

Group-based Parental Support in Child Health Service. Development and evaluation of a group leadership course for nurses.

Lefevre. Åsa

2016

Document Version: Publisher's PDF, also known as Version of record

Link to publication

Citation for published version (APA):

Lefevre, Å. (2016). Group-based Parental Support in Child Health Service. Development and evaluation of a group leadership course for nurses. [Doctoral Thesis (compilation), Department of Health Sciences]. Lund University: Faculty of Medicine.

Total number of authors:

Unless other specific re-use rights are stated the following general rights apply: Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

• Users may download and print one copy of any publication from the public portal for the purpose of private study

- or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
 You may freely distribute the URL identifying the publication in the public portal

Read more about Creative commons licenses: https://creativecommons.org/licenses/

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

Group Based Parental Support in Child Health Service

Development and evaluation of a group leadership course for nurses

Åsa Lefèvre



DOCTORAL DISSERTATION

by due permission of the Faculty of Medicine, Lund University, Sweden. To be defended at Health Science Centre, Thursday $3^{\rm rd}$ of November 2016 at 9.00.

Faculty opponent
Professor Catrine Kostenius
Luleå University of Technology

Organization	Document name
LUND UNIVERSITY	DOCTORAL DISSERTATION
Department of Health Sciences	
P.O. Box 157	
SE-221 00 Lund, Sweden	
	3 rd of November, 2016
Author Åsa Lefèvre	

Title and subtitle: Group Based Parental Support in Child Health Service. Development and evaluation of a group leadership course for purses

Abstract

The close relationship between young children's living conditions and their health later in life is well documented and a safe and healthy environment during early childhood promotes cognitive functions and social development during the whole lifespan. Becoming a parent is a major life transition and it is sometimes described as a stressful and vulnerable time involving changes to lifestyle and routines. Parental groups are an important part of Swedish parental support and are offered to almost all parents in Sweden by the Child Health Service (CHS) during their child's first year, but only half of the parents choose to participate.

The overall aim of this thesis was twofold, first to elucidate group-based early parental support provided by the CHS from the perspective of CHS nurses and parents, and secondly, based on the findings, to develop and evaluate a group-based intervention including a course in group leadership. Study A was a cross sectional study involving CHS nurses and parents with experiences from parental groups within CHS from one county in Sweden. A total of 156 CHS nurses from 31 of 33 municipalities and 143 parents from 71 parental groups at 27 different Child Health Care centres (CHC) completed two different questionnaires about their experiences of the parental groups provided by the CHS. Based on the findings of Study A, an intervention consisting of a course in group leadership was developed and evaluated in Study B. Fifty-six CHS nurses participated in a three-day course in group leadership. The intervention was evaluated using pre- and post-test questionnaires, a course evaluation, an open interview with course leaders and focus group interviews five to eight months after the course.

The findings in Study A showed that almost all CHS nurses managed parental groups and that specialized parental groups (groups for e.g., single parents or parents with non-Swedish backgrounds) were managed by half of the nurses and were more common at family centres. The participating parents were mostly Swedish, married, well-educated, working mothers who found the parental groups to be meaningful and strengthening. More than half of the parents had met someone with whom they socialized outside of the parental group meetings. Most of the topics addressed in the parental groups were of interest for both the CHS nurses and the parents, but the parents wanted more focus on topics such as parenting, child related community information and sex and relationships. Most of the parents were content with the group management, the nurses however felt that group leadership was difficult and challenging and expressed a need for education in group dynamics and group leadership. The CHS nurses who participated in the group leadership course in Study B felt strengthened in their group leader role and expressed a change in perception towards the work task. The group leader role was clarified and the nurses received the knowledge they needed to further develop their group leadership skills. They described that they had started to work differently with the groups and use their new tools to plan and perform the parental groups in new ways. The nurses felt encouraged to work with their parental groups and expressed feeling increased job satisfaction.

Despite extensive experience of leading parental groups, CHS nurses feel insecure in group leadership. A course in group leadership seems to strengthen the CHS nurses in their group leader role and might help them fulfil the objectives of parental groups. Parents attending CHCs with high Care Need Index are underrepresented in parental groups and there is a need to adjust the support to reach more parents. The parental groups have been performed more or less the same way since implemented in 1978 and other needs and demands may have risen. Improved confidence in group management might motivate the CHS nurses to further develop parental groups to attract the parents who currently choose not to participate.

Key words: parental support, parental groups, health promotion, group leadership, training, nurses, child health services,				
Classification system and/or index terms (if any)				
Supplementary bibliographical information Language English				
ISSN and key title 1652-8220		ISBN 978-91-7619-323-5		
Recipient's notes	Number of pages 165	Price		
	Security classification			

I, the undersigned, being the copyright owner of the abstract of the above-mentioned dissertation, hereby grant to all reference sourcespermission to publish and disseminate the abstract of the above-mentioned dissertation.

Signature Ara Lefin

Date 2016-09-22

Group-based Parental Support in Child Health Service

Development and evaluation of a group leadership course for nurses

Åsa Lefèvre



Cover picture by Sophia Lundquist Cover layout front page: Anna K Blomgren & Åsa Lefèvre

Copyright Åsa Lefèvre

Faculty of Medicine | Department of Health Sciences

ISBN 978-91-7619-323-5 ISSN 1652-8220

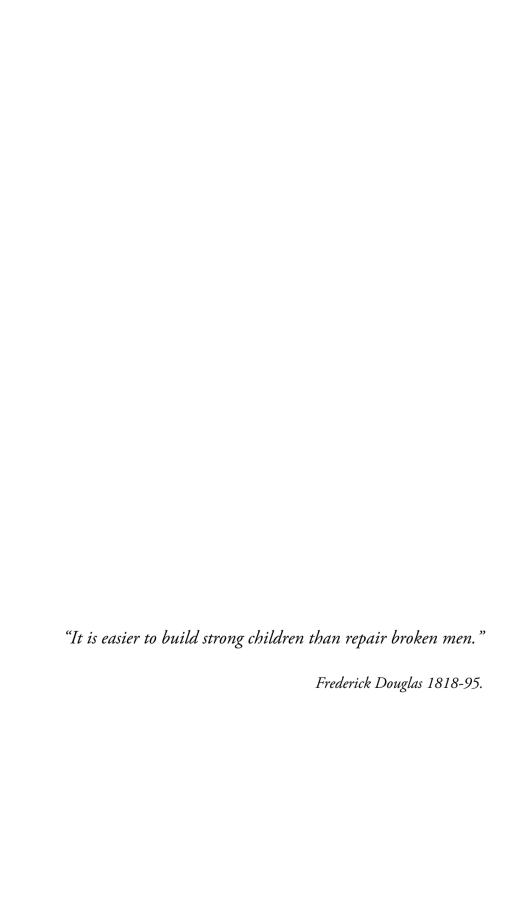
Printed in Sweden by Media-Tryck, Lund University Lund 2016











Content

Abstract	9
Original papers	11
Abbreviations and definitions	12
Introduction	13
Background	14
Children's health	14
Theoretical framework	14
Family support	16
The family	17
Social insurance	17
Parental support in Sweden	18
Child Health Service	18
Swedish Child Health Service	
Nurses within the child health services	20
Group-based parental support	22
Aims	25
Method	27
Design	27
Methodological framework	
Context of the study	
Study population	30
Nurses	30
Parents	32
The intervention	33
Costs	35

	Data collection	35
	Questionnaires	35
	Course evaluation	36
	Interviews	36
	Procedures for Study A	37
	Procedures for Study B	38
	Data analyses	39
	Statistical analyses	39
	Qualitative content analysis	40
	Preunderstanding	40
	Ethical considerations	40
	Non-maleficence and beneficence	41
	Autonomy	41
	Justice	42
Findin	ıgs	43
	Participation and management in parental groups	
	Participation in parental groups	
	Perception of parental groups and management	
	Management of parental groups	
	Organisation	
	Structured tools for managing parental groups	44
	Topics	
	Evaluation of the education in group leadership	45
	Evaluation from the participating nurses	
	Reflections from the course leaders	
	Nurses experiences of managing parental groups before and after	er the
	intervention	46
Discus	ssion	49
	Methodological considerations	49
	Validity	
	Trustworthiness	
	General discussion of results	
	Experiences of parental groups	
	Impact of a course in group leadership	
	Non-attending parents	
	Costs	

Conclusions and clinical implications	61
Further research	62
Summary in Swedish	63
Acknowledgements	65
References	67
Paper I-IV	
Appendix I-III	

Abstract

The close relationship between young children's living conditions and their health later in life is well documented and a safe and healthy environment during early childhood promotes cognitive functions and social development during the whole lifespan. Becoming a parent is a major life transition and it is sometimes described as a stressful and vulnerable time involving changes to lifestyle and routines. Parental groups are an important part of Swedish parental support and are offered to almost all parents in Sweden by the Child Health Service (CHS) during their child's first year, but only half of the parents choose to participate.

The overall aim of this thesis was twofold, first to elucidate group-based early parental support provided by the CHS from the perspective of CHS nurses and parents, and secondly, based on the findings, to develop and evaluate a group-based intervention including a course in group leadership. Study A was a cross sectional study involving CHS nurses and parents with experiences from parental groups within CHS from one county in Sweden. A total of 156 CHS nurses from 31 of 33 municipalities and 143 parents from 71 parental groups at 27 different Child Health Care centres (CHC) completed two different questionnaires about their experiences of the parental groups provided by the CHS. Based on the findings of Study A, an intervention consisting of a course in group leadership was developed and evaluated in Study B. Fifty-six CHS nurses participated in a three-day course in group leadership. The intervention was evaluated using pre- and post-test questionnaires, a course evaluation, an open interview with course leaders and focus group interviews five to eight months after the course.

The findings in Study A showed that almost all CHS nurses managed parental groups and that specialized parental groups (groups for e.g., single parents or parents with non-Swedish backgrounds) were managed by half of the nurses and were more common at family centres. The participating parents were mostly Swedish, married, well-educated, working mothers who found the parental groups to be meaningful and strengthening. More than half of the parents had met someone with whom they socialized outside of the parental group meetings. Most of the topics addressed in the parental groups were of interest for both the CHS nurses and the parents, but the parents wanted more focus on topics such as parenting, child related community information and sex and relationships. Most of the parents were content with the group management, the nurses however felt that group leadership was difficult and challenging and expressed a need for education in group dynamics and group

leadership. The CHS nurses who participated in the group leadership course in Study B felt strengthened in their group leader role and expressed a change in perception towards the work task. The group leader role was clarified and the nurses received the knowledge they needed to further develop their group leadership skills. They described that they had started to work differently with the groups and use their new tools to plan and perform the parental groups in new ways. The nurses felt encouraged to work with their parental groups and expressed feeling increased job satisfaction.

Despite extensive experience of leading parental groups, CHS nurses feel insecure in group leadership. A course in group leadership seems to strengthen the CHS nurses in their group leader role and might help them fulfil the objectives of parental groups. Parents attending CHCs with high Care Need Index are underrepresented in parental groups and there is a need to adjust the support to reach more parents. The parental groups have been performed more or less the same way since implemented in 1978 and other needs and demands may have risen. Improved confidence in group management might motivate the CHS nurses to further develop parental groups to attract the parents who currently choose not to participate.

Original papers

This thesis is based on the following papers:

Paper I Lefevre Å., Lundqvist P., Drevenhorn E., Hallström I. "Managing

parental groups during early childhood: New challenges faced by Swedish child health-care nurses". Journal of Child Health Care:

for professionals working with children in the hospital and community. 2015 Sep; 19 (3):381-91.

DOI: 10.1177/1367493513509421. Epub 2013 Dec 2.

Paper II Lefèvre Å., Lundquist P., Drevenhorn E., Hallström I. "Parents'

experiences of parental groups in Swedish Child Health Care – do they get what they want?". Journal of Child Health Care: for professionals working with children in the hospital and

community. 2016 Mar; 20(1):46-54.

DOI: 10.1177/1367493514544344. Epub 2014 Aug 28.

Paper III Lefèvre Å., Lundquist P., Drevenhorn E., Hallström I. "Managing

parental groups: Personal impact of a group leadership course for

child health care nurses." Journal of Clinical Nursing.

DOI: 10.1111/jocn.13446. Epub 2016 July

Paper IV Lefèvre Å., Lundquist P., Drevenhorn E., Hallström I. "From

resistance to challenge": Child Health Service nurses experiences on how a course in group leadership affected their management of

parental groups." Submitted.

Abbreviations and definitions

ARL Action Reflection Learning, pedagogic model combining

lectures, practice and reflection

CONSORT Consolidated Standards of Reporting Trials.

Recommendations for reporting randomized trials

CHC Child Healthcare Center (Barnavårdscentral, BVC)

CHS Child Health Service (Barnhälsovård, BHV)

CHS nurses Both CHC (BVC sjuksköterskor) and CHS (BHV

sjuksköterskor) nurses are used within the literature. After the 2015 the term CHS nurses is preferred

(National network for child health care coordinators/developers in Sweden 2015)

CNI Care Need Index

ICDP International Child Development Program

IPFCC The Institute for Patient and Family Centered Care

MRC Medical Research Council

NCD Non Communicable Diseases such as cardiovascular

diseases, cancer, respiratory diseases, and diabetes

RCT Randomised Controlled Trial

UNCRC United Nation Convention on the Rights of the Child

WHO World Health Organisation

QCA Qualitative Content Analysis

Introduction

The close relationship between young children's living conditions and their health later in life is well documented and a safe and healthy environment during early childhood promotes cognitive functions and social development, as well as mental and physical health during the whole lifespan (Irwin & Hertzman 2008, Kieling et al. 2011, McCrory et al. 2010). High levels of stress for the child during early years is associated with inferior physical and mental health, poor academic results, antisocial behaviour and increased risk behaviour (Irwin & Hertzman 2008, Stewart-Brown & Schrader-McMillan 2011). The benefit of universal early intervention programmes and parental support has been highlighted both internationally (Irwin & Hertzman 2008, Kieling et al. 2011, Stewart-Brown & Schrader-McMillan 2011) and nationally (Lagerberg et al. 2008, Swedish Ministry of Health and Social Affairs 2009) and it is argued that investments in such interventions are highly cost effective (Bremberg 2004, Irwin & Hertzman 2008). However, there is limited research on the effects of early support for parents and children and further knowledge is required (Bremberg 2004, Irwin & Hertzman 2008, Swedish Ministry of Health and Social Affairs 2009).

Parental groups are offered to almost all parents in Sweden by the child health service (CHS) during their child's first year, but only half of the parents choose to participate (Centre of Excellence for Child Health Service 2016, Wallby 2008). The participating parents are mostly well-educated Swedish-speaking mothers. Parents living in areas with high Care Need Index (CNI) (SCB 2010) are less likely to participate (Centre of Excellence for Child Health Service 2016). Parental groups provided by the Swedish CHS were integrated into the CHS programme in 1978 (Swedish Ministry of Health and Social Affairs 1978). The groups are still designed and implemented in more or less the same way and it can be questioned if the groups offers what the parents want. There is a lack of current research on parental groups and to further develop the early parental support provided by CHCs, it is important to gain knowledge about CHS nurses' and parents' experiences of parental groups. The purpose of the thesis was to elucidate group-based early parental support provided by the CHS from the perspective of CHS nurses and parents (Study A) and as a result of the findings to develop and evaluate a group-based intervention including a course in group leadership (Study B).

Background

Children's health

During 2015, 5.9 million children under the age of five died mostly due to preventable causes (WHO 2016a). The most common causes of death were preterm birth complications, pneumonia, diarrhoea and malaria and about 45% of all infant mortality is inked to malnutrition (WHO 2016a). The WHO estimates that almost half of child and infant mortality could have been prevented with low-cost interventions like exclusive breastfeeding or adequate nutrition for malnourished children, adequate sanitation and hygiene to avoid diarrhoea and vaccination to prevent infections (WHO 2016a). Throughout the world, the incidence of mental and behavioural disorders among children and adolescents is high and expected to rise further (Barlow & Parsons 2003, Kieling et al. 2011, WHO 2001), with symptoms such as anxiety, depression, insomnia, fatigue and headache having become more common among children and adolescents over the last 20 years (Barlow & Parsons 2003, Kieling et al. 2011, WHO 2001, 2004). In Sweden as well as Western Europe, child health has improved, child mortality has decreased, infectious diseases have become easier to prevent while non communicable diseases (NCD) dominate paediatric practice (Wolfe et al. 2013). The physical health of children in Sweden is good and the infant mortality rate is low (The Public Health Agency of Sweden 2014a). Mental and behavioural disorders is however currently one of the largest public health problems among youths and children (The Public Health Agency of Sweden 2014a, Hallberg et al. 2005, Swedish Ministry of Health and Social Affairs 2009) and the number of young people being treated for depression and anxiety has risen (The Public Health Agency of Sweden 2014a).

Theoretical framework

The present and future health of a child is highly dependent on several factors influencing the daily life of a family. The Swedish CHS is based on a child and public health perspective aiming to strengthen and facilitate several of those factors. In this thesis two theories related to the health and developments of a child are used to

enable the understanding of the complex interplay between the different factors affecting children's health and development.

