
Agency	0.4%	2
Bank	2.1%	11
Other (please specify)	3.5%	18
Answered question		**520**
Missing data		**7**

Question 5

What setting do you primarily work in?		
Answer Options	**Response Percent**	**Response Count**
Community	18.1%	94
Consultant Led Unit / Community Midwifery Unit	45.8%	238
Community Midwife / General Practice Unit	4.8%	25
Midwifery Led Unit (stand alone)	8.1%	42
General Practitioner Practice	2.7%	14
Other (please specify)	20.6%	107
Answered question		**520**
Missing data		**7**

Question 6

How soon after being employed did you undertake your first SMMDP training course:		
Answer Options	**Response Percent**	**Response Count**
Less than a year	9.1%	46
1 to 5 years	28.0%	142
6 to 10 years	21.9%	111
11 to 20 years	24.1%	122
Over 20 years	17.0%	86
Answered question		**507**
Missing data		**20**

Question 7

At this present time which best describes your role in the SMMDP training courses? (Please tick one)		
Answer Options	**Response Percent**	**Response Count**
Candidate (attended a course)	69.5%	357
Instructor (facilitates learning on the course)	26.1%	134
Instructor Candidate (In the process of being assessed as an instructor on a course)	2.5%	13
Other (please specify)	1.9%	10
Answered question		**514**
Missing data		**13**

Question 8

Which SMMDP course(s) have you attended? (Please tick all which apply)		
Answer Options	**Response Percent**	**Response Count**
Scottish Generic Instructor Training	18.5%	95
Scottish Generic Instructor Training Bridging	10.9%	56
Scottish Neonatal Resuscitation	59.5%	305
Scottish Neonatal Pre-Transport Care	15.0%	77
Scottish Routine Examination of the Newborn	26.5%	136
Scottish Normal Labour and Birth	7.6%	39
Scottish Emergency Maternity Care Course (for Non-Maternity Professionals)	9.2%	47
Scottish Core Obstetrics Teaching and Training in Emergencies	45.0%	231
Scottish Maternity REACTS	4.1%	21
Answered question		**513**
Missing data		**14**

Question 9

Please tick the most appropriate response to the following statements.							
Answer Options	**Strongly Agree**	**Agree**	**Neutral**	**Disagree**	**Strongly disagree**	**Don't know / Not applicable**	**Response Count**
The SMMDP training is affordable.	247	149	26	0	0	88	510
The SMMDP training gives value for money.	275	147	20	1	0	66	509
The SMMDP training should be held locally.	319	160	24	2	1	6	512
Attending the SMMDP was more convenient for me rather than attending a conference off site.	249	138	58	13	9	36	503
Comments							85
Answered question							**516**
Missing data							**11**

SECTION TWO

Question 55

Read the statements below and pick the most appropriate response for each statement about how you felt before attending the Scottish Emergency Maternity Care Course (for Non-Maternity Professionals): (Please tick one for each row)							
Answer Options	**Strongly agree**	**Agree**	**Neutral**	**Disagree**	**Strongly disagree**	**Not applicable**	**Response Count**
I wanted to attend the Scottish Emergency Maternity Care Course (for Non-Maternity Professionals) (SEMCC):	21	13	1	0	0	12	47
I did not need to attend the SEMCC:	1	5	3	13	12	12	46
I was less confident to conduct my job role prior to attending the SEMCC:	5	13	9	6	1	11	45
The SEMCC would better prepare me for my job role:	8	21	5	0	0	11	45
Prior to attending the SEMCC I had a good knowledge base in this area:	6	11	13	3	1	10	44
Prior to attending the SEMCC I had a good confidence level in these skills:	5	5	10	13	2	10	45
Prior to attending the SEMCC I was prepared for carrying out my job role:	6	13	11	4	1	10	45
Prior to attending the SEMCC I had a good level of clinical competence in this area:	6	6	12	8	3	10	45
						Answered question	**48**
						Missing data	**479**

Question 56

Read the statements below and pick the most appropriate response for each statement about how you felt after attending the Scottish Emergency Maternity Care Course (for Non-Maternity Professionals): (Please tick one for each row)							
Answer Options	**Strongly agree**	**Agree**	**Neutral**	**Disagree**	**Strongly disagree**	**Not applicable**	**Response Count**
I was more confident to conduct my job role following attendance of the Scottish Emergency Maternity Care Course (for Non-Maternity Professionals) (SEMCC):	16	16	1	1	0	10	44
Attending the SEMCC has allowed me to put into practice the skills I learnt on the course:	10	17	4	0	0	12	43
Attending the SEMCC has increased my knowledge base in this area:	16	17	0	0	0	10	43
Attending the SEMCC has increased my confidence level in these skills:	17	16	0	0	0	11	44
Attending the SEMCC has increased my preparedness for carrying out my job role:	12	19	2	1	0	10	44
Attending the SEMCC has increased my level of clinical competence in this area:	13	18	1	2	0	10	44
Following attendance of the SEMCC I have changed the way I practice:	9	8	9	5	0	12	43
						Answered question	**44**
						Missing data	**483**

Question 59

I felt that the assessment for the Scottish Emergency Maternity Care Course (for Non-Maternity Professionals): (Please tick all which apply)		
Answer Options	**Response Percent**	**Response Count**
Increased my confidence level	61.9%	26
Increased my preparedness for carrying out my job role	45.2%	19
Increased my knowledge base	59.5%	25
Increased my level of clinical competence	54.8%	23
Not applicable (No assessment)	26.2%	11
Answered question		**42**
Missing data		**485**

Question 64

Read the statements below and pick the most appropriate response for each statement about how you felt before attending the Scottish Maternity REACTS Course: (Please tick one for each row)							
Answer Options	**Strongly agree**	**Agree**	**Neutral**	**Disagree**	**Strongly disagree**	**Not applicable**	**Response Count**
I wanted to attend the Scottish Maternity REACTS:	11	3	0	0	0	11	25
I did not need to attend the Scottish Maternity REACTS:	0	2	1	3	5	13	24
I was less confident to conduct my job role prior to attending the Scottish Maternity REACTS:	3	4	2	4	0	11	24
The Scottie Maternity REACTS would better prepare me for my job role:	6	8	0	0	0	10	24
Prior to attending the Scottish Maternity REACTS I had a good knowledge base in this area:	2	8	2	1	1	10	24
Prior to attending the Scottish Maternity REACTS I had a good confidence level in these skills:	2	8	1	2	1	10	24
Prior to attending the Scottish Maternity REACTS I was prepared for carrying out my job role:	3	9	0	2	0	10	24
Prior to attending the Scottish Maternity REACTS I had a good level of clinical competence in this area:	3	7	2	2	0	10	24
						Answered question	**26**
						Missing data	**501**