The bioecological model developed by the psychologist Urie Bronfenbrenner is a system theory describing the process of human development as being shaped by the interaction between an individual and their environment (Bronfenbrenner 1979, 1999). According to Bronfenbrenner, the developing person, which in this context will be referred to as the child, can be seen as a result of the influences of parents, friends, school, work, society and culture. To explain the interactions he created a model with five different systems; the micro-, meso-, exo-, macro- and time system, where the child and his or her relationships form the centre, a microsystem (Bronfenbrenner 1979, 1999). The microsystem consists of patterns of activities and relationships that directly influence the developing child. These activities such as daily routines and traditions including the child refer to activities not only within the nuclear family (child, parents and siblings) but the whole setting in which the child lives. The mesosystem is described as "the relationship between two or more microsystems" (Bronfenbrenner 1999 p. 17). An example of this is when the child starts day care (a new microsystem) where the mesosystem refers to the relationship between the day care and the family. An introduction when the parent accompanies the child to the day care centre for the first few days, and parental meetings, were parents meet with the day-care personnel and parents of the other children in the group are examples of ways to strengthen the mesosystem (Gulbrandsen 2009). The exosystem, consists of persons and systems indirectly affecting the child, such as the parental employment, neighbourhood, and parental friends which are parts of processes affecting the child, however not including it. The exosystem includes social integration and influences revealed by different relationships as for example the influences of the parenting styles practiced by the parents of the friends of the child and by other parents in the neighbourhood.

"The exosystem comprises the linkages and processes taking place between two or more settings, at least one of which does not contain the developing person, but in which event occur that indirectly influence processes within the immediate setting in which the developing person lives" (Bronfenbrenner 1999p19).

The fourth system, the macrosystem, refers to the cultural context surrounding the child and the family including laws and regulations, ethnicity, socioeconomic status and poverty factors, living in a developing or industrialized country, which all directly or indirectly affects the microsystem of the child (Bronfenbrenner 1979, 1999). The macrosystem enclose the other three systems and affects them by creating norms and social patterns (Gulbrandsen 2009). The social security system is one example of a macrosystem in a country and religious belonging another. Finally Bronfenbrenner describes the fifth system which refers to the dimension of time, including the lifespan of the individual, the epoch of history in which the person lives and the interdependency of all family members, within and across the generations

(Bronfenbrenner 1999, Gulbrandsen 2009). The bioecological process is a never ending process and is not to be seen as static, but an ongoing process affecting the development of the individual throughout the path of life (Bronfenbrenner 1999).

To help us to understand the important role possessed by the parents for the development of the child, the theory developed by the psychologist Michael Guralnick is used (Guralnick 2005). In his research, Guralnick identified three family interaction patterns which are of specific importance for assuring the development of young children. The first is what he calls the "quality of parent-child transactions" and refers to the interaction between the parent and the child. A secure attachment, followed by a warm relationship including open communication with reasonable demands during the whole childhood, are related to positive development with less criminality, violence, school dropout and better health as a result. The second family interaction pattern refers to the parents being responsible for providing the stimulation needed for the child to develop in an optimal way. The parents are responsible for providing a stimulating environment for the child, with age-appropriate activities and experiences, such as stimulating toys and home environment as well as appropriate child care. The third family interaction pattern according to Guralnick is for the parents to ensure the health and the safety of the child which includes maintaining health regimens such as immunization programmes as well as providing sufficient nutrition and sleep (Guralnick 2005). Threats against the possibility to satisfy these needs could, according to Guralnick, be economic distress, lack of social support to the family, low intellectual capacity, mental illness among the parents or child abuse or neglect. The balance between risk factors and protection factors are essential and the accumulation of risk factors is considered to be the greatest threat towards a healthy development of the child (Guralnick 2005).

Family support

"A healthy start in life gives each child an equal chance to thrive and grow into an adult who makes a positive contribution to the community – economically and socially."

Early Child Development: A powerful equalizer, WHO 2007

Becoming a parent is a major life transition and it is often described as a stressful and vulnerable time involving changes to lifestyle and routines (Deave *et al.* 2008, Fagerskiold *et al.* 2001, Nolan *et al.* 2012). Parents attempt to shape their role as parents with both fathers and mothers sometimes reporting feelings of isolation (Premberg *et al.* 2008, Tiitinen *et al.* 2013). The interest in parental support has exploded during recent decades and early interventions aiming to support parents during the most stressful period are advocated (Guralnick 2005, Irwin & Hertzman 2008). The presence of systems supporting the family life differs widely

and the accessibility and organisation of healthcare, school and social security varies throughout the world. However the needs among parents differ and parental support has to be adapted and tailored to the culture and parents it is intended for (Stewart-Brown & Schrader-McMillan 2011). The childhood period is considered to be the most important developmental phase in life, and investments in family life for young children are considered to be one of the most powerful investments a country can make (Stewart-Brown & Schrader-McMillan 2011).

The family

Being the primary context of the child, the family constitutes a strong influence on child health and development (Bronfenbrenner 1999, Guralnick 2005). The definition of a family varies between different cultures and might for example include one single parent and a child or an extended family including several relatives and friends (Bäck-Wiklund & Bergsten 2010). In Sweden the family tends to be defined as the traditional nuclear family including parents and siblings (Bäck-Wiklund & Bergsten 2010). Family patterns are however changing and new varying family constellations are more common today (Bäck-Wiklund & Bergsten 2010, Wissö 2012). The Institute for Patient and Family Centred Care (IPFCC) defines the family as two or more persons who are related in any way, whether biologically, legally or emotionally, as defined by the family members themselves (IPFCC 2010). This thesis focuses on the support provided by the CHS during the child's first year, aiming to support parents to provide a healthy environment for the child and will therefore refer to the family as the persons living close to the small child and attending the CHS together with the child, which most often are parents (biological or non-biological, regardless of gender) and siblings.

Social insurance

Accessibility and organisation of social benefits for maternal care or family allowances varies widely worldwide. Some countries have universal support for the whole population while others have chosen an income-based approach, all depending on the strategies used for financing in the country (Social Security Administration USA 2015). Most industrialised countries have had family allowance programmes in different forms since 1945 (Social Security Administration USA 2015). In the European Union for example the parental leave consists of a minimum of 14 weeks where the amount of payment is based on income depending on country of residence (European Parliament Research Service 2014).

Sweden has a long tradition of providing families with comprehensive social insurance (Swedish Social Insurance Agency 2016a) beginning with a small benefit for the mother in the 1930s "Moderskapsförsäkringen" replaced 1974 by a parental benefit

for both parents (Swedish Social Insurance Agency 2004). The benefit is based on income with a minimum allowance for parents without. The current parental benefits make it possible for parents to stay at home from work with their child for 480 days i.e., 240 days for each parent, of which 90 are reserved for each parent, while the remaining days can be transferred between the parents as they wish. Some of the days can be used by both parents at the same time in order to attend pre- and post-natal parental groups (Swedish Social Insurance Agency 2016b).

In order to promote equality, a month that could be used only by the parent who has not given birth was introduced in 1995, followed by a second month in 2006 and a third in 2015 (Swedish Social Insurance Agency 2016a). An equality bonus was implemented in 2008 to encourage parents to share the parental leave equally (Swedish Social Insurance Agency 2016a). Child benefit for all children is paid every month until the child is 16 years old, and housing allowances can be applied for low-income families with children (Swedish Social Insurance Agency 2016b).

Parental support in Sweden

Parental support in Sweden is defined as an activity for parents with children between 0 and 18 years that aims to promote children's health and psychosocial development and strengthen the parents' social network (Swedish National Board of Health and Welfare 2008). The support is supposed to be available for all parents, be optional and based on the needs and wishes of the parents (Public Health Agency of Sweden 2013). Parental support encompasses a broad spectrum of universal and targeted activities within several different disciplines, including early parental support within maternity and CHS, social services, preschool and school, non-profit organizations and industry, with the aim of reaching all parents with children in different age groups (Swedish National Board of Health and Welfare 2008). Parental support systems in Sweden have however been found to be disorganized and vary widely between different parts of the country. In 2009 national guidelines for parental support were developed in order to improve coordination and further develop the existing support (Swedish Ministry of Health and Social Affairs 2009).

Child Health Service

It is difficult to get a picture of the child health care systems worldwide, but following the immunization coverage of measles is a useful indicator of the strength of immunization and child health programmes in general (WHO 2016b). In 2008 the lowest immunization rates could be found in Africa and the South East Asia with about 75% coverage, and the highest were found within the European Region

with 94% coverage (WHO 2016b). The systems for child health care in Europe differ and various providers are organized in different ways (McKee & Wolfe 2014). A trend seems to be that active surveillance and detection of health problems has moved towards more passive systems with child wellbeing checks initiated by the parents instead of routine visits (McKee & Wolfe 2014). The Scandinavian countries have many similarities within the CHS provided (Håkansson *et al.* 2006). All countries have a national programme, financed by the government, coordinated by a nurse with a general practitioner or paediatrician tied to the service. There are however some differences. The Danish system is mostly homebased and the number of visits included in the programmes varies. Parental groups are a fixed part of the Swedish programme while it is optional for the providers in Norway and Denmark (Håkansson *et al.* 2006).

Swedish Child Health Service

Sweden has a long history of CHS, not only aiming to reduce disease, mortality and disability but also to support parents in their parenting role (Swedish National Board of Health and Welfare 2014, Sundelin *et al.* 2005). The UN Convention on the Rights of the Child (UNCRC) is indicative for the work in CHS (Swedish National Board of Health and Welfare 2014) and the aims of the CHS are based on the Swedish Health and Medical Service Act (Swedish Parliament 1982) establishing good health care on equal terms for all citizens, meaning that those who have the greatest need of health care should be given priority access (Swedish Parliament 1982). The CHS support is appreciated and reaches approximately 99% of all children in Sweden (Swedish Ministry of Health and Social Affairs 2009).

History

The development of European child health care during the 20th century aimed to reduce infectious diseases during the first half of the century and was followed by an era of preventative medicine. Better living conditions and prevention of infectious diseases led to a shift in focus for child health care, where NCDs have become the dominating problem and prevention has become increasingly important (McKee & Wolfe 2014). The development of the Swedish CHS followed the rest of Europe during the early 20th century with the start of "Mjölkdroppen" in 1901 which was a drive to provide indigent mothers with milk and encourage breastfeeding. This was conducted at a time where Swedish society was characterized by high infant mortality rates (10%) as a result of malnutrition, overcrowding, poor hygiene and infectious diseases (Hallberg *et al.* 2005, Stenhammar *et al.* 2001). Different periods can be distinguished within the history of CHS (Sundelin *et al.* 2005). The 1930s to 1950s focused on education and health surveillance, including the introduction of vaccine distribution during the 1940s, followed by a period characterized by health guidance and detection of risks and poor development during the 1950 to 1970s. The infant

mortality rate in Sweden had decreased to 0.3% and between 1970 and 1990 family and parental support became the focus (Hallberg *et al.* 2005). Parental education and collaboration with preschool became officially-integrated parts of the CHS during the late 1970s (Hallberg *et al.* 2005, Magnusson 1999, Stenhammar *et al.* 2001) and identification of social related risk groups and psychosocial orientation was in focus. From the 1990s to present the relationship between the professionals working within the CHS and the parents have change from control and surveillance towards partnership (Swedish National Board of Health and Welfare 2014) meaning that the responsibility for surveillance and detection of abnormalities have slightly moved from CHS to parents (McKee & Wolfe 2014, Sundelin *et al.* 2005).

Today, the CHS is part of a health care chain including maternity care, child health care and school health care. When a child is born, its family is invited to participate in the CHS programme, lasting until the child reaches the age of six and is transferred to the school healthcare programme. The CHS programme is free of charge and includes home visits, regular health examinations, a vaccination programme and individual as well as group-based parental support (National Child Health Handbook 2014a).

Organization

The CHCs may be privately or publicly run. Most CHCs are situated in a primary healthcare centre as a separate clinic, but may also be organized as a family centre including maternity care, social workers and open preschool activities in close collaboration.

Care Need Index

Public health reports show that overall public health is developing positively, the differences between groups with different socio-economic conditions is however evident in all ages (The Public Health Agency of Sweden 2014a). CNI is a method to measure health needs based on the socio-economic conditions for individual distinct populations in order to allocate primary health care resources resulting in health care centres with high CNI receiving more founding than those with low CNI (SCB 2010). Variables included in the model entailing a high CNI are age 65 and over and living alone, foreign-born (Southern and Eastern Europe (non-EU), Asia, Africa and Latin America), unemployed 16 – 64 years old, single parent with children aged 17 or younger, low level of education 25-64 years and age below 5 years (SCB 2010).

Nurses within the child health services

The nurses working in the CHS have a specialist nursing education in paediatrics or public health nursing, including education within healthcare for children and adolescents (National network for child health care coordinators/developers in Sweden 2015). The CHS nurse may be working at a CHC with both grown-ups and

CHS, a so called "integrated CHC" or only with children within the CHS. The work includes promoting children's health and development (promotion) and preventing ill-health (prevention) as well as health surveillance (Swedish National Board of Health and Welfare 2014). The CHS team is led and organized by the CHS nurse, with a physician performing predefined health check-ups and extra consultations when needed. Referrals to other experts in the team, such as psychologists, dieticians and speech therapists are made when needed (Swedish National Board of Health and Welfare 2014). The CHS nurse works independently with the families but as the work of the CHS nurse has changed over recent decades (National network for child health care coordinators/developers in Sweden 2007), a close collaboration with the CHS team and instances related to the children and families has become essential (National network for child health care coordinators/developers in Sweden 2007). Knowledge about social paediatrics and public health have become more important and the CHS nurse needs to have knowledge and skills to work from a holistic point of view in order to prevent and promote the health of the family as well as the ability to understand the complex interplay between living conditions and health (National network for child health care coordinators/developers in Sweden 2007). To actively support parents in their parenthood and thereby create good conditions for the development of the child and give individualized support to families at risk is a fundamental part of the work (Swedish National Board of Health and Welfare 2014).

Promotion and prevention are key concepts in the work of the CHS nurse. Health promotion is defined by the WHO as the process of enabling people to increase control over and improve their health, involving both structural changes in the society as well as changes in the life of individuals (WHO 2016c). Prevention, divided in primary and secondary prevention refers to actions aimed at avoiding the manifestation of diseases (primary) and deal with early detection when this improves the chances for positive health outcomes (secondary) (WHO 2016c). For the CHS nurse this entails for example the immunization programme, detection of risk factors such as obesity or failure in parent-child attachment, followed by supportive conversations about lifestyle factors or counselling and supportive advice on how to establish healthy interaction. The concept of empowerment can be defined as "a social process of recognising, promoting and enhancing peoples' abilities to meet their own needs, solve their own problems and mobilise the necessary resources in order to feel in control of their own lives" (Gibson 1991, Vuorenmaa et al. 2016) and is central for the CHS nurses in their work to strengthen the parents in their parenthood by for example providing knowledge and information about child health care, child development and family-related rights. Self-efficacy refers to "a person's belief in own capacity to organize and execute the course of actions required to produce given attainments" (Bandura 1997 p. 3) and is essential within health promotion as a person are more likely to act if they perceive themselves as having the necessary abilities to success (Kendall 1998).

Health prevention is also referred to as *universal*, *selective* or *indicated*. The CHS programme is *universal* as it is offered to all children and parents regardless of income or risk exposure and focus on strengthening a person's protective factors. Additional parts of the CHS programme are however *selective*, aiming towards sub groups with increased risk exposure, like specialised parental groups offered to for example young or single parents, or *indicated* like an intervention offered to individuals who already have pre-identified problems like for example counselling, when a risk for maternal depression is detected, or referral to a speech therapist when needed (Gordon 1983).

Group-based parental support

Early group-based parental support, "parental groups" have been provided by the Swedish CHS since 1978 (Swedish Ministry of Health and Social Affairs 1978). The aim of these groups is to strengthen the parents' in their parental role by providing knowledge of children's needs and rights and offer a place for parents to meet with others in the same situation and thereby strengthen their social network (Bremberg 2004, National Child Health Handbook 2014b).

The parental groups are offered to the parents of almost all children, regardless of whether it is the family's first child or if the parents have been offered parental groups before. The parental group starts when the child is six to twelve weeks old and meets eight to ten times during the child's first year. A recommended five to eight families participate in each group and the meetings to last about 1½ hours. The meetings are recommended to take place in the morning or in the evening to enable both parents to be able to participate. (National Child Health Handbook 2014b). The content of the meetings are recommended to be based on the requirements of the parents, but different parenting topics such as nutrition, sleep and child safety almost always appear (Table 1) (National Child Health Handbook 2014b, Wallby 2008). Some CHCs organize parental groups for a specific group of parents such as young parents, parents of twins, parents of adopted children and parents with first languages other than Swedish. The incidence varies, however, and it is up to the individual CHS nurse to initialize such groups (Wallby 2008).

Table 1. Recommended topics in parental groups

Meeting	Recommended topics
1. Introduction	Establish rules for group meetings. First few days at home. Social networks, sleep (child), tiredness (parents), crying and comforting, breastfeeding, child safety (child's bed and in the car), the joys and challenges of parenthood
2. Adaption to a life with child	Transition to becoming a parent. Childhood needs and development, equality, expectations, sibling issues, sex and relationships, jealousy, parental leave
3. What does the child need to thrive?	Childhood needs and development, child safety (as the child becomes more mobile), children's sleep patterns, self-care, children's health and diseases, vaccination, the joys and challenges of parenthood, stimulane, monitoring, peace and quiet.
4. Eat grow and feel well	Breastfeeding and nutrition, tobacco, alcohol and drugs, how do the parents' eating and drinking habits affect the child's eating habits
5. Everyday life	Everyday family life, working, parental leave, bad conscience, shared parental leave, couple relationships, who gives the parent support, child needs and development
6. Guiding your child	The UN Convention of the Rights of the Child, parenting, outdoor activities, physical activities, child activities and stress factors, nutrition and eating habits, tobacco and alcohol, TV habits, reading
7. Child safety	Child development, child safety
8. Language and play	Development of language and speech, reading together, child development, screen time, TV computer and smartphone, fear of strangers, toys, nursery rhymes, outdoor play
9. The world at large	Family life, social networks, expectations on life, kindergarten, child development, eating habits dental health, infections, child safety, tobacco and alcohol
10. Conclusion	Child development, independent will, completion

From National Child Health Handbook (2014b).

Only forty-nine percent of all families in Sweden participate in parental groups within the CHS and for example parents belonging to CHC centres with high CNI are underrepresented (Centre of Excellence for Child Health Service 2016, Wallby 2008). The form, objectives and topics addressed in the parental groups are more or less the same as they were in 1978 (Swedish Ministry of Health and Social Affairs 2009), and it can be questioned whether the groups provide what the parents want. The CHS has a long tradition of providing both group-based and individual parental support during the child's first year as part of its regular activities, but few structured methods are used. The parental support within CHS has sometimes been criticised for lack of evaluation (Sundelin & Hakansson 2000, Sundelin *et al.* 2005, Swedish National Board of Health and Welfare 2008) and how parental groups are perceived is sparsely investigated. Therefore more knowledge about how parental groups are experienced by parents and CHS nurses could be valuable to further develop the parental groups.

Aims

The overall aim of this thesis is twofold, first to elucidate group-based early parental support provided by the CHS from the perspective of CHS nurses and parents and second, based on the findings, to develop and evaluate a group-based intervention including a course in group leadership. The thesis is based on four papers, each with its own specific aim.

Paper I: To describe CHS nurses' views of managing parental groups during early childhood in a county in Sweden.

Paper II: To describe parents' experiences of participating in parental groups at the CHC centres during their child's first year with focus on content, management and experience.

Paper III: To evaluate the experiences and personal impact of a group leadership course on the CHS nurses.

Paper IV: To describe how a course in group leadership affected CHS nurses in managing parental groups.

Method

Design

Study A was designed to elucidate group-based early parental support provided by the CHS from the perspective of CHS nurses and parents and a cross-sectional method involving questionnaires was used for data collection (Paper I-II). In Study B, a randomized controlled study design was chosen following the CONSORT recommendations for randomised controlled trials (RCT) (The CONSORT group 2010) to evaluate a group-based intervention (Paper III-IV) (see Table 2).

Table 2. Sample and methods of the studies presented in this thesis

Study	Paper	Design	Sample	Data collection	Analyses
A	I	Cross-sectional	CHS nurses from 31 different munici- palities (N=156)	Questionnaires	Descriptive and comparative statistics
	II	Cross-sectional	Parents from 71 parental groups at 27 different CHCs (N=143)	Questionnaires	Descriptive and comparative statistics
В	III	Randomised controlled trial	CHS nurses (N=56) Course leaders (N=2)	Questionnaires pre- and post-test Course evaluation Open interview	Descriptive and comparative statistics Qualitative content analyses
	IV	Inductive descriptive	CHS nurses (N=21)	Focus group interviews	Qualitative content analyses

Methodological framework

The research follows the guidelines for complex interventions developed by the Medical Research Council (Medical Research Council 2008). The framework was developed in 2000 for research consisting of various interacting components, most often with the aim to evaluate the effectiveness of an intervention in everyday practice and was revised in 2008 (Craig et al. 2013, Medical Research Council 2000, 2008). The guidelines provide a structural way to consider different issues during the research process to prevent implementation failure (Craig et al. 2013). The framework consists of four different phases for development, feasibility/piloting, evaluation, and implementation. In the development phase existing evidence and best practice is identified, as well as the desired changes and theories of how they might be achieved (Craig et al. 2013, Medical Research Council 2008). Possible hindrances and facilitating factors are to be identified and the design of the intervention is modelled. The feasibility/piloting phase includes testing different key parts of the intervention to eliminate uncertainties (Craig et al. 2013, Medical Research Council 2008) and the evaluation and implementation phase includes dissemination of the results and the intervention, which might include strategies for making the intervention available for policy makers and plan for implementation on a larger scale, including long-term follow up and further evaluation (Medical Research Council 2008). The phases in the framework should be considered in a systematic way - not necessarily linear or cyclical - aiming to find and decrease the uncertainties in the design (Craig et al. 2013, Medical Research Council 2008).

In the development phase a literature review was performed prior to the studies identifying a gap in research with few publications found after the year 2000. Study A was performed to further identify the needs of parents and nurses. The results of Study A led to several group discussions with CHS nurses within the CHS organisations and resulted in the development of an intervention consisting of a course in group leadership for CHS nurses managing parental groups. Discussions with key stakeholders and professionals within the CHS as well as with experts working with group development and group processes were performed to model processes and outcomes of the intervention. Possible hindrances such as lack of time and difficulties in obtaining all geographical areas represented were identified and considered. In the piloting phase sample size calculations and recruitment procedures were carefully considered with the power calculation as well as dropout rates from earlier studies. An evidence-based and well-tried pedagogic model (ARL) was chosen. In the evaluation phase theories of self-efficacy and empowerment were used in order to facilitate the process of understanding the change processes and to identify the active ingredients in the intervention. As suggested in the MRC framework different methods and designs were considered to evaluate the intervention, strengths and limitation in the design of the present project are discussed and further studies to

strengthen a possible implementation are suggested under different sections within this thesis.

Context of the study

The studies were conducted in Skåne between November 2011 and September 2015. Skåne is a county in the south of Sweden consisting of both rural and urban areas with 1.2 million inhabitants. Every year, 16,000 children are born in the county (Statistics Sweden, 2011). Skåne has 146 CHCs employing more than 350 CHS nurses. About 96,000 children between 0 and 6 years of age are registered at the different CHCs (Centre of Excellence for Child Health Service 2015). The public CHCs (60%) in Skåne are integrated in three different organisations, each one with its own management, according to its geographical location.

In 2010, a manual for group-based parental support was implemented in the CHS in Skåne. The manual consisted of an agenda for eight meetings with different topics at each meeting, followed by a guide pointing out important knowledge for the CHS nurse to emphasize. The aim for the manual was to serve as a source of inspiration and could be used as a guide for which topics and knowledge that was to be mediated by the CHS to the parents (Development Units for Child Health Care 2009). Two training days were offered to all CHS nurses during the implementation phase, focusing on the topics addressed in parental groups. This manual was replaced by national recommendations during 2014 (National Child Health Handbook 2014b).

Study population

Nurses

Characteristics of the CHS nurses participating in the studies in this thesis are presented in Table 3.

Table 3. Description of study population. Comparison with background characteristics of the participating CHS nurses in Study A and B, the national survey with 80% participation rate (Wallby 2008) and the whole CHS nurse population working in Skåne 2015.

Characteristics	National survey 2008*	CHS nurses in Skåne 2015	Study A 2011	Study B 2014
	N=1,943	N=374	N=311	N=56
Education (%)				
Public Health Care	72	60	70	55
Paediatric	17	30	22	30
Public Health Care + Paediatric	9	7	5	9
Other or no specialist education	1	3	3	6
Years working in CHC (%)				
1-5	30	34	38	38
>10	**	42	42	41
>20	30	14	**	**
Organization (%)				
CHC organized as Family Centre	30	23	19	27
CHC-centre	70	77	81	73
Nurses working only with children	53	54	43	64
Nurses working with children and adults	45	46	57	36

^{*}No register for all CHS nurses working in Sweden containing this data have been found, the national survey 2008 is used as 80% of all CHS nurses participated.

In Study A, all (N=311) CHS nurses in Skåne were invited to participate (Paper I). One hundred and fifty six CHS nurses (55%) from 31 of the 33 municipalities in Skåne were represented (see Figure 2). The nurses who participated varied in terms of their education and experience of working at CHCs. Most nurses, 70%, had a public healthcare education, 38% had been working for between 1 and 5 years and 42% had been working for more than 10 years. The majority of the nurses (81%) came from ordinary CHCs (i.e. not a family centre) and 43% of the nurses only worked with

^{**}no data avalable

children. Both CHC centres organised as family centres and primary health care centres were represented.

In Study B, all CHS nurses working in Skåne at the time were randomised and geographically stratified for the intervention (n=259) and control group (n=131) to achieve 75 participating CHS nurses in each group. The randomization, stratification and recruitment procedures for Study B are described in detail under "Randomization and stratification" in this section. Finally, in total 56 CHS nurses were recruited for the intervention group (Paper III) representing variation in terms of educational background, experience of working within the CHS and child healthcare organisation. In total, 23 CHS nurses in the control group answered the baseline questionnaire. Two nurses answered that they did not want to participate in the study if they were not allowed to attend the course. The low participation in the control group resulted in the inability to make comparisons between the groups. Thus a decision to cancel the control group was made, which resulted in participants in the intervention serving as their own control using the pre- and post-questionnaire (for participants in Study B see Figure 1).

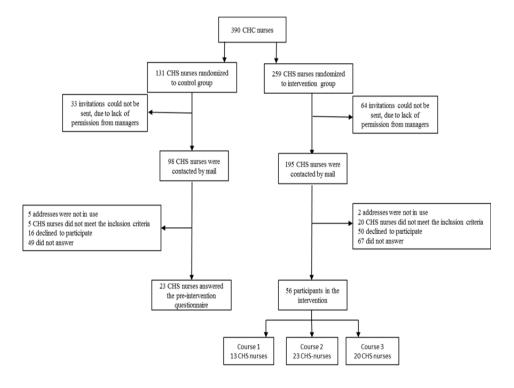


Figure 1. Flowshart of CHS nurses participating in Study B.

Randomization and stratification

In Study B, all CHS nurses working in Skåne in May 2014 were randomised to either intervention or control group. The randomization lists were created by The Research and Education Center in Skåne using the R ver. 3.1.1 software (RCoreTeam 2014).

To promote a geographical spread the CHS nurses working at publicly run health centres were divided into three strata after their organizational belonging. The CHS nurses at the privately run CHCs in the area were added to the strata reflecting their geographical location. A certain amount of places in the intervention were reserved for each strata to guarantee a geographical spread, reflecting 20% of the CHS nurses working in the area. An invitation letter with information about the study was sent to the first 75 persons on the three lists of nurses randomised for the intervention group, divided according to the number of places reserved for each stratum in the intervention. New invitations were sent out as the nurses turned down the invitation. Letters to all 131 CHS nurses randomised for the control group were sent at the same time.

For the focus groups interviews in Study B (for further details see Table 4), a sample of 37 CHS nurses was drawn from a list with all 56 participants in the intervention group (Paper IV). Every third participant was selected on the list, making sure that all course groups were represented in all focus groups.

Table 4.	Stratification	in	study B.
----------	----------------	----	----------

	Area 1	Area 2	Area 3	Total
CHS nurses in total	80	140	170	390
Educational places reserved per area in intervention	15	27	33	75
Randomised for intervention group	53	93	113	259
Randomised for control group	27	47	57	131
Participating in intervention	4	11	41	56

Parents

In Study A 274 parents from 71 different parental groups at 27 CHCs volunteered to participate (see Figure 2). Of those, 143 (53%) parents answered the questionnaire (Paper II). Most parents were mothers (93%) with their first child (62%), born in Sweden (92%), living together with the child's father (97%), had a college or university degree (68%) and were employed when they were not on parental leave (87%) (For further details see Paper II, Table 1).

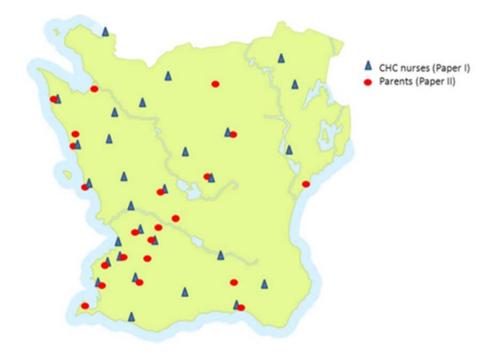


Figure 2. The locations of the participating CHCs in Skåne (larger towns with many centres are only shown once)

The intervention

In Study B an education in group leadership was developed and offered to 56 CHS nurses working with parental groups. A course plan was developed by the author of this thesis in collaboration with the course leader, a professional trainer working full time with group leadership courses and organizational development. Three different education groups were carried out by the course leader and an external trainee. The same course plan was used in all education groups.

The education in group leadership was developed in order to provide knowledge and awareness about group dynamics, processes and leadership in a group as well as skills to influence the climate, promote interaction between the group members and deal with the challenges that may arise in a group. The education also aimed to increase self-awareness in the role as a group leader and intended to develop the strengths of each individual participant. The education was based on the pedagogic model ARL, a learning methodology used in adult learning settings for leadership development within various different contexts (Rimanoczy 2008). With guided reflections using learning journals and specific questions and exercises, tacit knowledge like know-how,

judgment, experiences, insights, intuition and skills were to be discovered by the participants and transformed into explicit knowledge. Short theoretical lectures, exercises and reflection were used to create awareness of the results of own actions and to add knowledge of the exercises that could be used to influence climate and processes in a group (Rimanoczy 2008). The education consisted of three one day sessions with three to four weeks apart.

Session one: Create a trusting climate

The first course session began with the study team giving a short oral presentation of the study, possibilities to ask questions and the participants signing a written informed consent. The session focused on how to create a trusting climate in a new group. The importance of having a clear structure, introducing each other and monitor expectations were highlighted. Different kinds of techniques for "check in" were used including introduction rounds, how to monitor expectation and to present a clear structure for the meetings, and each participant had to reflect over own feeling of being a part of a new group. By discussing how group leadership in parental groups would be "in an ideal world" the participants were encouraged to reflect upon their assignment to manage parental groups, the purpose as well as different group leader techniques. This exercise was later used for the participants to reflect on regarding their own strengths and potential development areas as group leaders. Different group dynamic theories were introduced followed by training in coaching and supporting interview techniques. At the end of the day each participant defined one or a couple of tasks to be tried out in their parental groups until session two.

Session two: The group leader as conversational leader

The second course session started with a check in round followed by reflection about the homework and recapitulating the main features from session one. It was followed by exercises trying to identify and handle differences that could affect the participants in a group. Theories about strength based development was introduced and discussed in relation to becoming a group leader or becoming a parent. The discussions were accompanied by exercises aiming to identify and reflect over own strengths to build upon and difficulties to handle, resulting in an individual development plan. Further training sessions in coaching interview techniques were held as well as training in giving and receiving feedback. Potential improvement areas were added to the personal development plan.

Session three: Change

The last session aimed to make the participants aware of the processes of change. Theories of change were presented and connected to own changes in the role as group leader as well as the parents in parental groups going through the major life change of becoming a parent. Different needs in the different stages of changes were discussed to illustrate that different parents could have different needs and should be met

differently. The importance of planning the group sessions was discussed and different exercises to discover the possibility to affect the energy in the group were tried. Different ways of designing a two hour parental group meeting were tried as a final exercise followed by feedback exercises. Session three was finished by a course evaluation distributed and collected by the research team.

During all sessions the participants in each group were divided into small working groups with five to six participants, intended to be kept undivided during the whole course. The working groups served as a model for how groups develop and how the climate can be influenced in groups by using different exercises. The processes in the working groups were highlighted and linked to theories about group processes by the course leader. The exercises used to influence the climate in the small working groups served as examples of exercises that could be used by the CHS nurses in their parental groups. Homework aiming to transform insights into action in own parental groups were given between the sessions. The task were submitted and responded upon by the course leaders by e-mail between the sessions.

Costs

The cost/CHS nurse for the group leadership course was SEK 3,214. The salary for the CHS nurse was estimated to SEK 2,800 per day which meant a total sum of SEK 8,400 for all three course days. The salaries are based on the average salary of a CHS nurse in Sweden including general payroll tax for health care personnel (Swedish Association of Health Professionals 2016). The course, food and beverages were free of charge for the CHS nurses and were financed within the research project, and the salaries were covered by the employer.

Data collection

Different instruments were used for data collection; two different questionnaires (Paper I, II, Study A and Paper III Study B), a course evaluation and interview with the course leaders (Paper III, Study B), and focus group interviews with the course participants (Paper IV, Study B). The instruments are presented separately, followed by the data collection procedures for each study.