Question 65

Read the statements below and pick the most appropriate response for each statement about how you felt after attending the Scottish Maternity REACTS Course: (Please tick one for each row)							
Answer Options	**Strongly agree**	**Agree**	**Neutral**	**Disagree**	**Strongly disagree**	**Not applicable**	**Response Count**
I was more confident to conduct my job role following attendance of the Scottish Maternity REACTS:	6	6	1	0	0	9	22
Attending the Scottish Maternity REACTS has allowed me to put into practice the skills I learnt on the course:	7	5	1	0	0	9	22
Attending the Scottish Maternity REACTS has increased my knowledge base in this area:	9	4	0	0	0	9	22
Attending the Scottish Maternity REACTS has increased my confidence level in these skills:	8	3	1	0	0	9	21
Attending the Scottish Maternity REACTS has increased my preparedness for carrying out my job role:	8	4	1	0	0	8	21
Attending the Scottish Maternity REACTS has increased my level of clinical competence in this area:	8	4	1	0	0	8	21
Following attendance of the Scottish Maternity REACTS I have changed the way I practice:	5	4	4	0	0	8	21
						Answered question	**22**
						Missing data	**505**

Question 66

The assessment for the Scottish Maternity REACTS Course was appropriate: (Please tick one)		
Answer Options	**Response Percent**	**Response Count**
Strongly agree	35.0%	7
Agree	30.0%	6
Neutral	5.0%	1
Disagree	0.0%	0
Strongly disagree	0.0%	0
Not applicable	30.0%	6
Answered question		**20**
Missing data		**507**

Question 68

I felt that the assessment for the Scottish Maternity REACTS Course: (Please tick all which apply)		
Answer Options	**Response Percent**	**Response Count**
Increased my confidence level	50.0%	10
Increased my preparedness for carrying out my job role	50.0%	10
Increased my knowledge base	45.0%	9
Increased my level of clinical competence	35.0%	7
Not applicable (No assessment)	40.0%	8
Answered question		**20**
Missing data		**507**

SECTION THREE

Question 82

Attending a local venue was more convenient. (Please tick one for each course. If you did not attend the course please tick 'Did not attend')							
SMMDP Course	**Strongly agree**	**Agree**	**Neutral**	**Disagree**	**Strongly disagree**	**Did not attend**	**Response Count**
Scottish Generic Instructor Training	33	18	19	1	0	229	300
Scottish Generic Instructor Training Bridging	25	15	6	1	0	242	289
Scottish Neonatal Resuscitation	138	60	9	1	0	112	320
Scottish Neonatal Pre-Transport Care	34	17	10	1	0	232	294
Scottish Routine Examination of the Newborn	51	19	19	1	0	214	304
Scottish Normal Labour and Birth	14	6	3	0	0	263	286
Scottish Emergency Maternity Care (for Non-Maternity Professionals)	25	7	1	0	1	260	294
Scottish Core Obstetrics Teaching and Training in Emergencies	108	41	15	3	2	149	318
Scottish Maternity REACTS	7	5	3	0	0	269	284
Comments							61
						Answered question	**369**
						Missing data	**158**

Question 82 Mean scores

SMMDP Course	**Mean**	**n**
Scottish Generic Instructors Training	4.17	71
Scottish Maternity REACTS	4.27	15
Scottish Routine Examination of the Newborn	4.33	90
Scottish Neonatal Pre-Transport Care	4.35	62
Scottish Generic Instructors Training Bridging	4.36	47
Overall	**4.45**	**719**
Scottish Normal Labour and Birth	4.48	23
Scottish Core Obstetric Teaching and Training in Emergencies	4.48	169
Scottish Neonatal Resuscitation	4.61	208
Scottish Emergency Maternity Care Course (for Non-Maternity Professionals)	4.62	34

Question 83

The SMMDP course I attended was evidence-based. (Please tick one for each course. If you did not attend the course please tick 'Did not attend')							
SMMDP Course	**Strongly agree**	**Agree**	**Neutral**	**Disagree**	**Strongly disagree**	**Did not attend**	**Response Count**
Scottish Generic Instructor Training	37	33	3	0	0	227	300
Scottish Generic Instructor Training Bridging	11	26	6	1	0	247	291
Scottish Neonatal Resuscitation	121	80	8	0	0	115	324
Scottish Neonatal Pre-Transport Care	35	24	2	0	0	235	296
Scottish Routine Examination of the Newborn	61	32	0	0	0	217	310
Scottish Normal Labour and Birth	13	9	1	0	0	267	290
Scottish Emergency Maternity Care Course (for Non-Maternity Professionals)	16	18	0	0	0	262	296
Scottish Core Obstetrics Teaching and Training in Emergencies	99	66	9	0	0	144	318
Scottish Maternity REACTS	9	6	0	0	1	270	286
Comments							10
						Answered question	**367**
						Missing data	**160**

Question 83 Mean Scores

SMMDP Course	Mean	n
Scottish Generic Instructors Training Bridging	4.09	44
Scottish Maternity REACTS	4.38	16
Scottish Generic Instructors Training	4.47	73
Scottish Emergency Maternity Care Course (for Non-Maternity Professionals)	4.47	34
Overall	**4.51**	**727**
Scottish Core Obstetric Teaching and Training in Emergencies	4.52	174
Scottish Normal Labour and Birth	4.52	23
Scottish Neonatal Resuscitation	4.54	209
Scottish Neonatal Pre-Transport Care	4.54	61
Scottish Routine Examination of the Newborn	4.66	93

Question 84

The SMMDP course used up-to-date and relevant materials. (Please tick one for each course. If you did not attend the course please tick 'Did not attend')							
SMMDP Course	**Strongly agree**	**Agree**	**Neutral**	**Disagree**	**Strongly disagree**	**Did not attend**	**Response Count**
Scottish Generic Instructor Training	32	40	2	0	0	231	305
Scottish Generic Instructor Training Bridging	15	22	6	2	0	248	293
Scottish Neonatal Resuscitation	130	75	4	1	0	118	328
Scottish Neonatal Pre-Transport Care	37	21	0	0	0	238	296
Scottish Routine Examination of the Newborn	64	28	0	0	0	219	311
Scottish Normal Labour and Birth	14	9	0	1	0	273	297
Scottish Emergency Maternity Care Course (for Non-Maternity Professionals)	20	14	0	0	0	268	302
Scottish Core Obstetrics Teaching and Training in Emergencies	95	76	3	0	0	147	321
Scottish Maternity REACTS	8	8	0	0	0	277	293
Comments							16
						Answered question	**368**
						Missing data	**159**