Questionnaires

For the nurses in Studies A and B, a questionnaire containing 30 questions about the structure, content and extent of the CHS nurses' parental groups was used. The questionnaire was developed and piloted by professionals with extensive experiences

of CHS for a national survey used in 2008 (Wallby 2008). Before use the questionnaire was extended with eight questions about the CHS nurses' views on their group leadership and the group leadership manual implemented in 2010 were added, as well as the opportunity to add open-ended comments to some of the questions (Paper I). For Study B, the extended questionnaire was used as pre and post intervention questionnaire (Paper III). One question was added in the post intervention questionnaire about if, and if so, how the course in group leadership had affected their group leadership (Appendix I).

For the parents in Study A, a questionnaire containing 34 questions focusing on the topics addressed in parental groups, how parents found the groups to be managed and their overall experience of participating in parental groups was used. There was one final open-ended question where parents could leave comments about parental groups in general. The questionnaire was developed to describe the experiences of parental groups from a parental perspective in the Stockholm area, piloted, slightly modified, retested and used in 2001 by professionals who had worked for several years within CHS (Friberg 2001). Both questionnaires included questions about background characteristics, e.g. education and occupation. Most of the questions were of multiple-choice character (Appendix II).

Both questionnaires were converted into online questionnaires in the Verity Teleform 9 and Cardiff Teleform 10 versions of HP Teleform and were piloted during the spring of 2011 with eight CHS nurses from four different CHCs and 14 parents. To test face validity, i.e. explore whether the questionnaires were perceived as relevant by the participants and measuring what they were meant to measure (Kazdin 2010), they were all asked afterwards about their experience of the questions. Minor corrections to resolve technical issues were made after the pilot study.

Course evaluation

In Study B, a course evaluation regarding course content, relevance and training was used. The course evaluation form was previously used for primary health care nurses taking courses in further training. The form consisted of four questions arranged on a five-point Likert scale ranging from 1 "poor" to 5 "excellent" and three open-ended questions giving the possibility to answer in free text (Appendix III).

Interviews

Aiming to investigate the CHS nurses' different experiences of managing parental groups after the intervention in Study B, focus group interviews were performed. In focus group interviews, the invited participants discuss a specific topic during a limited time. A moderator and sometimes an assisting observer facilitate the

discussions and observe the interaction of the participants (Bourgeault *et al.* 2010, Krueger & Casey 2015). The focus group discussions provide the participants possibilities to formulate and articulate their responses without being prepared with a final solution or fully developed view (Bourgeault *et al.* 2010). An interview guide with themes was used to encourage the discussions among the nurses (Bourgeault *et al.* 2010).

The interview with the two course leaders was performed to find out their reflections and thoughts of the development among the course participants and the advantages and disadvantages of the course from their perspective (Paper III).

Procedures for Study A

Addresses for each of the CHS nurses working at the CHC centres in Skåne were provided by the Centre of Excellence for CHS in Malmö (Paper I, II, III).

In Study A (Paper I) a letter was sent by e-mail in November 2011 to test whether all of the 377 addresses were in use, resulting in 66 invalid addresses. This test was followed by an information email sent to the remaining 311 CHS nurses with information about the study, information about the Swedish Personal Data Act (Swedish Ministry of Justice, 1998), a unique study participation number and the web link to the questionnaire. Of the 311 CHS nurses, 13 responded that they did not have time to participate and 14 that they were not involved in parental groups (for further details see flowchart, Figure I, Paper I). Two reminders were sent to the nurses who had not answered the questionnaire and a final phone call was made to those nurses who had still not answered. A statement confirming the participant's informed consent was filled in in order to access the web based questionnaires.

Parents taking part in parental groups were invited to participate in the study by their CHS nurse. Updated addresses for the CHS nurses were requisitioned from Centre of Excellence in March 2012 (Paper II). A letter with information about the study was sent out to all 384 CHS nurses. There were 19 invalid addresses, 12 CHS nurses answered that they did not want to participate and five nurses were not working during the study period (for further details see Figure I, Paper II). The letter included standardized information about the study to be read out for the parents by the nurses when they had parental groups. To encourage the nurses to inform parents in their parental groups about the study, two announcements about the study were published in the monthly newsletter for CHS nurses from the Centre of Excellence for CHS in Malmö during the study period, and the author of this thesis attended six of the regularly arranged meetings for CHS nurses held by the Centre of Excellence for CHS during the autumn of 2012 to further inform about the study. Parents who were interested in participating provided their names and e-mail addresses to the CHS nurse who forwarded this to the author of this thesis. 274 parents volunteered and an information letter about the study and the Swedish Personal Data Act

(Swedish Ministry of Justice 1998) was sent to these parents, together with a unique participation code and the link to the online questionnaire. Informed consent was filled out before entering the questionnaire. Three reminders were sent to those parents who despite registration did not answer the questionnaire.

Procedures for Study B

In Study B, a letter was sent to the 56 CHS nurses who accepted to participate in the intervention with further information about the study and the questionnaire (Paper III). A letter including an URL link and invitation to fill in the web based questionnaire was provided two weeks before the start of the course. Reminders were sent to make sure that all participants had answered the questionnaire before starting the intervention. For the post intervention questionnaire a letter with an URL link to the questionnaire was sent to the participants in the intervention five to eight months after the course. Two reminders were sent to those who did not answer. All 56 CHS nurses completed the pre intervention questionnaire and 47 the post intervention questionnaire. Five nurses did not provide a reason for not answering, three nurses could not answer due to lack of time and one nurse was no longer working within CHS.

The course evaluation was completed at the end of the last course session (Paper III). 52 CHS nurses completed the evaluation form; four nurses did not complete the evaluation due to illness.

A 45 minute interview with the course leaders was performed by the author of this thesis two weeks after the last group finished their last session at a place of their choice; a café. The course leaders were asked to freely reflect over the course, their experiences of leading the course and the development of the participants. Notes were taken during the interview and summarized by the author of this thesis. The transcription was sent to the course leaders to confirm the data and give possibilities for further comments.

A total of 21 CHS nurses were interviewed in five focus groups between May and August 2015, five to eight months after the intervention (Paper IV). Information about the focus group interviews was given during the study information part during the first session of the intervention, and preferred time and place was discussed during the course. A short reminder about the purpose of the focus group interviews was sent to the sampled 36 CHS nurses by e-mail, followed by a phone call to confirm time and place. Fifteen CHS nurses turned down the invitation due to lack of time (9), illness (4), not working within CHS any more (1) and no wish to participate (1). The interviews took place in the afternoon in a small conference room at a university. All interviews started with small talk and light refreshments to make the participants feel comfortable (Kvale & Brinkmann 2014). An interview guide with four themes to be covered was used including "Experiences of managing parental groups", "Thoughts

about what it means to be a group leader in a parental group", "Experiences of participating in a course in group leadership" and "If and how the course had affected ways to manage parental groups". Additional questions like "can you please explain" or "could you give an example" were asked to further elaborate their thoughts.

The interviews lasted approximately one hour and were performed by the author of this thesis together with a member of the research team with extensive experience of focus group interviews as co-interviewer. All interviews were recorded and transcribed verbatim by the first author (n=1) and an external transcriber (n=4). Three focus groups were initially planned (n=3, 5, 5) and to confirm data two more groups were added (n=3, 5).

Data analyses

Statistical analyses

Analyses were conducted using the IBM SPSS version 20.0© (Papers I, II) and version 22.0© (Paper III). Descriptive statistics (numbers, percentage and mean) were used to present structure, content and extent of performed parental group meetings. Fishers' exact test was used to test if background characteristics were of significance to the nurses' experiences of managing parental groups and if there were any differences in the specialized parental groups that were offered that related to how the CHCs were organised (Paper I). Fishers' exact test were used to examine the association between parents educational level and their perception of parental groups, how their parental role were affected, their perception of the CHS nurse as a group leader as well as which topics they found important (Paper II). The Mann-Whitney U test was used to test whether there were differences between groups (mothers and fathers).

Based on the questionnaire a need of 60 CHS nurses were calculated when using an external control group and 45 if the nurses served as their own control. The significance level for all studies was set to p<0.05. To receive a power of 80% with a significance level of 5% McNemar's test was used to estimate the amount of participants in the intervention (Paper III). To test the differences in the perception of managing group leadership before and after the intervention McNemar's test was used (Paper III). The answers in the course evaluations were compiled using Microsoft Excel 2010 (Paper III).

Qualitative content analysis

For the comments expressed in the open questions in the questionnaire (Study A, Paper I), the course evaluation form and the notes from the interview with the course leaders (Study B, Paper III), manifest content analyses were used (Neuman 1997). All comments were primarily read by all authors to obtain a first impression. The comments and notes were condensed and clustered into categories and subcategories including comments with the same meaning. All categories and comments were discussed among all four authors to confirm their belonging.

In Study B, the narratives were analysed according to Graneheim and Lundman (Graneheim & Lundman 2004). The focus groups interviews (Paper IV) were listened to and the transcripts were read through several times to obtain a sense of the whole. A naïve map of interpretation of the overall impression was drawn by the author of this thesis and discussed by all authors until agreement was reached. Meaning units considering how a course in group leadership affected the CHS nurses experiences of managing parental groups were extracted from the text. The units were labelled with a code and abstracted into subcategories and categories. Codes, subcategories and categories were discussed among the authors several times during the whole process and finally an overarching theme emerged. To attain structure and overview in the text the programme N-Vivo Ver.10 was used.

Preunderstanding

Preunderstanding can be referred to as our previous knowledge about a specific phenomenon (Nystrom & Dahlberg 2001). The author of this thesis was familiar with the work within CHS, has an education in child and adolescent health and primary care and works as a health care developer within the Center of Excellence for Child Health Care in Malmö. Her pre-understanding was critically considered during the whole research process with regular discussions in the research group, particularly during the qualitative analysis in order to minimize the risk of letting the pre-understanding influence the interpretation of data in a biased way.

Ethical considerations

The studies were approved by the Regional Ethical Review Board (2011/3 and 2014/397) and permission to conduct the studies was obtained by the managers responsible in March 2011 (Study A) and June 2014 (Study B). The studies were planned and conducted in accordance with the WMA Declaration of Helsinki of 2008 and 2013 (WMA 2013), the Swedish Act concerning the Ethical Review of

Research Involving Humans (Swedish Ministry of Justice 2008) and the Swedish Personal Data Act (Swedish Ministry of Justice 1998), balancing non-maleficence against beneficence, considering, autonomy and justice (Beauchamp & Childress 2013).

Non-maleficence and beneficence

The scientific benefits of a study are supposed to outweigh the risks and inconveniences for the participants (Beauchamp & Childress 2013, Swedish Ministry of Justice 2008, WMA 2013). The questionnaires were short, taking approximately 15 minutes to answer, and did not consist of any questions of a delicate nature. To prevent the CHS nurses from the feeling of being evaluated the links and codes for the parental questionnaires were provided by the researchers (Study A, Paper II). The web based questionnaire for the parents was completed at home, without involvement of the CHS nurse, as the parents could have found it unpleasant to criticize their CHS nurse. Possible inconvenience for the participants in these studies was, however, considered to be minor and the information from the study results might be of value to the outcome of future parental groups.

Autonomy

The principle of autonomy refers to the rights of an individual to make intentional voluntary informed decisions about personal matters without controlling influences with the possibility to intermit at any time (Beauchamp & Childress 2013). With respect for the autonomy of the participants of the studies all persons in the studies were informed in writing about the aims, methods, risks and benefits, and were encouraged to contact the author of this thesis if they had any questions.

The CHS nurses (Papers I, II, III) were informed about the study through an information letter and CHS nurses participating in the intervention (Study B) were additionally informed orally before the intervention started. The parents (Paper II) were informed about the study using written information that was read aloud by the CHS nurses, followed by written information to the parents who volunteered. The right for participants to discontinue at any time and the voluntariness in participation was emphasized. Written informed consent was signed before it was possible to enter the questionnaires and before the intervention started.

A code number was given to each of the participants and the study data were kept safely apart from personal data in order to maintain confidentiality. Data is presented at group level and unique citations are presented with code number to prevent any individual participant from being recognized.

Justice

The principle of justice refers to the recruitment of study participants being performed in a non-discriminatory way (Beauchamp & Childress 2013). All CHS nurses in Skåne and all parents participating in parental groups during a certain time frame were asked to participate in the studies regardless of age, ethnic origin or gender. For the intervention a randomization was made by an external party to ensure the randomness. Participation in the study required at least some knowledge of the Swedish language as the information and questionnaires were produced in Swedish. CHS nurses were informed that the services of an interpreter could be used by the parents and there was a box in the questionnaire that could be filled in by the parents if further language help was needed. However, no one asked for this, which could indicate that these parents had not participated.

Findings

Participation and management in parental groups

Participation in parental groups

Most CHS nurses (98%) offered parental groups. A majority managed groups for both first-time parents and families with more than one child (86%) (Study A). Parental groups for families with children younger than one year were the most common (90%), but 8% also offered parental groups for older children. In total, 57% of the nurses offered specialized parental groups directed to for example parents of twins or young parents. These groups were more commonly organized by nurses working at family centres (p=0.004) (for more details see Paper I, Table 3). On average, the nurses ran four to six parental groups annually and had six to eight meetings with each group.

Mostly mothers (93%) attended the parental groups and more than half of the participants (64%) reported that only one parent from each family participated. All of the fathers in Study A reported that the mother also attended some or all of the meetings (p<0.01). In Study A, nurses estimated the fathers' participation in general to be between 10 and 20% and 16% responded that they did not have any fathers in their groups. Most nurses stated that they did not employ any specific strategies to make the fathers attend the parental groups but among the nurses who responded that they did (30%), the most frequent strategies were to emphasize the importance of the fathers' attendance in the invitations and to offer parental groups at times that would suit the fathers' working hours.

Perception of parental groups and management

The CHS nurses (66%) defined parental groups as parental support which primarily aims to be a place where parents can connect and create a network and secondly as a place for learning (Study A). The nurses responded that they found group leadership to be both easy (45%) and difficult (45%). Overall, 85% of the nurses responded that they were content with the support they received from their employer concerning the

parental groups; however, 52% of the nurses stated that they had no regular supervision (Paper I).

The majority of the parents (73%) (Paper II) found parental groups to be very or rather useful. Half of the parents (52%) reported that they felt that their parental role had been strengthened by the parental group, while 30% stated that their participation had made no difference. Two parents felt that the parental group had made them feel more insecure. Parents found the CHS nurse to be very or quite well prepared (82%), very or quite committed (82%) and very or quite knowledgeable (85%) about the topics they addressed in their parental groups. Many of the parents who reported the nurse to be prepared, committed and knowledgeable also reported that they had become more secure in their parental role (p=0.04). Most parents (82%) felt that they had the opportunity to express their opinion and that they could talk to other parents as much as they wanted (78%). More than half of the parents (62%) responded that they had met someone with whom they socialized outside of the parental group and several parents commented that the parental group was a good way to meet other parents in the same situation in order to discuss parenthood and childcare.

Management of parental groups

Organisation

Most of the nurses (83%) (Study A) organized new groups at the CHCs and did not take over pre-existing antenatal care groups. The groups were organized and led by the CHS nurses themselves (55%) or together with another CHS nurse (24%). Other professionals, for example, librarians, dental hygienists or psychologists, were sometimes invited (18%).

Structured tools for managing parental groups

The Region Skåne manual was used by 83% of the nurses (Study A) to create a structure for their parental groups or as a source of inspiration. Some nurses used it as a checklist and someone used it to plan their whole agenda. Most nurses (88%) responded that they found it useful. Many nurses (78%) attended the training sessions held in 2010 when the manual was implemented and most nurses (81%) felt they were supported by these training sessions. The booklet provided by the CHS and the Swedish National Institute of Public Health about group leadership was read by 28% of the nurses and the majority of them found it to be helpful. Other structural programmes for parental support were used to a minor extent by the nurses in their

daily work at the CHCs, for example ICDP (International Child Development Programme) (5%) (Hundeide 2009) and Marte Meo (2%) (Aarts 2008).

Topics

Most CHS nurses in Study A (88%) had a pre-planned agenda for their parental groups, but stated that they were open to suggestions from the parents. The CHS nurses (93%) found sleep, child safety and family and relationships to be the most important topics to address and also prioritized such topics as nutrition (92%), breastfeeding (86%) and pregnancy and childbirth (84%). They found however smoking habits (58%), child-related community information (53%) and sex and relationships (51%) to be topics that were less important to address (for details, see Paper I, Table 2).

A majority (64%) of the parents (Study A) responded that they were informed about the content of the parental group before the start, but most of them (83%) also felt that the nurses had, at least to some extent, considered their wishes about what should be addressed in the group. The most important topics from the parents' perspective were children's needs and development (90%), health and diseases (89%), child safety (88%) and interaction between parent and child (87%); topics that they also felt had been addressed by the CHS nurses. They also found child-related community information (67%), parenting (79%) and tobacco, alcohol and drugs (62%) to be important topics however they did not find that these were addressed that much in their parental groups. Parents with a non-university education seemed to be more interested in children's health and diseases (p=0.026), immunizations (p=0.003) and childhood accident prevention (p=0.015) than the parents with university education.