Question 84 Mean Scores

SMMDP Course	Mean	n
Scottish Generic Instructors Training Bridging	4.11	45
Scottish Generic Instructors Training	4.41	74
Scottish Normal Labour and Birth	4.50	24
Scottish Maternity REACTS	4.50	16
Scottish Core Obstetric Teaching and Training in Emergencies	4.53	174
Overall	**4.54**	**727**
Scottish Emergency Maternity Care Course (for Non-Maternity Professionals)	4.59	34
Scottish Neonatal Resuscitation	4.59	210
Scottish Neonatal Pre-Transport Care	4.64	58
Scottish Routine Examination of the Newborn	4.70	92

Question 85

Having a multidisciplinary approach to the course was beneficial. (Please tick one for each course. If you did not attend the course please tick 'Did not attend')							
SMMDP Course	**Strongly agree**	**Agree**	**Neutral**	**Disagree**	**Strongly disagree**	**Did not attend**	**Response Count**
Scottish Generic Instructor Training	46	26	3	0	0	227	302
Scottish Generic Instructor Training Bridging	14	21	11	0	0	247	293
Scottish Neonatal Resuscitation	136	68	6	1	0	116	327
Scottish Neonatal Pre-Transport Care	39	19	1	0	0	238	297
Scottish Routine Examination of the Newborn	62	30	2	0	0	218	312
Scottish Normal Labour and Birth	17	5	2	0	0	269	293
Scottish Emergency Maternity Care Course (for Non-Maternity Professionals)	21	13	1	0	0	265	300
Scottish Core Obstetrics Teaching and Training in Emergencies	113	54	4	0	0	146	317
Scottish Maternity REACTS	15	1	0	0	0	275	291
Comments							23
						Answered question	**367**
						Missing data	**160**

Question 85 Mean Scores

SMMDP Course	Mean	n
Scottish Generic Instructors Training Bridging	4.07	46
Scottish Emergency Maternity Care Course (for Non-Maternity Professionals)	4.57	35
Scottish Generic Instructors Training	4.57	75
Overall	**4.59**	**731**
Scottish Neonatal Resuscitation	4.61	211
Scottish Normal Labour and Birth	4.63	24
Scottish Core Obstetric Teaching and Training in Emergencies	4.64	171
Scottish Routine Examination of the Newborn	4.64	94
Scottish Neonatal Pre-Transport Care	4.64	59
Scottish Maternity REACTS	4.94	16

Question 86

The amount of pre-course material / work was appropriate. (Please tick one for each course. If you did not attend the course please tick 'Did not attend')							
SMMDP Course	**Strongly agree**	**Agree**	**Neutral**	**Disagree**	**Strongly disagree**	**Did not attend**	**Response Count**
Scottish Generic Instructor Training	31	38	2	0	0	231	302
Scottish Generic Instructor Training Bridging	14	23	5	2	0	250	294
Scottish Neonatal Resuscitation	110	97	1	3	0	116	327
Scottish Neonatal Pre-Transport Care	32	25	2	0	0	242	301
Scottish Routine Examination of the Newborn	53	40	0	2	0	220	315
Scottish Normal Labour and Birth	9	15	0	0	0	271	295
Scottish Emergency Maternity Care Course (for Non-Maternity Professionals)	18	12	2	0	0	267	299
Scottish Core Obstetrics Teaching and Training in Emergencies	87	85	2	0	0	146	320
Scottish Maternity REACTS	9	6	0	1	0	278	294
Comments							25
						Answered question	**367**
						Missing data	**160**

Question 86 Mean Scores

SMMDP Course	Mean	n
Scottish Generic Instructors Training Bridging	4.11	44
Scottish Normal Labour and Birth	4.38	24
Scottish Generic Instructors Training	4.41	71
Scottish Maternity REACTS	4.44	16
Overall	**4.46**	**726**
Scottish Neonatal Resuscitation	4.49	211
Scottish Core Obstetric Teaching and Training in Emergencies	4.49	174
Scottish Emergency Maternity Care Course (for Non-Maternity Professionals)	4.50	32
Scottish Neonatal Pre-Transport Care	4.51	59
Scottish Routine Examination of the Newborn	4.52	95

Question 87

The pre-course material / work was relevant. (Please tick one for each course. If you did not attend the course please tick 'Did not attend')							
SMMDP Course	**Strongly agree**	**Agree**	**Neutral**	**Disagree**	**Strongly disagree**	**Did not attend**	**Response Count**
Scottish Generic Instructor Training	37	34	2	0	0	231	304
Scottish Generic Instructor Training Bridging	14	21	9	1	0	249	294
Scottish Neonatal Resuscitation	125	80	4	0	0	113	322
Scottish Neonatal Pre-Transport Care	36	19	4	0	0	237	296
Scottish Routine Examination of the Newborn	58	34	0	0	0	222	314
Scottish Normal Labour and Birth	10	13	0	0	0	274	297
Scottish Emergency Maternity Care Course (for Non-Maternity Professionals)	19	10	3	0	0	268	300
Scottish Core Obstetrics Teaching and Training in Emergencies	88	77	4	0	0	149	318
Scottish Maternity REACTS	9	7	0	0	0	278	294
Comments							15
						Answered question	**364**
						Missing data	**163**

Question 87 Mean Scores

SMMDP Course	Mean	n
Scottish Generic Instructors Training Bridging	4.07	45
Scottish Normal Labour and Birth	4.43	23
Scottish Generic Instructors Training	4.48	73
Scottish Core Obstetric Teaching and Training in Emergencies	4.50	169
Scottish Emergency Maternity Care Course (for Non-Maternity Professionals)	4.50	32
Overall	**4.51**	**718**
Scottish Neonatal Pre-Transport Care	4.54	59
Scottish Maternity REACTS	4.56	16
Scottish Neonatal Resuscitation	4.58	209
Scottish Routine Examination of the Newborn	4.63	92

Question 89

The content of the lectures was appropriate. (Please tick one for each course. If you did not attend the course please tick 'Did not attend')							
SMMDP Course	**Strongly agree**	**Agree**	**Neutral**	**Disagree**	**Strongly disagree**	**Did not attend**	**Response Count**
Scottish Generic Instructor Training	35	32	3	0	0	236	306
Scottish Generic Instructor Training Bridging	10	22	8	2	1	259	302
Scottish Neonatal Resuscitation	122	80	2	1	1	118	324
Scottish Neonatal Pre-Transport Care	35	25	0	0	0	246	306
Scottish Routine Examination of the Newborn	62	30	0	0	0	220	312
Scottish Normal Labour and Birth	9	10	3	0	0	276	298
Scottish Emergency Maternity Care Course (for Non-Maternity Professionals)	22	11	0	0	0	271	304
Scottish Core Obstetrics Teaching and Training in Emergencies	80	82	4	0	0	153	319
Scottish Maternity REACTS	7	7	1	0	0	283	298
Comments							14
						Answered question	**360**
						Missing data	**167**

Question 89 Mean Scores

SMMDP Course	Mean	n
Scottish Generic Instructors Training Bridging	3.88	43
Scottish Normal Labour and Birth	4.27	22
Scottish Maternity REACTS	4.40	15
Scottish Generic Instructors Training	4.46	70
Scottish Core Obstetric Teaching and Training in Emergencies	4.46	166
Overall	**4.49**	**707**
Scottish Neonatal Resuscitation	4.56	206
Scottish Neonatal Pre-Transport Care	4.58	60
Scottish Emergency Maternity Care Course (for Non-Maternity Professionals)	4.67	33
Scottish Routine Examination of the Newborn	4.67	92

Question 90

The duration of the lectures was appropriate. (Please tick one for each course. If you did not attend the course please tick 'Did not attend')							
SMMDP Course	**Strongly agree**	**Agree**	**Neutral**	**Disagree**	**Strongly disagree**	**Did not attend**	**Response Count**
Scottish Generic Instructor Training	31	37	1	1	0	234	304
Scottish Generic Instructor Training Bridging	9	27	7	0	0	253	296
Scottish Neonatal Resuscitation	99	99	2	3	1	114	318
Scottish Neonatal Pre-Transport Care	28	29	1	0	0	242	300
Scottish Routine Examination of the Newborn	51	38	1	0	0	220	310
Scottish Normal Labour and Birth	7	13	1	2	0	274	297
Scottish Emergency Maternity Care Course (for Non-Maternity Professionals)	18	13	0	0	0	270	301
Scottish Core Obstetrics Teaching and Training in Emergencies	68	88	6	3	0	151	316
Scottish Maternity REACTS	6	7	1	1	0	285	300
Comments							12
						Answered question	**357**
						Missing data	**170**

Question 90 Mean Scores

SMMDP Course	Mean	n
Scottish Generic Instructors Training Bridging	4.05	43
Scottish Normal Labour and Birth	4.09	23
Scottish Maternity REACTS	4.20	15
Scottish Core Obstetric Teaching and Training in Emergencies	4.34	165
Overall	**4.39**	**699**
Scottish Generic Instructors Training	4.40	70
Scottish Neonatal Resuscitation	4.43	204
Scottish Neonatal Pre-Transport Care	4.47	58
Scottish Routine Examination of the Newborn	4.56	90
Scottish Emergency Maternity Care Course (for Non-Maternity Professionals)	4.58	31

Question 91

The lectures facilitated my learning. (Please tick one for each course. If you did not attend the course please tick 'Did not attend')							
SMMDP Course	**Strongly agree**	**Agree**	**Neutral**	**Disagree**	**Strongly disagree**	**Did not attend**	**Response Count**
Scottish Generic Instructor Training	30	37	4	0	0	232	303
Scottish Generic Instructor Training Bridging	10	21	10	3	0	256	300
Scottish Neonatal Resuscitation	107	89	7	0	0	117	320
Scottish Neonatal Pre-Transport Care	30	25	3	0	0	242	300
Scottish Routine Examination of the Newborn	55	34	1	0	0	219	309
Scottish Normal Labour and Birth	7	12	4	0	0	275	298
Scottish Emergency Maternity Care Course (for Non-Maternity Professionals)	17	13	2	0	0	268	300
Scottish Core Obstetrics Teaching and Training in Emergencies	68	85	9	1	0	153	316
Scottish Maternity REACTS	6	7	1	0	1	280	295
Comments							7
						Answered question	**357**
						Missing data	**170**

Question 91 Mean Scores

SMMDP Course	Mean	n
Scottish Generic Instructors Training Bridging	3.86	44
Scottish Normal Labour and Birth	4.13	23
Scottish Maternity REACTS	4.13	15
Scottish Core Obstetric Teaching and Training in Emergencies	4.35	163
Scottish Generic Instructors Training	4.37	71
Overall	**4.40**	**699**
Scottish Neonatal Pre-Transport Care	4.47	58
Scottish Emergency Maternity Care Course (for Non-Maternity Professionals)	4.47	32
Scottish Neonatal Resuscitation	4.49	203
Scottish Routine Examination of the Newborn	4.60	90

Question 93

The small group teaching facilitated my learning: (Please tick one for each course. If you did not attend the course please tick 'Did not attend')							
SMMDP Course	**Strongly agree**	**Agree**	**Neutral**	**Disagree**	**Strongly disagree**	**Did not attend**	**Response Count**
Scottish Generic Instructor Training	36	32	1	0	0	232	301
Scottish Generic Instructor Training Bridging	12	17	12	0	0	252	293
Scottish Neonatal Resuscitation	121	76	6	0	0	114	317
Scottish Neonatal Pre-Transport Care	35	19	3	0	0	242	299
Scottish Routine Examination of the Newborn	54	31	2	0	0	219	306
Scottish Normal Labour and Birth	11	11	0	1	0	273	296
Scottish Emergency Maternity Care Course (for Non-Maternity Professionals)	20	10	1	0	0	267	298
Scottish Core Obstetrics Teaching and Training in Emergencies	82	70	7	0	1	150	310
Scottish Maternity REACTS	7	5	1	0	0	279	292
Comments							13
						Answered question	**351**
						Missing data	**176**