In total, 69% of the parents felt that they had gained further knowledge about children's development and needs and 41% about relationships in general. Nevertheless, 20% of the parents' felt that they had gained little or no knowledge about children's development and needs and 47% of the parents felt they had gained no knowledge about relationships in general. Many parents (60%) did not feel that they had become any wiser concerning child and family-related community issues.

Evaluation of the education in group leadership

Evaluation from the participating nurses

The course evaluation used in Study B after the intervention showed that the nurses were content with the course (theoretical part 96%, practical part 100%) and found

that it was relevant and provided new knowledge applicable to their work with parental groups (97%). All (100%) CHS nurses stated that they were going to use the new knowledge in clinical practice. The majority of the nurses (96%) found that the course had influenced their leadership and changed their view of the group leader role and several nurses commented that they would have liked to have a follow up session some months after the course.

The results from the pre- and post- questionnaire used in Study B were very similar to the results from the questionnaire in Study A and no significant differences were found before and after the intervention. Specific parental groups were offered by 45% CHS nurses before and 53% after the intervention. Before the intervention 32% of the CHS nurses took specific action to make the fathers participate in parental groups compared to 40% after (p=0.508). Fifty percent of the CHS nurses found it difficult to manage parental groups while 30% found it easy before they participated in the intervention. Afterwards 36% nurses found it difficult and 47% easy (p=0.222). However, eleven CHS nurses did not answer this question and it was commented that management of parental groups can be both difficult and easy.

Reflections from the course leaders

The course leaders pointed out that to meet and exchange experiences seemed to be an important part of the setting for the attendants which seemed to strengthen the CHS nurses. The course leaders reflected on the considerable amount of expertise among the participants and highlighted the importance of the peer learning process in the groups. The small working groups were found to be essential for exchanging experiences and training (Study B).

The homework appeared to be a good way to make the CHS nurses start using their new skills and served as a good way to learn and practice. Supportive interview techniques, reflections over own leadership and exercises for increased involvement was pointed out by the group leaders as skills specifically called for by the participants. The course leaders also commented that many of the nurses expressed a fear for not having the characteristics necessary to be a leader and low faith in own capability to be a group leader, which however seemed to ease throughout the course (Study B).

Nurses experiences of managing parental groups before and after the intervention

The experiences of managing parental groups were captured by comments made in the questionnaires (Study A) and in the course evaluation (Study B) and from the focus group interviews (Study B).

Group leader role

The CHS nurses expressed that the group leader role was clarified to them after the group leadership course and that they had become aware of the aim, responsibilities and limitations of their work task which made them work differently (Study B). The management of parental groups was now perceived as an important work task and they took time for preparation and evaluation of group meetings (Study B). To facilitate the group processes by creating a structure, using exercises for increased participation and taking an active part in leading conversations became a new way to work with the parental groups. Before the course in group leadership it was common among the nurses to leave the parental group session after a while for the parents to manage themselves, this was however particularly pointed out as something they had changed after the course. The nurses described that they now stayed in the group during the whole session to facilitate the group and conclude the session in the end (Study B).

The nurses expressed that they now had the competence and confidence to form their own leadership styles and adapt the leadership to the group. Earlier leadership was often based on how the previous CHS nurse had worked and to be a leader was not perceived as compatible with their own personality (Study B). The importance of a clear leadership was highlighted. For some nurses this resulted in a more prominent leader role while others described taking a step back to provide more room for parental participation (Study B). The importance of parental participation was stressed by the nurses and new exercises to increase the participation of the parents were used. The needs and wishes among the parents were in focus and the own agenda had become less important (Study B).

Self-awareness

Before the course in group leadership, the management of the parental groups was described as either difficult or easy, depending on the constellation of the group (Studies A and B). After the course the CHS nurses felt that they had started to reflect over own performance in personal and group meetings and had become aware of how their own actions could affect the meeting. Evaluations of group meetings with different methods to receive feedback were now included in the parental groups and group sessions often started by exploring the expectations of the parents (Study B).

Feeling strengthened and motivated

The CHS nurses expressed feeling a loss in interest and energy for the parental groups before the course (Study A, B). Several nurses also expressed feeling reluctance towards parental groups and described a need for education and training in group leadership and group dynamics (Study A). In the interviews after the course, the CHS nurses expressed confidence regarding their group leadership and pointed out that they felt professional and good at what they were doing. They were now using new tools and exercises, trying new ways to redirect their agenda when needed as well as

using old tools in new ways (Study B) and they felt that the increased response from the parents were motivating. The CHS nurses expressed feeling relieved and an increased acceptance with own limitations. If a group session did not turn out the way they wanted, they felt empowered to try new things assuming that results would be better next time (Study B).

To meet and reflect over the joys and difficulties with parental groups with other CHS nurses was perceived to be strengthening and motivational (Study B). The nurses expressed that they felt relieved to discover that colleagues were experiencing the same uncertainty as themselves. Ideas and exercises were shared among colleagues during the course and supportive contacts were established. Advice and feedback was exchanged among the nurses even after the course (Study B).

Discussion

Methodological considerations

Following the framework of complex interventions (Medical Research Council 2008) the first study, Study A, a cross-sectional study with questionnaires were used to describe parents' and CHS nurses' experiences of parental groups. Based on the results of Study A, Study B was planned and designed as an RCT to develop, test and evaluate a course in group leadership. For all studies the chosen method and instrument may impose restrictions as well as strengths on the study results which it is essential to discuss in order to assess the generalizability and quality of the study (Kazdin 2010). Qualitative and quantitative methods were used in this thesis, both with their own ways to ensure the quality of the research.

Validity

Validity refers to the ability of the study to scientifically answer the questions it is intended to answer (Kazdin 2010) and is often discussed in terms of external and internal validity. The external validity refers to the opportunity to generalize the results to other populations and settings whereas the internal validity refers to the validity of the conclusion drawn (Kazdin 2010). Identified important threats to validity are discussed below.

External validity

Selection bias is one of the most common threats to the external validity of a study (Björk 2010, Kazdin 2010) and refers to the risk of the study population not being representative of the intended population (Björk 2010, Kazdin 2010). In Study A, all CHS nurses and parents were invited to participate with the intention to reach an overall population. Of the CHS nurses working in Skåne at the time, 55% participated (Paper I). A 50% response rate is common when using postal questionnaires (Olsson & Sörensen 2007) and could be considered acceptable, depending on how the respondents are distributed. No national register was available for all CHS nurses working in Skåne or Sweden during 2011, but a comparison with the participants in the study, all the CHS nurses working in Skåne during 2015 and the national survey used by Wallby in Sweden 2007 (Wallby 2008) did not reveal any

major differences in terms of education, experience and organization (for details see Table 3 under *Study population* in this Thesis). Almost all municipalities in Skåne were represented in the study, which ensures a broad geographical representation and increases the possibility to generalize the findings. However 133 CHS nurses did not answer at all and the reasons for this are unknown. A new computerized system for medical records was implemented and extensive annual statistics were collected during the study period, which may have affected the response rate as the nurses might have been occupied with these administrative duties. To capture the experiences of the nurses who did not answer the questionnaire due to, for example, lack of time or because they had few parental groups, would have been valuable, as this might have given us more information on the obstacles that could be found in the management of parental groups.

Fifty three percent of the parents who volunteered to participate in the study completed the questionnaires (Paper II). Some CHS nurses did not fill in the total amount of parents in their parental groups and could not remember when asked afterwards. It is not possible to obtain information about the total number of parental groups in Skåne which makes it difficult to analyse the dropout rate further. However, 71 different parental groups at 27 different CHCs were represented. The variation in the study population was similar to the population in other studies with higher response rates (Bremberg 2004, Friberg 2001) and reflects the group of parents who usually participate in parental groups. Recruiting respondents through caregivers always carries a risk of bias and involuntary selection (Fenner et al. 2012, Fletcher et al. 2012) and all CHS nurses in Skåne were encouraged to invite all parents to participate in the study. It is however possible that the CHS nurses who informed the parents attending their parental groups are those who were more interested in managing parental groups. It cannot be excluded that this might have affected the findings to be more positive than if all parents would have participated. Recruiting the parents randomly through a birth register might have provided a broader population. However, recruiting through registers is argued to lead to a lower response rate (Olsson & Sörensen 2007).

Study B was designed and planned as an RCT with random selection and control group in line with the MRC recommendations for complex interventions (Craig et al. 2013). The study design did however not end up as planned and there are some methodological issues concerning external and internal validity to consider. By using randomization in a study the researcher strives to strengthen the validity. Two concepts are to be considered while talking about randomization; random selection of subjects from a population to enhance the external validity (generality) and random assignment to the intervention, aiming to ensure that the subjects in the intervention and control group are equal to enhance the internal validity (Karanicolas et al. 2010, Kazdin 2010). In Study B, the study population was randomly assigned to the study as well as to intervention or control group by an external part from the whole population of CHS nurses working in Skåne at the time. In order to ensure a broad

representation of the CHS nurses, stratification was used. The interest in participation among the assigned CHS nurses in some areas was low and from the group assigned to participate (195 CHS nurses) only 56 CHS nurses ended up participating and it was not possible to fulfil the stratification. This could be of importance to consider in for example a large-scale implementation since certain geographical areas might risk being underrepresented, resulting in unequal care supply. The reason for not participating was not always given, but lack of time was the most common. Even if the group was randomly assigned, it is likely that the participants in the intervention group were the most motivated CHS nurses, feeling that they needed the course or being more interested in parental groups than other nurses. It cannot be excluded that the results would be less positive if the course were provided to all CHS nurses in Skåne.

The CHS nurses allocated to this study knew if they were going to participate in the intervention or control group before they agreed to participate. It is plausible that this have contributed to the lack of participants to the control group. To first invite the CHS nurses allocated to the study, and subsequently give them their randomly assigned allocation, or use a waiting list control group design might have increased the participation rate in the control group.

Internal validity

In study A, a cross sectional approach was used intending to reach as many CHS nurses and parents as possible. Using questionnaires can be advantageous when attempting to reach a large population from different geographic areas, and the risk of influencing the responses is likely to be low (Hansagi & Allebeck 2004, Olsson & Sörensen 2007). The questionnaires used in this study; "Barnhälsovårdens föräldrastöd" for the CHS nurses and "Frågor om föräldragrupperna på barnavårdscentralen" for the parents, were developed and previously used by professionals with extensive experience of the CHS (Friberg 2001, Wallby 2008), which ensures their relevance. The questionnaires used were not psychometrically tested. The face validity of both questionnaires was tested in a pilot study before the present study began, with parents and CHS nurses being encouraged to provide their opinions and suggestions concerning the questions and the way they were distributed. No opinions concerning the questions were raised which may be interpreted as confirming that the questions were considered relevant. Most questions were multiple-choice, which might have limited the answers of some respondents. The opportunity to add comments was added in the questionnaire for the CHS nurses (Paper I) and used by many respondents. The comments confirmed the multiple-choice questions which added strength to the study.

In Study B, the same questionnaire was used for the CHS as for Study A to allow comparison with earlier studies. The questionnaire was originally developed to learn about the parental groups within the CHS in general and not specifically focusing on group leadership and the result of the pre and post questionnaires are therefore

recommended to be interpreted with caution. The lack of statistical impact could be a result of the questionnaire being too general to capture changes in group leadership experiences at this early point. Triangulation of methods can be used to expand the understanding and strengthen the validity (Morse 2015, Polit & Beck 2016). In our studies interviews, course evaluation and questionnaires were used and the results from other sources were consistent which indicates that there was an impact caused by the intervention. A specific questionnaire focusing on group leadership and a self-efficacy assessment form might have evaluated the intervention better.

In Study B, only 23 of the 131 CHS nurses in the control group answered the pre intervention questionnaire. According to the sample size calculation, 66 completed questionnaires were needed to receive statistical power while using an external control group and 45 if the participants served as their own controls, comparing the pre and post intervention questionnaires. The low response rate in the control group implied that the participants had to serve as their own control. According to the MRC framework of complex interventions, an RCT design should preferably be considered (Medical Research Council 2008). A randomised control group is used to assure that the possible effects of the intervention are caused by the intervention and no other factors, and threats such as history, maturation or selection are excluded (Kazdin 2010). However, if the effects of the intervention are large and unlikely to be explained by other factors, conclusions about the impact of the intervention could be drawn without using a control group (Craig et al. 2013). No statistical changes were seen in the results of the questionnaires whereas the results from the course evaluation and interviews indicated that the changes in behaviour and approach in group management described by the CHS nurses were caused by the intervention. The study took place during a limited time with no external events affecting the CHS concerning the parental groups, which implies the internal control to be sufficient for this study.

Trustworthiness

The term trustworthiness is used to evaluate the quality of qualitative studies and refers to if the data reflects the truth. The concept of trustworthiness includes credibility, dependability, conformability and transferability (Lincoln & Guba 1985, Polit & Beck 2016).

Credibility

Credibility refers to the confidence in the truth of the data and how the data is interpreted (Lincoln & Guba 1985, Polit & Beck 2016) including the selection of appropriate methods and participants as well as reporting the study procedures in a transparent way (Graneheim & Lundman 2004, Polit & Beck 2016).

To capture and study the various different complex aspects of the challenges and experiences in the management of parental groups a qualitative method was chosen to increase understanding (Polit & Beck 2010). Two individual pilot interviews with CHS nurses were performed prior to Study A, which revealed more data concerning how the parental groups were performed in practice and less data concerning group management. The group management phenomenon might be considered abstract and as discussions in focus groups are recommended when complex issues are to be explored or new topics or topics not of primary importance to the participants are to be investigated, the choice of focus groups was considered to be a good alternative. The synergies in a group interaction could stimulate and further elaborate views and experiences (Bourgeault et al. 2010, Carey & Asbury 2012) and are recommended to facilitate the problematizing of concepts and ideas (Bourgeault et al. 2010, Krueger & Casey 2015). The discussions in the groups were rich and vivid, which indicates that the method was appropriate. The composition of a focus group is important and should be characterized by homogeneity, through a certain phenomenon that bring the group together, but must also include variation enough to cumulate contrasting opinions and experiences (Krueger & Casey 2015). All of the participants in the focus groups were CHS nurses, had been practicing parental group management for some years and had participated in the group leader course, but they varied in education, working background and experience of CHS. The recommended amount of participants in focus groups varies (Bourgeault et al. 2010, Carey & Asbury 2012, Krueger & Casey 2015, Kvale & Brinkmann 2014) but have to be sufficient to reveal the dynamics desired in the focus group interview method (Bourgeault et al. 2010). The number of participants varied in the groups and two of the groups only included three participants. The discussions in the groups were rich and comprehensive and the respondents talked openly and described their experiences thoroughly in all focus groups. The role of the moderator is essential and is to facilitate group processes as well as observe the participants (Carey & Asbury 2012, Krueger & Casey 2015). Two moderators, one interviewer and one experienced co-interviewer performed the focus groups interviews. Special attention was paid to verbal and non-verbal communication and the participation of all members were facilitated. To promote objectivity and reduce the risk of the interviewers influencing the opinions of the participants, open questions were asked and the participants were encouraged to tell their own stories (Lincoln & Guba 1985).

Dependability

Dependability refers to the reliability of data over time and conditions. High dependability implies that the findings would be the same if the study were replicated (Polit & Beck 2016). To enhance dependability, the research design and analyses were reviewed and discussed among the researchers at monthly meetings as well as with junior and senior researchers at research seminars several times. Letting the participants in the study confirm study results (member checking) could have been another way of investigating the dependability in the study (Polit & Beck 2016). The

results from Study A were presented for all the CHS nurses in Skåne during different workshops held by the Centre of Excellence in CHS in Malmö. The results were discussed and accuracy was confirmed. During the focus group interviews the opinions and experiences were summarized by the moderator to make sure that comments were understood correctly (Polit & Beck 2016). To make the research inquiry possible to duplicate the research methods are thoroughly described.

Conformability

Confirmability refers to objectivity of the data and the interpretations (Lincoln & Guba 1985, Polit & Beck 2016). To avoid investigator bias and one-sided interpretation investigator triangulation was used with four persons analysing the qualitative data (Morse 2015, Polit & Beck 2016). Citations were used to increase the transparency and facilitate for readers to judge the trustworthiness (Lincoln & Guba 1985, Polit & Beck 2016).

Transferability

Transferability refers to the possibility to transfer the results of the data to other settings than those studied in the study (Lincoln & Guba 1985, Polit & Beck 2016) and is primary for the reader to decide (Graneheim & Lundman 2004, Lincoln & Guba 1985, Polit & Beck 2016). All CHS nurses in Sweden work more or less in the same way which implies that this group-based intervention could be of value for all CHS nurses in Sweden. Transferability is however for the reader to decide and to facilitate a thick description of the research, setting, context and procedures was given in the papers as well as in the thesis (Lincoln & Guba 1985, Polit & Beck 2016).

To avoid drawing hasty conclusions about the impact, or lack of impact, of an intervention, process evaluation is an important part of the MRC framework for complex interventions (Craig et al. 2013). It was important that the same intervention was received by all participants in this study. The ARL pedagogical method includes adaptation to the course participants to facilitate learning by ensuring the feeling of relevance and increasing the feeling of personal responsibility for own learning (Rimanoczy 2008). To ensure that the participants in all courses received the same education, the same course plan was used in all three courses. The main course leader had extensive experience of working with the ARL pedagogical method which increased fidelity to the method and the course plan. The course was given by the same course leaders in all courses and any deviations from the course plan were documented, revealing some small differences between the groups concerning time plan and order of exercises.