Question 93 Mean Scores

SMMDP Course	Mean	n
Scottish Generic Instructors Training Bridging	4.00	41
Scottish Normal Labour and Birth	4.39	23
Scottish Core Obstetric Teaching and Training in Emergencies	4.45	160
Scottish Maternity REACTS	4.46	13
Overall	**4.50**	**684**
Scottish Generic Instructors Training	4.51	69
Scottish Neonatal Pre-Transport Care	4.56	57
Scottish Neonatal Resuscitation	4.57	203
Scottish Routine Examination of the Newborn	4.60	87
Scottish Emergency Maternity Care Course (for Non-Maternity Professionals)	4.61	31

Question 95

The four stage technique facilitated my learning. (Please tick one for each course. If you did not attend the course please tick 'Did not attend')							
SMMDP Course	**Strongly agree**	**Agree**	**Neutral**	**Disagree**	**Strongly disagree**	**Did not attend**	**Response Count**
Scottish Generic Instructor Training	23	32	12	2	1	231	301
Scottish Generic Instructor Training Bridging	10	11	18	2	2	252	295
Scottish Neonatal Resuscitation	76	85	29	5	2	116	313
Scottish Neonatal Pre-Transport Care	22	22	8	3	2	237	294
Scottish Routine Examination of the Newborn	40	37	9	3	1	216	306
Scottish Normal Labour and Birth	1	13	5	1	0	271	291
Scottish Emergency Maternity Care Course (for Non-Maternity Professionals)	10	14	4	0	0	268	296
Scottish Core Obstetrics Teaching and Training in Emergencies	60	75	21	2	2	147	307
Scottish Maternity REACTS	1	9	1	0	0	276	287
Comments							15
						Answered question	**351**
						Missing data	**176**

Question 95 Mean Scores

SMMDP Course	Mean	n
Scottish Generic Instructors Training Bridging	3.58	43
Scottish Normal Labour and Birth	3.70	20
Scottish Maternity REACTS	4.00	11
Scottish Neonatal Pre-Transport Care	4.04	57
Scottish Generic Instructors Training	4.06	70
Overall	**4.10**	**676**
Scottish Neonatal Resuscitation	4.16	197
Scottish Core Obstetric Teaching and Training in Emergencies	4.18	160
Scottish Emergency Maternity Care Course (for Non-Maternity Professionals)	4.21	28
Scottish Routine Examination of the Newborn	4.24	90

SECTION FOUR

Question 97

On a scale from excellent to very poor how would you rate the SMMDP training courses? (Please tick one for each course. If you did not attend the course please tick 'Did not attend')							
SMMDP Course	**Excellent**	**Good**	**Satisfactory**	**Poor**	**Very poor**	**Did not attend**	**Response Count**
Scottish Generic Instructor Training	40	28	8	0	0	237	313
Scottish Generic Instructor Training Bridging	11	17	12	3	2	258	303
Scottish Neonatal Resuscitation	162	49	5	0	0	117	333
Scottish Neonatal Pre-Transport Care	49	9	2	0	0	247	307
Scottish Routine Examination of the Newborn	80	16	0	0	0	222	318
Scottish Normal Labour and Birth	12	8	4	1	0	277	302
Scottish Emergency Maternity Care Course (for Non-Maternity Professionals)	22	13	1	0	0	271	307
Scottish Core Obstetrics Teaching and Training in Emergencies	115	44	10	1	1	152	323
Scottish Maternity REACTS	9	6	0	0	0	281	296
Comments							24
						Answered question	**374**
						Missing Data	**153**

Question 97 Mean Scores

SMMDP Course	Mean	n
Scottish Generic Instructors Training Bridging	3.71	45
Scottish Normal Labour and Birth	4.24	25
Scottish Generic Instructors Training	4.42	76
Scottish Emergency Maternity Care Course (for Non-Maternity Professionals)	4.58	36
Scottish Core Obstetric Teaching and Training in Emergencies	4.58	171
Overall	**4.59**	**740**
Scottish Maternity REACTS	4.60	15
Scottish Neonatal Resuscitation	4.73	216
Scottish Neonatal Pre-Transport Care	4.78	60
Scottish Routine Examination of the Newborn	4.83	96

Question 98

I feel that the SMMDP training courses are affordable: (Please tick one for each course. If you did not attend the course please tick 'Did not attend')							
SMMDP Course	**Strongly agree**	**Agree**	**Neutral**	**Disagree**	**Strongly disagree**	**Did not attend**	**Response Count**
Scottish Generic Instructor Training	55	16	4	1	0	227	303
Scottish Generic Instructor Training Bridging	22	14	9	1	0	249	295
Scottish Neonatal Resuscitation	105	50	51	0	0	115	321
Scottish Neonatal Pre-Transport Care	32	14	9	0	0	239	294
Scottish Routine Examination of the Newborn	57	20	13	0	0	214	304
Scottish Normal Labour and Birth	15	3	7	0	0	268	293
Scottish Emergency Maternity Care Course (for Non-Maternity Professionals)	14	9	11	0	0	264	298
Scottish Core Obstetrics Teaching and Training in Emergencies	98	40	28	0	0	148	314
Scottish Maternity REACTS	9	4	4	0	0	273	290
Comments							40
						Answered question	**356**
						Missing data	**171**

Question 98 Mean Scores

SMMDP Course	Mean	n
Scottish Emergency Maternity Care Course (for Non-Maternity Professionals)	4.09	34
Scottish Generic Instructors Training Bridging	4.24	46
Scottish Neonatal Resuscitation	4.26	206
Scottish Maternity REACTS	4.29	17
Scottish Normal Labour and Birth	4.32	25
Overall	**4.37**	**715**
Scottish Neonatal Pre-Transport Care	4.42	55
Scottish Core Obstetric Teaching and Training in Emergencies	4.42	166
Scottish Routine Examination of the Newborn	4.49	90
Scottish Generic Instructors Training	4.64	76

Question 99

I feel that the SMMDP training courses give value for money: (Please tick one for each course. If you did not attend the course please tick 'Did not attend')							
SMMDP Course	**Strongly agree**	**Agree**	**Neutral**	**Disagree**	**Strongly disagree**	**Did not attend**	**Response Count**
Scottish Generic Instructor Training	53	17	5	0	0	225	300
Scottish Generic Instructor Training Bridging	20	13	10	2	0	245	290
Scottish Neonatal Resuscitation	119	43	43	0	0	112	317
Scottish Neonatal Pre-Transport Care	37	12	7	1	0	236	293
Scottish Routine Examination of the Newborn	60	18	10	0	0	216	304
Scottish Normal Labour and Birth	13	9	5	0	0	265	292
Scottish Emergency Maternity Care Course (for Non-Maternity Professionals)	18	8	7	0	0	263	296
Scottish Core Obstetrics Teaching and Training in Emergencies	105	38	24	0	0	143	310
Scottish Maternity REACTS	11	3	4	0	0	273	291
Comments							27
						Answered question	**354**
						Missing data	**173**