To make the results more useful for decision makers the MRC framework recommends economic evaluation to be considered and, if possible, cost-effectiveness ought to be assessed (Medical Research Council 2008). Effectiveness of parental support programmes is however difficult to measure and the effectiveness and the relationship between costs and benefits in parental support programmes is sparsely

investigated (Stattin *et al.* 2015) (Public Health Agency of Sweden 2014b). The findings in the existing studies are sometimes contradictory and the degree of methodological rigor differs widely (Furlong *et al.* 2012, Stattin *et al.* 2015) (Public Health Agency of Sweden 2014b). In this study the costs and benefits for the intervention are described but further health economic analyses considering loss in production and effect of the intervention would be needed to provide a comprehensive cost evaluation.

General discussion of results

The overall aim of this thesis was to further illuminate and investigate the groupbased parental support within the CHS from different perspectives which resulted in an educational intervention for CHS nurses.

The CHS is an important part of Swedish society and both influences and follows the norms, laws and culturally influenced behaviour patterns in the society. The parental groups provide support to several of the different systems presented in the Bronfenbrenner model (Bronfenbrenner 1979, 1999) as well as strengthen the family interaction patterns of importance advocated by Guralnick (Guralnick 2005). Strengthening the relationship between people in the neighbourhood, the social network among parents, the relationship between the CHS nurse and the family and provide and discuss important knowledge are all examples of how the parental groups influences the mexo-, meso- and microsystem and strengthens the parents in their parental role (Bronfenbrenner 1999).

Experiences of parental groups

The CHS nurses in our studies felt that group leadership was difficult and challenging. The parents however, found the parental groups to be supportive and strengthening. Several of the parents had met someone with whom they socialized and both CHS nurses and parents were over all content with the topics addressed in the groups.

Most parents in Study A found parental groups to be meaningful and half of the parents reported that they felt that their parental role had been strengthened by attending the parental group. The results are consistent with other studies showing that parents feel that attending parental groups is a good way to gain self-confidence, extend their social networks, and exchange information about children's health and parenting (Forslund Frykedal & Rosander 2015, Hanna *et al.* 2002, Hjalmhult *et al.* 2014b, Nolan *et al.* 2012). Becoming a parent is often described as overwhelming including happiness as well as uncertainty while the new parental role and new

routines are settled (Deave et al. 2008, Fagerskiold et al. 2001, Nolan et al. 2012). More than half of the parents in Study A had met someone with whom they socialized outside of the meetings and by exchanging experiences with other parents in the same situation the parents seem to be able to strengthen and confirm their parental role (Guest & Keatinge 2009, Petersson et al. 2004). Increased unemployment resulting in higher competition for jobs and education makes people work or study away from home, leaving their family of origin and social network behind (Bäck-Wiklund & Bergsten 2010, Wissö 2012). Previous research shows that both fathers and mothers sometimes feel isolated by parenthood (Premberg et al. 2008, Tiitinen et al. 2013) and wish for increased opportunities to meet with other parents in the same situation (Bremberg 2004, Hanna et al. 2002, Nolan et al. 2012). The results of our study are important as they show that parental groups are a good way to break this isolation.

The nurses in Study A defined parental groups primarily as a place where parents could connect and create a network and secondarily as a place for learning. Our findings reflect a change in attitudes among the CHS nurses which tracks the development of the CHS and general educational methods over the course of the 20th century. Parental groups aim to provide parents with knowledge and information, strengthen the parents in their parenthood and provide possibilities to strengthen their social network (National Child Health Handbook 2014b). Previous studies show discrepancies in the expectations placed on parental groups by nurses and parents, with the parents expecting to socialize and meet new people at the parental group meetings, while the nurses consider it as an opportunity to educate the parents (Bremberg 2004, Fagerskiold et al. 2003, Hallberg et al. 2005). Many CHS nurses in our studies reported that they found the group leadership role challenging and uncomfortable and expressed a need for further education. The teaching methods used in parental groups have changed in line with educational reforms, from lectures to learning by reflection and understanding (Egidius 2009) and the role of the CHS nurse in parental groups has expanded, from expert to a facilitator of processes and of communication among the group members. As the interaction between members of the parental groups has become more essential over time, the need for tools to tackle obstacles in group dynamics and group processes may have increased. Knowledge in these areas is often overlooked as something that does not have to be taught or trained (Elwyn et al. 2004) even though these are advanced skills that require guidance and practice if they are to be used successfully (Elwyn et al. 2004). Most CHS nurses do not have any extensive education in group facilitation, group dynamics and group processes (Bremberg 2004, Forslund Frykedal & Rosander 2015, Hjalmhult et al. 2014a) and the results of Study B show that the education in group leadership contributed with new relevant and useful knowledge which have strengthened the nurses in their leadership role.

The results in Study A show that many of the topics addressed in the parental groups were found to be important by both CHS nurses and parents. However there were

differences and parenting, child-related community information and sex and relationships, for example were considered less important by the CHS nurses, while parents wanted more focus on those topics. The need for more focus on discussing the relationship between the mother and the father in parental groups has been raised in earlier research (Petersson *et al.* 2004). Traditionally, CHS nurses have focused more on natural sciences and medical issues (Jansson 2000) and it has been suggested that they might feel less comfortable in addressing topics like parenting and relationships (Petersson *et al.* 2004). Some nurses in our study chose to share the role of group leader with a social counsellor or psychologist, which is likely to favour discussion of the required topics. This might be facilitated by those CHCs that are organized as family centres, where the nurse and the counsellor already work closely together.

Child-related community information was a topic that the nurses in Study A reported to be addressed less frequently by the parental groups. This was in accordance with the parents' experiences in Study A, but it was a topic that the parents were interested in discussing. One of the explicit aims with parental groups is to make parents aware of how the family situation is dependent on societal circumstances in order to increase the possibilities for the parents to influence their situation (National Child Health Handbook 2014b, Swedish Ministry of Health and Social Affairs 1978). Access to adequate information about municipal services is associated with high parental empowerment and family wellbeing (Vuorenmaa et al. 2016). To be able to actively choose, use and influence support for families, parents have to know of the existing options, their rights to use them as well as how to politically influence them. Parental groups were previously visited by representatives from the Swedish Social Insurance Agency and open preschools or kindergartens to share information about their services which were an opportunity for parents to learn more about the parental social security system and the different alternatives for preschool activities. The meetings with the Social Insurance Agency have, however, been replaced by information on its official website (Swedish Social Insurance Agency 2016a).

Impact of a course in group leadership

The CHS nurses who participated in the group leadership course in Study B described that they felt strengthened in their group leader role and expressed a change in perception towards the work task. They had started to work differently with their groups and used their new tools to plan and manage the parental groups in new ways. After completing the course, the nurses felt encouraged to work with their parental groups and expressed increased job satisfaction. Other research shows that CHS nurses express low confidence in their personal performance as parental group leaders and further education in group leadership has been suggested (Bremberg 2004, Forslund Frykedal *et al.* 2015, Hjalmhult *et al.* 2014a)). Self-efficacy is described as believes in own capacity to execute given attainments (Bandura 1997) and the course

in group leadership aimed to strengthen the nurses in their group leader role by providing relevant knowledge and opportunities for reflection and practice (Rimanoczy 2008). Successful learning is associated with faith in own success, believing that one can implement the new knowledge, and is given the possibility to try new skills (Bandura 1988). Teaching methods associated with success includes peer learning and high internally driven motivation (Bandura 1997, Rimanoczy 2008, Sogunro 2015). By using a group-based intervention and small learning groups the participants had the possibility to personally experience and practice a positive and trusting climate while they could reflect on the cause and effect of own acting together with the course leaders and fellow participants. The course leaders acted as positive role models and through exercises like "group leadership in in an ideal world" the participants had to visualize successful action, also associated with improved performance (Bandura 1997). The course leaders pointed out that there was extensive knowledge among the participants and by using different pedagogical methods such as asking specific questions and guided reflection, these skills were identified by the participants themselves and might have strengthened their belief in their own performance. The CHS nurses in Study B gave several examples of how they now tackled obstacles in different ways and planned and executed their work in accordance with their own preferences. They also expressed that they now could accept their limitations and seemed to be more at ease with the situation. Empowerment refers to the process of promoting and enhancing the ability for someone to meet their own needs and mobilise the necessary resources to feel having control over their own lives (Kendall 1998). The course in group leadership provided a variety of tools to execute and manage the parental group in different ways as well as various ways to confront structural difficulties associated with the work with the groups. The more relaxed approach towards their work with the parental groups might be interpreted as they now felt empowered to manage their work task.

The CHS nurses who had participated in the leadership course reported that they now adapted their way of leading to the group they were running and that their predefined agenda had become less important. Earlier researchers (Forslund Frykedal & Rosander 2015) found two different kind of leadership when analysing group leadership in parental groups, the "instrumental approach" were the group leader stuck to a predefined agenda without including the needs and expectations of the group and the "investigational approach" adjusting the execution towards the current group (Forslund Frykedal & Rosander 2015). By using the investigational approach the climate in the group can be influenced and the participants can be facilitated to open up and new knowledge are jointly constructed (Forslund Frykedal & Rosander 2015) which is likely to further support the parents and facilitate socialisation.

Despite the fact that many CHS nurses felt insecure in their group leadership role, most parents who participated in Study A were satisfied with the management of the parental groups. The parents who reported a high level of satisfaction with the nurse's

performance in our studies also reported that they had become more secure in their parental role due to the parental group. Other studies confirm the relationship between the management of parental groups and parental satisfaction (Hanna *et al.* 2002, Nolan *et al.* 2012) and show that parents associate good parental groups with the nurses ability to create a relaxed and trusting climate in the group and promote parental involvement (Forslund Frykedal & Rosander 2015, Nolan *et al.* 2012, Petersson *et al.* 2004). A relationship between the nurses' own sense of empowerment and their ability to enhance empowerment in patients has been suggested (Kendall 1998). Empowerment is an important part of the CHS nurses' role as parental group leader and own attitudes towards parental groups might reflect how CHS nurses invite and encourage the parents to participate in parental groups. An increased sense of empowerment among nurses could perhaps persuade more parents to participate.

Non-attending parents

In the present study, the majority of the participants were well educated, employed Swedish speaking mothers, living together with the father, which reflects the participation patterns seen in parental groups in general (Petersson et al. 2004, Sundelin & Hakansson 2000). The Swedish parental support system is based on a child and public health perspective meaning that the benefits for the child during their lifetime as well as the benefits to society arising from decreased health care costs are considered (Bremberg 2004). The support is intended for all parents, is voluntary and is based on the needs and wishes of the parents (The Public Health Agency of Sweden 2013). The Swedish Health Care Act states that all members of the population in Sweden are to receive good health care on equal terms, stressing that persons with the greatest needs are to be given priority to care (Swedish Ministry of Health and Social Affairs (1982). Only 49% of the families in Skåne chose to participate in parental groups and parents belonging to health care centres with high CNI are less likely to attend (Centre of Excellence for Child Health Service 2016). The general development of the public health is favourable in Sweden for the time being, although there are differences in health clearly related to socioeconomic factors (The Public Health Agency of Sweden 2014a). Family health is of great importance for the wellbeing of the child and physical or mental problems within the family might constitute a risk to the child's health and development (Bronfenbrenner 1999, Guralnick 2005, Irwin & Hertzman 2008). It is argued that the cumulative amount of stressors is what constitutes the greatest threat to a child's development (Guralnick 2005). By providing parents with knowledge and awareness about children, parenthood and family rights in general accompanied by the possibility to extend their social network and discuss their parenthood, the results in Study A show that parental groups can prevent and reduce several possible family stressors and promote and strengthen the existing resources within the family. The Bronfenbrenner model visualizes the complex interplay between different factors in the environment and the

development of the child (Bronfenbrenner 1999) and it is of great concern that this support does not reach all parents.

Specialized parental groups were offered by half of the nurses in Study A and more frequently by nurses working at family centres than those at ordinary CHCs. Single parents, young parents, parents with another mother tongue and less well educated parents are examples of parents less represented in parental groups and when they do participate they often represent a minority in the groups (Fabian et al. 2005). Being able to identify with the other members of the parental group is important (Hanna et al. 2002, Nolan et al. 2012, Wissö 2012) but if the differences between the group members are too prominent there could be a risk of the group engendering feelings of insufficiency rather than promoting the parents' self-esteem (Wissö 2012). There are, however, studies to show that these parents (Feinberg & Kan 2008, Hägglöf et al. 2013, Lipman et al. 2010, Wolfe & Haddy 2001) want - and could - benefit from group-based parental support, and specialized parental groups are suggested to be one way of reaching these parents (Fabian et al. 2006). After the course in group leadership many of the CHS nurses in Study B reported that they felt encouraged to try new ways to work with parental groups as for example to start a specialized parental group.

However not all parents are interested in participating in parental groups. A Study conducted in 2003, investigating what kind of parental support parents were interested in (Bremberg 2004) showed that apart from parental groups within the CHS other kind of support like information through media, structured parental groups (referring to structured parental groups for parents with older children outside CHS), and telephone counselling were other methods that appealed to parents (Bremberg 2004). More recent studies investigating parental internet use also teaches us that the interest in parental communication through chat forums and other internet based media is enormous (Plantin & Daneback 2009, Sarkadi & Bremberg 2005). The internet has created new ways to communicate; not only has it made it possible for parents to obtain information and socialize in alternative ways, but might also have created new needs for the nurses to help the parents to navigate among information and opinions. Our communication patterns in general have rapidly changed (Sarkadi 2003) and people are becoming accustomed to accessing information and chat functions around the clock. Integrating the new technology into parental groups could, perhaps, be a way to maintain the interest for parental groups of parents today.

Costs

The efficacy of group-based support in general is discussed (Hoddinott *et al.* 2010) but several studies show that parents view parental groups to be an important support tool (Hanna *et al.* 2002, Hjalmhult *et al.* 2014b, Nolan *et al.* 2012). Cost effective

analyses and health economic evaluations conducted by the Public Health Institute in Sweden 2014 investigated both selective and universal programmes, and showed parental support programmes to be relatively low cost interventions. They concluded that the programmes are profitable investments (The Public Health Agency of Sweden 2014b). Cost analyses for parental groups within CHS have been difficult to find but an analysis from 2004 shows that parental groups within the maternal care and CHS constitutes of 15% of the total cost for maternal and child health care (Bremberg 2004). These calculations are however old and due to changes in the CHS programme making parental groups mandatory for CHS nurses to offer, these costs are likely to have risen. Healthcare resources are limited and it is of great importance that resources are used well. A relaxed and trusting climate in the group seems to be important for how the parents connect and experience the group-based support (Nolan et al. 2012, Petersson et al. 2004). Our studies show that most CHS nurses spend a large amount of time managing parental groups every year; to enable CHS nurses to take part in a course in group leadership might facilitate conditions for the nurses to further fulfil the objectives with parental groups and further optimize the use of resources.

Conclusions and clinical implications

The need for prevention and promotion are emphasized within healthcare today (Public Health Agency of Sweden 2015a, WHO 1998) as well as the importance of good living conditions for small children (Bronfenbrenner 1999, Guralnick 2005, Irwin & Hertzman 2008, Public Health Agency of Sweden 2015b, WHO 1998). The CHS plays a significant role in public health work as it is in the unique position of being able to reach almost all families (Swedish National Board of Health and Welfare 2014). To develop the CHS in order to maintain the confidence of parents and continue to reach all parents in the future is one of the challenges within the CHS today (Swedish National Board of Health and Welfare 2014). Conditions for parents and CHS nurses are different today than when the parental groups were implemented and there is a need to further adapt the support (Swedish National Board of Health and Welfare 2014).

- A course in group leadership might be one way to help CHS nurses to further
 obtain the aims with parental groups. Increased motivation, knowledge and job
 satisfaction might lead to further interest in developing the support to attract more
 parents. Increased collaboration with parents participating in parental groups might
 promote CHS nurses to further address topics requested by the parents as well as to
 facilitate social contacts between parents.
- To develop strategies to make the group-based support attractive for parents in CHCs with high CNI needs to be prioritized. The general development of the

public health is favourable in Sweden for the time being although there are differences clearly related to socioeconomic factors (The Public Health Agency of Sweden 2014a). The CHS nurses are in the unique position of meeting almost all families and thereby have good opportunities to adapt their services to appeal to more families.

Coordination between CHCs could be beneficial to ensure health care on equal terms for all parents. Specialized parental groups are suggested to be one way to reach some of the parents underrepresented in parental groups but are likely to be too small to be run frequently in all CHCs. Collaboration between CHCs could make the support available for more parents. It could be difficult for all CHS nurses to acquire sufficient experience to feel secure enough to initiate them and family centres – with their wide range of staff – are perhaps better prepared to meet the different needs of these groups of parents.

Further research

The course in group leadership strengthened the CHS nurses in their group leadership role but further evaluation could be of value. Long term follow ups would be needed to investigate if CHS nurses are empowered to try new ways to attract the parents who does not participate today and secondly; to see if such education affects the experiences and the participation rate among parents.

Several nurses within other health care areas work with group-based health prevention and support. Many of these care providers do not have any formal education in group leadership (Hoddinott *et al.* 2010). It cannot be excluded that this course in group leadership could be beneficial for more groups and further studies with other health care personnel in other health care settings could be of value.

Focus for the evaluation of the course in group leadership has been the CHS nurses. The recipients of the group-based parental support are however the parents and the children. The parents participating in this study were content with the parental groups. Satisfaction is however difficult to measure and studies measuring satisfaction within health care are criticised to all too often reveal a too positive result (Tiitinen *et al.* 2013, van Teijlingen *et al.* 2003). To further investigate the needs and wishes of all parents would be of great interest to develop the parental groups. The parents who participated in this study were a rather homogenous group, consisting mainly of Swedish-born, well-educated mothers, reflecting the demographics of the parents who normally participate in parental groups. There is a particular need to find out what would attract the parents who normally don't participate in parental groups and their experiences of parental groups when they do.

Summary in Swedish

Barns fysiska hälsa i Sverige är god men psykisk ohälsa är ett av de största och snabbast växande folkhälsoproblemen bland barn och unga. Tidigare forskning visar att en trygg uppväxtmiljö i den tidiga barndomen främjar den kognitiva och sociala utvecklingen såväl som den fysiska och psykiska hälsan senare i vuxenlivet. Att bli förälder är en stor omställning i livet och föräldrar uppger att de kan känna sig isolerade och osäkra i sitt föräldraskap och de efterfrågar föräldrastödjande verksamhet. Inom barnhälsovården (BHV) inbjuds alla föräldrar att delta i ett basprogram som förutom hälsoundersökningar och vaccinationer innehåller stöd till föräldrar, individuellt och i grupp. Föräldragrupperna leds av barnhälsovårdssjuksköterskor på barnavårdscentralerna (BVC) och består av ett antal gruppträffar under barnets första år där föräldrar får möjlighet att diskutera olika barn- och föräldraskapsrelaterade ämnen. Målet med föräldragrupperna är att stärka föräldrars sociala nätverk och öka deras kunskap om barns utveckling och rättigheter. Tidigare studier visar att föräldragrupper, på flera sätt, bidrar till att styrka föräldrar i deras föräldraskap men det framkommer även att endast hälften av alla familjer deltar i föräldragruppsverksamhet vid BVC och att verksamheten inte alltid lyckas nå de föräldrar som bäst är i behov av den. Den snabba tekniska utvecklingen av media och internet har medfört nya sätt att inskaffa kunskap, kommunicera och umgås. Föräldragrupper har haft ungefär samma utformning sedan starten på 80-talet och frågan är om föräldragrupperna, som de ser ut, ger det stöd som föräldrar i dag behöver och vill ha. Aktuell forskning om det gruppbaserade föräldrastödet inom barnhälsovården saknas. Det övergripande syftet med avhandlingen var att belysa föräldrastöd i grupp inom barnhälsovården utifrån BHV-sjuksköterskors och föräldrars erfarenheter (Studie A) samt att, baserat på deras erfarenheter utveckla och utvärdera en kurs i gruppledarskap för BHV-sjuksköterskor (Studie B).

I Studie A som ägde rum 2011-2013 ombads BVC-sjuksköterskor (Artikel I) och föräldrar som deltagit i föräldragrupp (Artikel II) i Skåne att besvara två olika webbaserade frågeformulär om sina erfarenheter av föräldragrupper på BVC. 156 BHV-sjuksköterskor från 31 olika kommuner och 143 föräldrar från 71 föräldragrupper vid 27 olika barnavårdscentraler besvarade respektive frågeformulär. Resultatet visade att majoriteten av alla BHV-sjuksköterskor bedriver föräldragrupper, vanligen både för förstagångs- och flergångsföräldrar. Föräldragrupper som riktar sig till en viss grupp av föräldrar, t.ex. adoptivföräldrar, fäder, unga föräldrar och föräldrar med ett annat modersmål än svenska visade sig vara mer sporadiskt förekommande men var något vanligare på familjecentraler. I genomsnitt startade varje BHV-sjuksköterska fyra till sex grupper varje år och hade sex

till åtta möten med varje grupp. För BHV-sjuksköterskorna var det viktigaste målet med föräldragrupper att skapa en plats för föräldrar att mötas på och i andra hand ett utbildningstillfälle. Detta är en skillnad från tidigare forskningsresultat, men var i överensstämmelse med föräldrarnas målsättning. Föräldrarna rapporterade att de upplevde föräldragrupper som meningsfulla och att deltagandet stärkt dem i deras föräldraroll. Över hälften av föräldrarna uppgav att de träffat någon som de fortsatte träffa utanför föräldragruppsträffarna. De ämnen som togs upp i gruppträffarna stämde relativt bra överens med vad föräldrarna uppgav sig ha behov av att prata om, men till exempel familjerelaterad samhällsinformation, föräldraskap i allmänhet, relationer och samtal om tobak, alkohol och droger var något som föräldrar efterfrågade i högre grad än vad de erbjudits. Trots att BHV-sjuksköterskorna hade stor vana av att bedriva föräldragrupper uttryckte de att de upplevde osäkerhet i sitt gruppledarskap och önskade utbildning i gruppdynamik och grupprocesser.

I Studie B utvecklades en utbildning i gruppledarskap som under hösten och vintern 2014-2015 erbjöds och utvärderades. Femtiosex slumpmässigt utvalda BHVsjuksköterskor i Skåne deltog i en tredagars kurs i gruppledarskap förlagd med ett antal veckors mellanrum. Kursen utvärderades med enkäter före och efter kursens genomförande, en kursutvärdering i direkt anslutning till kursens avslutning, en intervju med kursledarna (Artikel III) och uppföljande gruppintervjuer med BHVsjuksköterskorna 5-8 månader efter utbildningen (Artikel IV). Resultatet visade att BHVsjuksköterskorna upplevde utbildningen i gruppledarskap som relevant och att den nya kunskapen kunde användas i deras arbete. BHV-sjuksköterskorna kände sig styrkta i sin roll som gruppledare och i sin profession och beskrev att de hade förändrat sitt sätt att arbeta med föräldragrupper. De uppgav att de nu planerade sina gruppträffar i förväg och stämde av med föräldrarnas önskemål både före och efter träffarna. En del BHVsjuksköterskor beskrev att de nu blivit mer aktiva i sin roll att leda gruppen och andra beskrev att de tagit ett steg tillbaka för att ytterligare släppa in föräldrarna. BHV sjuksköterskorna uppgav att det blivit tydligt för dem vilket ansvar och vilka uppgifter som ingick i gruppledarrollen och att de fått ny kunskap och nya verktyg som behövdes för att fullgöra dessa uppgifter. I intervjuerna framkom också att BHV-sjuksköterskorna nu kände sig uppmuntrade att arbeta med föräldragrupper och upplevde en ökad arbetsglädje.

Sammanfattningsvis visar studierna att föräldragrupper är ett uppskattat stöd som upplevs stärkande av föräldrarollen av de föräldrar som väljer att delta. Stödet av barnhälsovårdens föräldragrupper når inte alla föräldrar och åtgärder behöver vidtas för att fler föräldrar ska välja att delta i föräldragrupp. BHV-sjuksköterskor träffar i sitt arbete så gott som alla föräldrar och har därmed en unik möjlighet att undersöka föräldrars behov och önskemål för att kunna anpassa föräldragruppsstödet. En kurs i gruppledarskap har visat sig stärka BHV-sjuksköterskorna i sin gruppledarroll och skulle kunna vara ett sätt att få BHV-sjuksköterskor att ytterligare utveckla föräldragrupperna på ett sätt som gör att de skulle tilltala fler föräldrar och i ännu högre grad än idag nå de uppsatta målen.

Acknowledgements

Work on this thesis was conducted at the Department of Health Sciences, Lund University. I would like to express my sincere gratitude to everyone who had any part of this work. In particular, I would like to thank:

- All the *CHS nurses* and *parents* who have participated in the study.
- My supervisor Professor Inger Hallström who not only has provided critical and
 excellent scientific guidance, but also provided a grand platform for scientific
 learning offering monthly seminars, international contacts and regular and
 structured supervision.
- My co-supervisor Associate Professor Pia Lundquist for most valuable and skilful supervision and for showing great patience when I have needed it the most.
- My co-supervisor *Senior Lecturer Eva Drevenhorn*, *PhD* who has supported me with very valuable supervision, for believing in me and encouraged me to maintain focus on the primary care perspective.
- To all staff working at Centre of Excellence for Child Health Care in Malmö, with special thanks to Marie Köhler, Margareta Berglund, Marita Ståhl and Lars Olsson who have supported me in several ways. Special thanks to Margareta who, during her many years working at Lund University was one of the instigators of this project, found me and matched me to it, and Marie who is a dedicated and skilful worker in favour of our small citizens of the world. You are a great role model.
- To the wonderful personnel at the Family centre Samovaren, who have shared their
 extensive experience from CHS with me and with endless patience answered all
 my questions.
- The research group for useful criticism and support during seminars, it has been
 most motivating working with so many skilful and dedicated persons. In particular
 I would like to thank Charlotte Castor, Elisabet Björquist, Katarina Lauruschkus,
 Malin Skoog and Petra Pålsson for being good friends and fellow passenger on this
 PhD studies roller-coaster ride.

- To all fellow PhD students and friends who have been a source of joy and fun. Especially I would like to thank *Pernilla Garmy, Ulf Jakobsson, Magnus Sandberg* and *Jimmie Kristensson* whose friendship and advises have been most supportive.
- Anna Blomgren for help with layout and typographic issues.
- *Johanna MO* for being my patient and beloved friend. Your keen-eyed, intelligent analyses of every type of situation are always most helpful.
- To my dear friends *Suz*, *Petra* and *Dea*; friends from studies in the Humanities who I have spent endless hours together with in deep discussion about the meaning of life. Suddenly I have become the representative for natural sciences how did that happen?
- Inger and Birger Forsbrandt for letting me take part of your endless hospitality and stay in your wonderful house in Torekov, where I have had the opportunity to focus entirely on my thesis.
- And finally the most important people in my life: My children *Isak, David* and *Alexander*, always there to remind me of what is really important. To *Patrik*, my wonderful husband, for having never-ending patience and the ability to discuss science, methodology and child healthcare related topics, as well as the difficulties in the life of a doctoral student with interest and energy, topics that in this amount could have bored anyone else outside of academia to death. I am so grateful to have you by my side.

The study was supported by grants from the Swedish Research Council

References

- Aarts M (2008) Marte Meo. Basic Manual, revised 2nd edition. Aarts Productions, Eindhoven.
- Bandura A (1988): Effective modelling teaches general rules and strategies for dealing with different situations. *Australian Journal of Management* 13, 275-302.
- Bandura A (1997) Self-efficacy: the exercise of control. W. H. Freeman, Basingstoke.
- Barlow J & Parsons J (2003): Group-based parent-training programmes for improving emotional and behavioural adjustment in 0-3 year old children. *Cochrane Database Syst Rev*, Cd003680.
- Beauchamp TL & Childress JF (2013) *Principles of biomedical ethics*. Oxford University Press, New York.
- Björk J (2010) Praktisk statistik för medicin och hälsa (Practical statistics for medicine and health), Stockholm.[In Swedish].
- Bourgeault IL, Dingwall R & De Vries RG (2010) *The SAGE handbook of qualitative methods in health research [Elektronisk resurs]*. SAGE, London.
- Bremberg S (2004) Nya verktyg för föräldrar: förslag till nya former av föräldrastöd (New tools for parents: Proposals for new forms of parental support). Swedish National Institute of Public Health 2004:49, Stockholm. [In Swedish].
- Bronfenbrenner U (1979) *The ecology of human development : experiments by nature and design.* Harvard Univ. Press, Cambridge, Mass.
- Bronfenbrenner U (1999) Measuring environment across the life span: emerging methods and concepts. American Psychological Association, Washington, DC.
- Bäck-Wiklund M & Bergsten B (2010) Det moderna föräldraskapet : en studie av familj och kön i förändring. (The modern parenthood: a study of family and gender). Natur & kultur, Stockholm. [In Swedish].
- Carey MA & Asbury J-E (2012) Focus group research. Left Coast Press, Walnut Creek, CA.
- Centre of Excellence for Child Health Service (2015) Årsrapport 2014 (Annual report 2014), Malmö: Centre of Excellence for Child Health Care. [In Swedish].
- Centre of Excellence for Child Health Service (2016) Årsrapport 2015 (Annual report 2015), Malmö: Centre of Excellence for Child Health Service. [In Swedish].
- CONSORT group CONSORT transparent reporting of trials. Available at: http://www.consort-statement.org/consort-2010 (accessed 20151115).

- Craig P, Dieppe P, Macintyre S, Michie S, Nazareth I & Petticrew M (2013): Developing and evaluating complex interventions: the new Medical Research Council guidance. *Int J Nurs Stud* **50**, 587-592.
- Deave T, Johnson D & Ingram J (2008): Transition to parenthood: the needs of parents in pregnancy and early parenthood. *BMC Pregnancy Childbirth* **8**, 30.
- Development Units for Child Health Care (2009) Föräldrastöd i grupp: Manual för barnhälsovården i Skåne (Group-based parental support: Manual for CHS in Skåne) Malmö. [In Swedish].
- Egidius H (2009) *Pedagogik för 2000-talet (Pedagogics for the 21st century)*. Natur & Kultur, Stockholm. [In Swedish].
- Elwyn G, Greenhalgh T & Macfarlane F (2004) *Groups a guide to small group work in healthcare, education and research.* Radcliffe Medical Press Ltd, Oxon.
- European Parliament Research Service (2014) Maternaty and paternaty leave in the EU. European Parliament, European Parliament. Available at: http://www.europarl.europa.eu/RegData/etudes/ATAG/2014/545695/EPRS_ATA(2014)545695_REV1_EN.pdf (accessed 0503 2016).
- Fabian HM, Radestad IJ & Waldenstrom U (2005): Childbirth and parenthood education classes in Sweden. Women's opinion and possible outcomes. *Acta Obstet Gynecol Scand* **84**, 436-443.
- Fabian HM, Radestad IJ & Waldenstrom U (2006): Characteristics of primiparous women who are not reached by parental education classes after childbirth in Sweden. *Acta Paediatr* **95**, 1360-1369.
- Fagerskiold A, Timpka T & Ek AC (2003): The view of the child health nurse among mothers. *Scand J Caring Sci* 17, 160-168.
- Fagerskiold AM, Wahlberg V & Ek AC (2001): Maternal expectations of the child health nurse. *Nurs Health Sci* **3**, 139-147.
- Feinberg ME & Kan ML (2008): Establishing family foundations: intervention effects on coparenting, parent/infant well-being, and parent-child relations. *J Fam Psychol* 22, 253-263.
- Fenner Y, Garland SM, Moore EE, Jayasinghe Y, Fletcher A, Tabrizi SN, Gunasekaran B & Wark JD (2012): Web-based recruiting for health research using a social networking site: an exploratory study. *J Med Internet Res* 14, e20.
- Fletcher B, Gheorghe A, Moore D, Wilson S & Damery S (2012): Improving the recruitment activity of clinicians in randomised controlled trials: a systematic review. *BMJ Open* 2, e000496.
- Forslund Frykedal K & Rosander M (2015): The role as moderator and mediator in parent education groups--a leadership and teaching approach model from a parent perspective. *J Clin Nurs* 24, 1966-1974.
- Forslund Frykedal K, Rosander M, Berlin A & Barimani M (2015): With or without the group: Swedish midwives' and child healthcare nurses' experiences in leading parent education groups. *Health Promot Int.*

- Friberg M (2001) Föräldrars syn på föräldragruppsverksamheten inom barnhälsovården i Stockholmslän (Parents view of parental education in child health care in the County of Stockholm) Linköping.
- Furlong M, McGilloway S, Bywater T, Hutchings J, Smith SM & Donnelly M (2012): Behavioural and cognitive-behavioural group-based parenting programmemes for early-onset conduct problems in children aged 3 to 12 years. *Cochrane Database Syst Rev*, Cd008225.
- Gibson CH (1991): A concept analysis of empowerment. J Adv Nurs 16, 354-361.
- Gordon RS (1983): An operational classification of disease prevention. *Public Health Reports* **98**, 107-109.
- Graneheim UH & Lundman B (2004): Qualitative content analysis in nursing research: concepts, procedures and measures to achieve trustworthiness. *Nurse Educ Today* 24, 105-112.
- Guest EM & Keatinge DR (2009): The Value of New Parent Groups in Child and Family Health Nursing. *J Perinat Educ* 18, 12-22.
- Gulbrandsen LM (2009) Oppvekst og psykologisk utvikling: [innføring i psykologiske perspektiver] (Growing up, Psychological development). Universitetsforlaget, Oslo. [In Norweigan].
- Guralnick MJ (2005): Early Intervention for Children with Intellectual Disabilities: Current Knowledge and Future Prospects. *Journal of Applied Research in Intellectual Disabilities* 18, 313-324.
- Hallberg AC, Lindbladh E, Petersson K, Rastam L & Hakansson A (2005): Swedish child health care in a changing society. *Scand J Caring Sci* 19, 196-203.
- Hanna BA, Edgecombe G, Jackson CA & Newman S (2002): The importance of first-time parent groups for new parents. *Nurs Health Sci* 4, 209-214.
- Hansagi H & Allebeck P (2004) Enkät och intervju inom hälso- och sjukvård: handbok för forskning och utvecklingsarbete (Survey and interview within health care: handbook for research and development). Studentlitteratur, Lund. [In Swedish].
- Hjalmhult E, Glavin K, Okland T & Tveiten S (2014a): Parental groups during the child's first year: an interview study of parents' experiences. *J Clin Nurs*.
- Hjalmhult E, Glavin K, Okland T & Tveiten S (2014b): Parental groups during the child's first year: an interview study of parents' experiences. *J Clin Nurs* 23, 2980-2989.
- Hoddinott P, Allan K, Avenell A & Britten J (2010): Group interventions to improve health outcomes: a framework for their design and delivery. *BMC Public Health* 10, 800.
- Hundeide K (2009) Genomförande av ICDP programmet (Guided Interaction: Implementing the ICDP programme) ICDP, Stockholm.
- Håkansson A, Flärd H, Bentzen I & Linder K (2006): Likheter o olikheter i skandinavisk barnhälsovård. (Similarities and differences in Scandinavian child health care). *Läkartidningen* 103, 2385-2389. [In Swedish].