Question 99 Mean Scores

SMMDP Course	Mean	n
Scottish Generic Instructors Training Bridging	4.13	45
Scottish Normal Labour and Birth	4.30	27
Scottish Emergency Maternity Care Course (for Non-Maternity Professionals)	4.33	33
Scottish Neonatal Resuscitation	4.37	205
Scottish Maternity REACTS	4.39	18
Overall	**4.44**	**715**
Scottish Core Obstetric Teaching and Training in Emergencies	4.49	167
Scottish Neonatal Pre-Transport Care	4.49	57
Scottish Routine Examination of the Newborn	4.57	88
Scottish Generic Instructors Training	4.64	75

APPENDIX 7

AN EVALUATION OF THE SCOTTISH MULTI-PROFESSIONAL MATERNITY DEVELOPMENT PROGRAMME (SMMDP)

Telephone Interview Schedule

Introduction

Thank you for volunteering to take part.

The focus of the interview is on the cost benefits of the SMMDP training within your speciality.

- **Section 1 - Changes In Methods Of Training**
- **Section 2 - Changes In Practice**
- **Section 3 - Changes In Training Budget And Resources**
- **Section 4 – Cost Benefit**

Telephone Interview Questions

Section 1 - Changes In Methods Of Training

1. Do you feel that the current SMMDP facilitates the main clinical skills training needs in your practice area(s)?

Yes ☐ **No** ☐

Can you please give examples.

Did you expect more? If yes…what did you expect?

2. Do you think there any new SMMDP training courses required to be developed to address the training needs of your workforce?

Yes ☐ **No** ☐

Can you give some examples? Can you explain this issue further.

3. Do you think this method of training has had an effect on collaborative mutliprofessional working within your practice area?

Yes ☐ **No** ☐

In what way? Can you give me any examples?

4. Do you think you staff benefit from attending the SMMDP training?

Yes ☐ **No** ☐

Could you explain this further and give some examples?

5. Have the methods in clinical skills training updates changed in your practice area as a direct result of the SMMDP training.

Yes ☐ **No** ☐

In what way? Can you give me any examples?

Section 2 - Changes In Practice

This section explores how the SMMDP has impacted on the practice areas and about any changes in practice, which have occurred.

6. How do you feel that the introduction of the SMMDP training has impacted on the maternity services within your practice area(s)?

Did you expect more? If yes…what did you expect?

7. In relation to SMMDP training, have you identified any changes in how practitioners perform within your practice area(s).

Yes ☐ **No** ☐

Can you give some examples of these changes in practitioners performance?

Could things have been improved? If yes…in what way? If no…why not?

8. Do you think the SMMDP has enhanced the integration of evidence into practice (EBP).

Yes ☐ **No** ☐

Can you give examples of these changes of evidence in practice?

9. Have you noticed a change in the frequency or nature of risk management cases within your practice area?

Yes ☐ **No** ☐

Can you give examples of how you think these changes are a direct result of SMMDP training? Did you expect more changes? If yes…what did you expect?

Section 3 – Changes In Training Budget And Resources

This section explores your training budget and your resources. The SMMDP is held at local venues using local resources but requires to be funded.

10. How do you fund training within your organisation?

Can you explain further? Tell me more about that.

11. If you have a training budget, has your training budget been affected over recent years due to the SMMDP training? Has it either increased or decreased.

Yes ☐ **No** ☐

Can you explain further? Tell me more about that.

12. Does your training budget facilitate more participants attending this multiprofessional programme compared to other conferences / study days?

Yes ☐ **No** ☐

Could you give examples?

13. Do you feel that you have got value for money by sending staff on these training courses?

Yes ☐ **No** ☐

If yes…in what way? If no…why not? Can you explain further?

14. Has the SMMDP impacted on how you provide and purchase training resources within your practice area?

Yes ☐ **No** ☐

Can you please explain.

15. If the SMMDP help fund these resources did you find the purchase of these resources of value and cost effective for future training within your organisation?

Yes ☐ **No** ☐

Can you please explain.

Section 4 - Cost Benefit

This section will explore what you think are the overall cost benefits to having a SMMDP training facility.

16. Do you think that multi-professional training is more cost effective for your practice area?

Yes ☐ **No** ☐

In what way? Can you explain further? Can you give me any examples?

17. Do you have any overall evidence of the cost benefit of the SMMDP training? e.g. database of training, finance databases, increase in number of staff trained, decrease in number of risk management cases.

Yes ☐ **No** ☐

What form does this evidence take?

18. In relation to workforce planning and appropriate skill mix – is it cost effective for your organisation for staff to attend this multiprofessional approach to training.

Yes ☐ **No** ☐

Could you elaborate please?

19. Does the multiprofessional training approach create a cost effective teaching faculty within your clinical/practice area?

Yes ☐ **No** ☐

In what way? Can you explain further? Can you give me any examples

20. The SMMDP are offered locally and regionally. How has this affected the numbers of participants who can attend the courses and the cost for travelling expenses?

Did you expect more? If yes…what did you expect?

Is there anything the SMMDP can do to assist in this matter?

21. Do you think that the SMMDP training is an effective use of time management in releasing your staff to attend?

Yes ☐ **No** ☐

If yes…in what way? If no…why not? Can you explain further?

22. If you have staff who are under performing, do you think that the SMMDP is a cost effective method of reskilling and increasing their knowledge as compared to other courses or in-house training?

Yes ☐ **No** ☐

Can you please explain further?

Could things be improved? If yes…in what way?

23. Do you have any other comments that are relevant to the cost benefit of this training programme?

Thank you for taking the time to take part in this telephone interview.

Telephone Interview - Suggested Prompts

An example of prompts that can be utilised during the telephone interview by the research to generate further discussion and gather a richer source of data.

Prompts

- Could you give examples?
- Explain this issue further?
- In what way did you feel…?
- Could you explain this issue further?
- Did you expect more? If yes, what did you expect?
- Could things have been improved? If yes, in what way?
- Could things have been improved? If not, why not?
- Could you elaborate?
- Explain your reason further?
- Explain your reasons further?
- Explain further?
- Tell me more about it?
- Would you like to further discuss this point?

APPENDIX 8

ATTENDANCE AND REMUNERATION FOR SMMDP COURSES

FOR SMMDP INSTRUCTORS

To maintain their instructor status it is anticipated that SMMDP trainers will participate in a minimum of 2 course days per year of which one day would be as an external faculty member. For those instructors who also teach on courses for other bodies (for example ALSO and NLS), participation will be a minimum of 3 course days over 2 years.

The SMMDP quality framework requires that there is an external trainer on every SMMDP course. Therefore, it is expected that trainers will participate in SMMDP courses away from their own place of work.

In return for external training days, the SMMDP will offer two free candidate places on the course. Instructor expenses for travel and accommodation, if incurred, will be reimbursed following the course in line with NHS Education for Scotland Policies.

APPENDIX 9

DURATION OF SMMDP COURSES

COURSE	DURATION
Scottish Core Obstetric Teaching and Training in Emergencies (SCOTTIE)	1.5 days
Scottish Neonatal Resuscitation Course (SNRC)	1 day
Scottish Routine Examination of the Newborn Course (SRENC)	3 days (plus 3 x post course clinical practice assessments to be completed in the 6 months following the course)
Scottish Generic Instructors Training Course (SGITC)	2 days (plus 2 Instructor Candidate days to be completed following the course)
Scottish Generic Instructors Training Course – Bridging (SGITBC)	2-3 hours (plus 1 Instructor Candidate day to be completed following the course)
Scottish Emergency Maternity Care Course (for Non-Maternity Professionals) (SEMCC)	1 day
Scottish Neonatal Pre-Transport Care Course (SNPTCC)	1 day
Scottish Maternity REACTS course (Recognition, Evaluation, Assessment, Critical Treatment and Stabilisation) (REACTS)	2 days
Scottish Normal Labour and Birth Course (SNLBC)	2 days (plus reflective report to be submitted following the course)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An Evaluation of the Scottish Multiprofessional Maternity Development Programme

EXECUTIVE SUMMARY

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BACKGROUND TO THE EVALUATION

The report of the Expert Group on Acute Maternity Services (EGAMS) (Scottish Executive, 2002) provided recommendations based on the principles from the maternity framework document (Scottish Executive, 2001). The EGAMS report suggested that maternity staff receive sufficient training, support and education to ensure that they had the necessary skills and competencies to cope with obstetric and neonatal emergencies. It was agreed that all healthcare professionals (midwives, obstetricians, anaesthetists, paediatricians, general practitioners, paramedics, neonatal nurses, nurses and allied healthcare professionals) involved with intrapartum care, irrespective of location, should have and maintain these core skills. Each level of maternity care should have the appropriate skill mix for that level and every professional working in a maternity unit should achieve and maintain identified core competencies. As well as providing the appropriate courses to meet multiprofessional needs, innovative ways of maintaining skills and competencies were advocated, hence the advent of the Scottish Multiprofessional Maternity Development Programme (SMMDP).

The SMMDP commenced in 2003, and for the first 18 months, was supported by the Royal College of Midwives (RCM) and the Scottish Executive Health Department (SEHD) through a service level agreement. The SMMDP then moved into NHS Education for Scotland (NES) in 2005 and has provided a range of courses to address these recommendations (Scottish Executive, 2001; Scottish Government, 2011). Over 3,100 participants have attended at least one SMMDP course with the present SMMDP database comprising 2,000 active email addresses. The training is provided at local centres throughout Scotland and latterly in the south of England.

Previously an evaluation of the SMMDP courses was conducted by Robert Gordon University, Aberdeen (Gibb, Ireland and West, 2007) in addition to ongoing internal course evaluations. Gibb, et al (2007) reported that learning together seemed to have a positive impact on team working, sharing and collaboration resulting in improved patient care. Recommendations for the SMMDP included the need to have clear learning outcomes for the courses, in addition to team working being supported in the work place. They also highlighted that selection and training of facilitators was important.

A further robust evaluation of the impact of the programme is now required to build on this previous evaluation (Gibb, et al, 2007) and in alignment with the Healthcare Quality Strategy for NHSScotland (Scottish Government, 2010). This will inform future programme development so that the SMMDP remains contemporary and continues to provide improved maternity care for women and their babies across Scotland. The evaluation should engage with both past participants and clinical managers to determine the holistic impact of the efficacy of the SMMDP. Issues that

require investigation include the impact the programme has had on maternity services in terms of staff competence and confidence, changes to practice and also a cost / benefits analysis. The University of the West of Scotland (UWS) is delighted to undertake an evaluation of the SMMDP, which has been commissioned by NHS Education for Scotland. This evaluation will explore how the SMMDP has fulfilled the recommendations from the EGAMS Report.

PROJECT OBJECTIVES

1. To measure the impact on maternity services following the introduction of the SMMDP e.g. Does it provide staff with increased knowledge, preparedness, confidence and competences to carry out their role?

2. To provide examples of any changes in practice (effectiveness of training).

3. To explore the staff experience, perceived knowledge base following attendance at clinical skills training.

4. To identify a method to evaluate the effectiveness of the SMMDP model of course development.

5. To provide an analysis of the benefits both in quality, output, cost savings, time savings of the SMMDP.

6. To evaluate the partnership approach to the work of the SMMDP.

7. To evaluate the following courses: The Scottish Emergency Maternity Care Course (for Non-Maternity Professionals) and the new Scottish Maternity REACTS (Recognition, Evaluation, Assessment, Critical Treatment and Stabilisation) Course.

PROJECT DESIGN

Methodology

The research design was an evaluation, which attempts to seek worth or value of some innovation, intervention, service or approach (Robson, 2006). The evaluation framework utilised was the Kirkpatrick model (Kirkpatrick, 1996). This model was appropriate as it has been utilised to measure the effectiveness of training programmes since the 1950s (Kirkpatrick, 1996) and is a goal-based model (Eseryel, 2002). It provides a taxonomy for training evaluation criteria (Alliger and Janak, 1989) and the chief purpose of the model is to clarify the meaning of evaluation and to be a source of guidance for conducting an evaluation (Kirkpatrick, 1996). The model comprises four stages or levels of training outcomes: reaction, learning, behaviour and results (Bates, 2004).

The study was undertaken in three phases from October 2010 to March 2011.