- Hägglöf B, Hjelte J, Hyvönen U & DSjöberg M (2013) Familjepeppen en familjestödssatsning i Umeåregionen, Forskningsrapport maj 2013 (Report from a parental research intervention; Familjepeppen). , Umeå. [In Swedish].
- IPFCC (2010) Institute for patient and family centered care. Institute for patient and family centered care. Available at: http://www.ipfcc.org/faq.html (accessed 0503 2016).
- Irwin L-G, Siddiqi A & Hertzman C (2008) Early Child hood Development: A Powerful equalizer. WHO final report., World Health Organization's Commission on Social Determinants of Health, 2007. Final Report.
- Jansson A (2000) Sjuksköterskan i primärvård med särskilt fokus på barnhälsovård (The nurse in primary health care with a special focus on child healthcare). In *Department of nursing, Medical Faculty*. Lund University, Lund. [In Swedish].
- Karanicolas PJ, Farrokhyar F & Bhandari M (2010): Practical tips for surgical research: blinding: who, what, when, why, how? *Can J Surg* **53**, 345-348.
- Kazdin AE (2010) Research design in clinical psychology. Pearson new international edition, Harlow.
- Kendall S (1998) Health and empowerment: research and practice. Arnold, London.
- Kieling C, Baker-Henningham H, Belfer M, Conti G, Ertem I, Omigbodun O, Rohde LA, Srinath S, Ulkuer N & Rahman A (2011): Child and adolescent mental health worldwide: evidence for action. *Lancet* 378, 1515-1525.
- Krueger RA & Casey MA (2015) Focus groups: a practical guide for applied research. Sage Publications, Thousand Oaks, Calif.
- Kvale S & Brinkmann S (2014) *Den kvalitativa forskningsintervjun (Interview in qualitative research)*. Studentlitteratur, Lund. [In Swedish].
- Lagerberg D, Magnusson M & Sundelin C (2008) Barnhälsovård i förändring, resultat av ett interventionsförsök (Child Healthcare in transition, results of an intervention trial). Gothia Förlag, Stockholm. [In Swedish].
- Lincoln YS & Guba EG (1985) Naturalistic inquiry. Sage, Beverly Hills, Calif.
- Lipman EL, Kenny M, Jack S, Cameron R, Secord M & Byrne C (2010): Understanding how education/support groups help lone mothers. *BMC Public Health* **10**, 4.
- Magnusson M (1999) Barnhälsovård. Studier av effektivitet och föräldratillfredställelse (Childhealth care, studies of the efficacy and parental satisfaction). In *Department of Womens and childrens health*. Uppsala University, Uppsala. [In Swedish].
- Magnusson M (2009) Barnhälsovård: att främja barns hälsa (Child health care: promotion of child health). Liber, Stockholm. [In Swedish].
- McCrory E, De Brito SA & Viding E (2010): Research review: the neurobiology and genetics of maltreatment and adversity. *J Child Psychol Psychiatry* **51**, 1079-1095.
- McKee M & Wolfe I (2014) European child health services and systems: lessons without borders.
- Medical Research Council (2000) A framework for the development of and evaluation of RCTs for complex intervention to improve health., London: Medical Research Council 2000:18.

- Medical Research Council (2008): Developing and evaluating complex interventions: new guidance.
- Morse JM (2015): Critical Analysis of Strategies for Determining Rigor in Qualitative Inquiry. *Qual Health Res* 25, 1212-1222.
- National Child Health Handbook.Rikshandboken Barnhälsovård (2014a)
 Barnhälsovårdsprogramprogrammemet (National Child Health Care programme).
 Rikshandbokens programprogramråd, Rikshandboken. Available at:
 http://www.rikshandbokenbhv.se/Kategori/Barnh%c3%a4lsov%c3%a5rdsprogramprogrammet (accessed 0515 2016). [In Swedish].
- National Child Health Handbook.Rikshandboken Barnhälsovård (2014b) Föräldrastöd i grupp (Group based parental support). Rikshandboken. Available at: http://www.rikshandboken-bhv.se/Texter/Foraldrastod-i-grupp/Malen-for-foraldrastod-i-grupp/ (accessed 0515 2016). [In Swedish].
- National network for child health care coordinators/developers in Sweden (2007). (Nationella nätverket för barnhälsovårdssamordnare/vårdutvecklare) Nationell målbeskrivning för sjukskötersketjänstgöring inom barnhälsovården. Available at: http://www.rikshandboken-bhv.se/Texter/Malen-for-yrkesforeningarna/Nationell-malbeskrivning-for-sjukskotersketjanstgoring-inom-Barnhalsovarden/ (accessed 0425 2016). [In Swedish].
- National network for child health care coordinators/developers in Sweden. In Swedish:
 Nationella nätverket för barnhälsovårdssamordnare/vårdutvecklare i Sverige (2015)
 National targets for child health care nursing within child health service (CHS).(In Swedish: Nationell målbeskrivning för sjukskötersketjänstgöring inom barnhälsovården).
 Rikshandboken. Available at: http://www.rikshandboken-bhv.se/Texter/Malen-for-yrkesforeningarna/Nationell-malbeskrivning-for-sjukskotersketjanstgoring-inom-Barnhalsovarden/ (accessed 0510 2016). [In Swedish].
- Neuman WL (1997) Social research methods: qualitative and quantitative approaches. Allyn and Bacon, Boston, Mass.
- Nolan ML, Mason V, Snow S, Messenger W, Catling J & Upton P (2012): Making friends at antenatal classes: a qualitative exploration of friendship across the transition to motherhood. *J Perinat Educ* 21, 178-185.
- Nystrom M & Dahlberg K (2001): Pre-understanding and openness a relationship without hope? *Scand J Caring Sci* 15, 339-346.
- Olsson H & Sörensen S (2007) Forskningsprocessen: kvalitativa och kvantitativa perspektiv (Research: qualitative and quantitative perspective), 2. uppl. edn. Liber, Stockholm. [In Swedish].
- Petersson K, Petersson C & Hakansson A (2004): What is good parental education? Interviews with parents who have attended parental education sessions. *Scand J Caring Sci* 18, 82-89.

- Plantin L & Daneback K (2009): Parenthood, information and support on the internet. A literature review of research on parents and professionals online. *BMC Fam Pract* 10, 34.
- Polit DF & Beck CT (2010): Generalization in quantitative and qualitative research: myths and strategies. *Int J Nurs Stud* 47, 1451-1458.
- Polit DF & Beck CT (2016) Nursing research: generating and assessing evidence for nursing practice. Wolters Kluwer, Philadelphia.
- Premberg A, Hellstrom AL & Berg M (2008): Experiences of the first year as father. *Scand J Caring Sci* **22**, 56-63.
- Public Health Agency of Sweden (2013) (Folkhälsomyndigheten) Föräldrar spelar roll: handbok i lokalt och regionalt föräldrastödsarbete. (Parent matters: handbook in work with parental support) Statens folkhälsoinstitut, Östersund. [In Swedish].
- Public Health Agency of Sweden (2014a) (Folkhälsomyndigheten) Folkhälsan i Sverige: årsrapport 2014 (Public Health in Sweden: annual report 2014). Folkhälsomyndigheten, Solna. [In Swedish].
- Public Health Agency of Sweden (2014b) (Folkhälsomyndigheten) Föräldrastöd-är det värt pengarna? Hälsoekonomiska analyser av föräldrastödsprogram (Parental support-is it worth the money? Health economic analyses of parental support programmes). [In Swedish].
- Public Health Agency of Sweden: Swedish Public health goal 6 (Folkhälsomyndigheten, Folkhälsomål 6): Public Health Agency of Sweden.

 http://www.folkhalsomyndigheten.se/amnesomraden/livsvillkor-och-levnadsvanor/folkhalsans-utveckling-malomraden/ (accessed 20151115) [In Swedish].
- Public Health Agency of Sweden (2015b) Swedish Public health goal 3 (Folkhälsomyndigheten, Folkhälsomål 3) Public Health Agency of Sweden. http://www.folkhalsomyndigheten.se/amnesomraden/livsvillkor-ochlevnadsvanor/folkhalsans-utveckling-malomraden/ (accessed 20151115). [In Swedish].
- RCoreTeam (2014) R: A language and environment for statistical computing. . R Foundation for Statistical Computing, Vienna, Austria.
- Rimanoczy I (2008) Action reflection learning: solving real business problems by connecting learning with earning [Elektronisk resurs].
- Sarkadi A (2003) Verklig gemenskap i en virtuell värld? (Real fellowship in a virtual world?). Swedish National Institute of Public Health.
- Sarkadi A & Bremberg S (2005): Socially unbiased parenting support on the Internet: a cross-sectional study of users of a large Swedish parenting website. *Child Care Health Dev* 31, 43-52.
- SCB (2010) Care Need Index, CNI ett socioekonomiskt behovsindex. Statistics Sweden. Available at:
 http://www.scb.se/Grupp/Produkter_Tjanster/Skraddarsydd/Regionala_produkter/Marknadsprofiler/CNI-blad.pdf (accessed 0613 2016). [In Swedish].

- Social Security Administration USA (2015) Social security programmes throughout the world. Social Security Administration USA, Washington DC. Available at: https://www.ssa.gov/policy/docs/progdesc/ssptw/2014-2015/africa/index.html (accessed 0503 2016). [In Swedish].
- Sogunro OA (2015): Motivating Factors for Adult Learners in Higher Education. *International Journal of Higher Education* 4, 22-37.
- Stattin H, Enebrink P, Ozdemir M & Giannotta F (2015): A national evaluation of parenting programmes in Sweden: The short-term effects using an RCT effectiveness design. *J Consult Clin Psychol* 83, 1069-1084.
- Stenhammar A-M, Ohrlander K & Föreningen Mjölkdroppen (Stockholm) (2001) Mjölkdroppen: filantropi, förmynderi eller samhällsansvar? (The Milk Drop: philanthropy, paternalism or social responsibility?). Carlsson: Fören. Mjölkdroppen, Stockholm. [In Swedish].
- Stewart-Brown SL & Schrader-McMillan A (2011): Parenting for mental health: what does the evidence say we need to do? Report of Workpackage 2 of the DataPrev project. Health Promot Int 26 Suppl 1, i10-28.
- Sundelin C & Hakansson A (2000): The importance of the Child Health Services to the health of children: summary of the state-of-the-art document from the Sigtuna conference on Child Health Services with a view to the future. *Acta Paediatr Suppl* 89, 76-79.
- Sundelin C, Magnusson M & Lagerberg D (2005): Child health services in transition: I. Theories, methods and launching. *Acta Paediatr* **94**, 329-336.
- Swedish Association of Health Professionals (2016). Vårdförbundet. *Personlig kontakt Anders Norén 20160823.*
- Swedish Ministry of Health and Social Affairs (1978) SOU 1978:5. Föräldrautbildning kring barnets födelse (Parental education around birth) Department of Health, Stockholm.
- Swedish Ministry of Health and Social Affairs (1982) 1982:763. Hälso och sjukvårdslagen (Swedish health care act) Department of Social Affairs, Stockholm. [In Swedish].
- Swedish Ministry of Health and Social Affairs (2009) Nationell strategi för ett utvecklat föräldrastöd: En vinst för alla (National strategy for an advanced parental support: A win for all) Västerås: Department of Health.
- Swedish Ministry of Justice (1998) 1998:204 Personuppgiftslagen (Personal Data Act), Stockholm. [In Swedish].
- Swedish Ministry of Justice (2008) SFS 2003:460/ SFS 2008:192 Lag om etikprövning av forskning som avser människor (Ethical Review of Research Involving Humans). [In Swedish].
- Swedish National board of health and welfare (2008) SOU 2008:131. Föräldrastöd en vinst för alla. Betänkande av utredningen Nationell strategi för samhällets stöd och hjälp till föräldrar i deras föräldraskap (Parental support a win for all. National investigation), Stockholm: Department of Health. [In Swedish].

- Swedish National Board of Health and Welfare (2014) Vägledning för barnhälsovården (Child health care guidelines). Socialstyrelsen, Stockholm. [In Swedish].
- Swedish Parliament (Sveiges Riksdag, Socaildepartementet) (1982) The Swedish Health care Act. Svensk författningssamling. Hälso- och sjukvårdslag (1982:763) Sveriges Riksdag, Svensk författningssamling. [In Swedish].
- Swedish Social Insurance Agency (2004) Föräldraförsäkringen 30 år (Parental insurance 30 years), Social Insurance Agency. [In Swedish].
- Swedish Social Insurance Agency (2016a) Social Insurance The Swedish Social Insurance Agency Available at: http://www.forsakringskassan.se/privatpers/foralder/ (accessed 0405 2016). [In Swedish].
- Swedish Social Insurance Agency (2016b) Till alla er som väntar eller just fått barn (To all expectant or newly become parents), Social Insurance Agency. Available at: https://www.forsakringskassan.se/wps/wcm/connect/4cb3a155-5050-4456-a2c6-3858b159b44d/4010_till_alla_som_vantar_eller_just_fatt_barn.pdf?MOD=AJPERES (accessed 0510 2016). [In Swedish].
- Tiitinen S, Homanen R, Lindfors P & Ruusuvuori J (2013): Approaches used in investigating family support in transition to parenthood. *Health Promot Int*.
- Wallby T (2008) Föräldrastöd i Sverige idag Vad, när och hur? (Parental support in Sweden today What, when and how? National investigation) (Sarkadi A ed.). Swedish National Institute of Public Health, Östersund. [In Swedish].
- van Teijlingen ER, Hundley V, Rennie AM, Graham W & Fitzmaurice A (2003): Maternity satisfaction studies and their limitations: "What is, must still be best". *Birth* **30**, 75-82.
- WHO (1998) Health 21: an introduction to the health for all policy framework for the WHO European region. WHO, Regional Office for Europe, Copenhagen.
- WHO (2001) The World Health Report 2001: Mental health: new understanding, new hope. In *The World Health Report* (WHO ed.), pp. 76-106.
- WHO (2004) Promoting mental health. Concepts-emerging evidence-practice, Geneva.
- WHO (2016a) Children: reducing mortality. WHO. Available at: http://www.who.int/mediacentre/factsheets/fs178/en/ (accessed 0404 2016).
- WHO (2016b) Global Health Observatory: Measels immunization coverage. WHO. Available at: http://www.who.int/gho/mdg/child_mortality/situation_trends_measles_immunization/en/ (accessed 0530 2016).
- WHO (2016c) Health promotion and disease prevention through population-based interventions, including action to address social determinants and health inequity Available at: http://www.emro.who.int/about-who/public-health-functions/health-promotion-disease-prevention.html (accessed 0416 2016).
- Wissö T (2012) Småbarnsföräldrars vardagsliv: omsorg, moral och socialt kapital (The everyday life of parents of small children. Dissertation). Institutionen för socialt arbete, Göteborgs universitet, Göteborg. [In Swedish].

- WMA (2013) WMA; Declaration of Helsinki; Principles for Medical research involving Human subjects 2008.
- Wolfe I, Thompson M, Gill P, Tamburlini G, Blair M, van den Bruel A, Ehrich J, Pettoello-Mantovani M, Janson S, Karanikolos M & McKee M (2013): Health services for children in western Europe. *Lancet* 381, 1224-1234.
- Wolfe RB & Haddy L (2001): A qualitative examination of parents' experiences in parent education groups. *Early Child Development and Care* **167**, 77-87.
- Vuorenmaa M, Halme N, Perala ML, Kaunonen M & Astedt-Kurki P (2016): Perceived influence, decision-making and access to information in family services as factors of parental empowerment: a cross-sectional study of parents with young children. *Scand J Caring Sci* 30, 290-302.