- Phase one analysed pre-existing SMMDP internal course evaluations.
- Phase two evaluated individual course participants and the impact on their practice and benefits from this training (Sample size was n=540).
- Phase three evaluated the impact on practice and cost benefits from a wider perspective (Sample size was n=15).

Triangulation provided rigor (Polit and Beck, 2006) in the form of:

- Research methods (qualitative and quantitative).
- Data collection tools (course evaluations, online questionnaire and telephone interviews).
- Data sources (candidates and instructors on the courses, heads of midwifery / lead midwives, midwifery managers, consultant midwives, practice development midwives, midwives, Scottish Ambulance Service training officers, medical directors, medical practitioners, nurses, neonatal nurses and allied health professionals).

MAIN FINDINGS

- Confirmability of data was through triangulation: research methods, data collection and data source.

- The SMMDP is relevant, up-to-date, evidence-based and a quality assured method of training multiprofessionals within the maternity services.

- The multiprofessional aspect to the programme was positively evaluated and endorsed the partnership approach to the work of the SMMDP.

- Participants reported that the SMMDP was an enjoyable, beneficial and effective mode of training, which increased their knowledge, confidence and competence and prepared them to carry out their role and advanced roles e.g. examination of the newborn.

- Participants reported numerous examples of evidence-based changes, which have been implemented into their practice areas following SMMDP training.

- The current internal evaluation from the SMMDP has been an appropriate tool to evaluate the effectiveness of the model of SMMDP courses. However, some sections need to have an identical stem question to be able to readily conduct more rigorous comparative data analysis.

- The Scottish Emergency Maternity Care Course (for Non-Maternity Professionals) and the new Scottish Maternity REACTS (Recognition, Evaluation, Assessment, Critical Treatment and Stabilisation) Course were both positively evaluated by the small number of participants who have attended to-date.

- The SMMDP was perceived to be cost effective, value for money and an efficient use of time. However, there was no evidence provided by the practice areas to allow the researchers to quantify these findings.

- The participants acknowledged that the SMMDP should remain a national evidence-based training programme, which is utilised by all professionals and non-professionals involved in providing maternity care across Scotland. Whilst sustainability of the SMMDP was important at this time a challenge identified from some respondents was financial constraints within NHS Boards and attending local in-house training maybe an option.

- Managers stated that if staff were underperforming in practice then the SMMDP was deemed to be an appropriate training programme to re-skill and update these practitioners even when in-house training was available.

- The continuing positive evaluations across all the courses emphasises the consistency of the instructors within the SMMDP who come from a variety of professional backgrounds and regions. This finding confirms a rigorous and robust quality assurance mechanism within the SMMDP.

RECOMMENDATIONS

Based on the findings the following recommendations have been made for NHS Education Scotland and / or employers of professionals and non-professionals delivering different levels of maternity care in Scotland.

NHS Education for Scotland

- Continue to provide the SMMDP as a national evidence-based programme for all professionals and non-professionals providing maternity care in Scotland as the recognised standard for obstetrics and neonatal training.

- Continue to promote the multiprofessional and partnership approach by incorporating staff from other NHS Boards to enhance the shared learning across disciplines and NHS Boards in Scotland.

- Continue to maintain this high standard of national, quality assured, cost effective training, which remains aligned to the Healthcare Quality Strategy for NHSScotland and focuses on safe patient care.

- Continue the present format of core lectures and small group teaching. Continue to keep the focus of scenarios used in courses to accommodate the variety of healthcare provisions from remote, rural and community areas as well as hospital environments.

- Continue the present format and administration of internal course evaluations but include identical stem questions for each heading to enable more rigorous comparative data analysis.

- Review the format for assessments and the appropriate method of feedback to both the candidates and their line managers.

- Review policy on travel expenses for courses.

- Review current advertising and marketing strategy.

NHS Education for Scotland and / or employers of professionals and non-professionals delivering different levels of maternity care in Scotland.

- Continue to encourage all staff providing care within the maternity services to attend for continual professional development as the SMMDP enhances their knowledge, confidence and competence and prepares them for their roles and advanced roles.

- Explore options for resources to support healthcare staff to be released from the areas when they are away as candidates, instructors / instructor candidates.

Employers of professionals and non-professionals delivering different levels of maternity care in Scotland.

- Current employers should link the effectiveness of staff training to risk management outcomes through a mapping exercise or further audit or research project.

- Current employers should develop a database or log of training to identify the cost benefits of the SMMDP compared to other training courses and create a benchmark for continuous professional development.

- Current employers should take cognisance of the benefits and outcomes for the maternity services from the national approach of SMMDP training in supporting the uptake of staff attendance. This will enhance safe and effective practice and promote up-to-date evidence-based obstetrics and neonatal care in Scotland.

REFERENCES

Alliger, G.M. and Janak, E.A. (1989) Kirkpatrick's levels of training criteria: Thirty years later. Personnel Psychology. Vol.42, pp.331-342.

Bates, R. (2004) A critical analysis of evaluation practice: The Kirkpatrick model and the principle of beneficence. Evaluation and Program Planning. Vol.27, pp.341-347.

Eseryel, D. (2002) Approaches to Evaluation of Training: Theory & Practice. Educational Technology & Society. Vol.5(2), [Online]. Available: http://www.ifets.info/journals/5_2/eseryel.html [Accessed 1/3/2011].

Gibb, S., Ireland, J., West, B.J.M. (2007) An Evaluation of the Scottish Multiprofessional Maternity Development Programme (SMMDP): Full Report. Aberdeen: The Robert Gordon University.

Kirkpatrick, D. (1996) Great ideas revisited. Training and Development. January. pp.54-59.

Polit, D.F. and Beck, C.T. (2006) Essentials of Nursing Research: Methods, Appraisal and utilization. (6th ed). Philadelphia: Lippincott Williams and Wilkins.

Scottish Executive. (2001) A Framework for Maternity Services in Scotland. Edinburgh: The Stationary Office.

Scottish Executive. (2002) The Expert Group on Acute Maternity Services Report. Edinburgh: Scottish Executive Stationary Office.

Scottish Government. (2011) A Refreshed Framework for Maternity Care in Scotland. Edinburgh: The Scottish Government.

Scottish Government. (2010) The Healthcare Quality Strategy for NHSScotland. Edinburgh: The Scottish Government.

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- Mario D Hair - Statistical advice, University of the West of Scotland.
- Dr Angie Docherty – Peer reviewer of interview data analysis, Quality assurer, University of the West of Scotland.

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