Antenatal and parent education classes: evidence and some recent Italian models of care

Pietro Grussu[a], Rosa Maria Quatraro[b]

[a]*Consultorio Familiare Service, Azienda ULSS 6 Euganea, National Health Service, Italy*

[b]*Hospital Psychology Unit, Obstetrics and Gynaecology Section, Azienda ULSS 8 Berica, National Health Service, Italy Maternità in difficoltà®, Padova and Vicenza, Ital.*

Abstract. The transition to parenthood involves both women and men. For the family, this life experience is one of the most challenging transformations they will ever face. (Huston & Holmes, 2004). The couple relationship during the transition to parenthood is at its most fragile, as parents learn to adapt to the physical, psychological, emotional, and relational changes that occur. A substantial proportion of couples struggle to adapt to parenthood, feel stress in caring for their infant, and experience a significant decline in their relationship as a couple (Petch & Halford, 2008) and a similar decline in positive couple communication (Cowan & Cowan, 2000; Doss et al., 2009). A collaborative and interdisciplinary perinatal care model is gaining acceptance and represents a growing scope of practice. The approach is a viable way of providing each mother with the specific physical, emotional, and social support relevant to her needs (Kwee & McBride, 2015). Involving fathers during pregnancy and childbirth may have positive outcomes for the health of the father, his wife, and their baby (Plantin et al., 2011).

Keywords: *parental needs, models of care, Italian experience*

Correspondence concerning this article should be addressed to Dr. Pietro Grussu, Consultorio Familiare Service, Azienda ULSS 6 Euganea, Via San Fermo 10, 35042 Este (PD), Italy, tel./fax +39 0429 618401, e-mail: pgruss@tin.it

Received: 03.03.2020 – Revision: 20.06.2020 – Accepted: 30.06.2020

Introduction: the Perinatal experience

A woman's desire and need for a positive pregnancy experience can be summed up in four subthemes: the preservation of physical and sociocultural normality; the continuation of a healthy pregnancy for both mother and baby (including the prevention and treatment of risks, illness and death); an effective transition to positive labor and birth; and achieving positive motherhood (including the mothers' self-esteem, competence and autonomy) (Downe et coll., 2016). A positive childbirth experience is achievable when women are at the center of care, when they are involved in decisions with respect to care, and when they feel themselves to be in a safe, empathetic environment with competent healthcare professionals. An essential element of this care, particularly in cases where intervention is considered necessary, is the woman's sense of control and personal achievement of the birth outcome (Downe et al., 2018).

Empowering a woman during the childbearing period is expected to have a beneficial effect on her psychological well-being. The same favorable outcome is anticipated with respect to the woman's readiness to face the challenges that arise after the birth, when she is called upon to adapt to her new role as mother, now responsible for raising a child (Garcia & Yim, 2017; Raymond et al., 2014; Nilsson et al., 2013). A positive birth experience also appears to have an empowering effect (Olza et al., 2018; Lewis et al., 2018).

The empowerment of women needs to be considered at both the macro and the micro levels for it to be practical as well as sustainable within the broader arena of health and social care (Downe et al., 2018). Women's empowerment is influenced by collective, social, economic, legal, and political conditions, as well as by the individual psychological aspect (Salazar et al., 2012).

Expectant and new fathers experience a range of fears, and they frequently do not know what to expect from the processes leading to the transition to fatherhood. This can bring about a feeling of helplessness in the fathers who sense themselves being pushed out of the relationship and left to struggle to find their role. They experience fears related specifically to their partner's labor and birthing process. They often worry about the wellbeing of their partner and of the baby throughout the perinatal period (Baldwin et al., 2018).

The role restrictions experienced by the new fathers and the changes in their lifestyle result in increased stress levels which can manifest as tiredness, irritability, and frustration. In response, fathers adopt coping techniques such as denial or escape activities like smoking, working longer hours, or listening to music (Baldwin et al., 2018). Fathers' involvement is affected by levels of

informational support, the fathers' own attitudes towards involvement, the marital relationship, the fathers' relationships with their own parents, and other socioeconomic factors (Xue et al., 2018). Marital relationship has also been identified as a factor associated with father involvement in infant care (Falceto et al., 2008).

Health and care needs

In recent decades, there have been significant improvements in care during the term extending from pregnancy, through delivery, and including the postpartum, yet mothers and their babies are still at risk during that time (EURO-PERISTAT project, 2018). The main objectives of the World Health Organization (WHO) are to reduce maternal and newborn mortality and to improve the care experience (World Health Organization HQ, 2019). Promoting healthy pregnancy and safe childbirth is a goal of all European health care systems (EURO-PERISTAT project, 2018).

The cultural shift to medicalize the perinatal experience which is essentially an event of deep personal, relational, and cultural significance has objectified women and increased their risk of emotional maladjustment. The implications of mothers' psychosocial well-being are compelling from a maternal health aspect as well as from an infant development perspective (Kwee & McBride, 2015).

First-time fathers have demonstrated a need for more guidance and support in their preparation for fatherhood. Offering a variety of support mechanisms that encompass father-inclusive services is a useful strategy in support of fathers' mental health and well-being. (Baldwin et al., 2018).

"... While reductions in maternal and infant mortality ought to be celebrated as milestones of modern medicine, the person behind the medical experience should remain in focus in perinatal care" (McBride and Kwee, 2016, page 16).

Preventive interventions

For more than 50 years, antenatal education has been offered in most high-income countries. Including expecting fathers is a more recent development. Overall, the aim of antenatal education is to provide expectant parents with strategies for dealing with pregnancy, labor, and childbirth (Koehn, 2002) and, to a lesser extent, with parenting (Walker, Visger & Rossie, 2009).

Although antenatal education calls for a significant effort by women and families and results in considerable cost to maternity services centers

(Ferguson, Davis, and Browne, 2013), pregnant women and health professionals view education as a significant component of antenatal care. Antenatal education is recommended by most health professionals, and used by most expectant parents (Fabian, Rådestad & Waldeström, 2005). However, there is a noticeable lack of widely adopted standards or guidelines, and the objectives, subject matter and methods of antenatal education vary considerably (O'Meara, 1993).

The objectives of antenatal education programs often include increasing the participants' knowledge on matters such as: antenatal and postnatal depression, the birth process, pain relief and obstetric interventions, promoting breast feeding, and increasing the woman's confidence in her own ability to give birth and to transition to parenthood. Providing information on health promotion and risk reduction is also an important aim of antenatal education (Brixval, 2015). Additionally, antenatal classes are structured to facilitate the development of social networks and to help participants connect with others in the same situation (Fabian et al., 2005).

The sensitivity of antenatal educators to opinions and trends has led to the implementation of marked changes in form and content over time. There were periods when antenatal education was delivered to small classes with group discussions. At other times, the practice involved lectures in large auditoriums. The curriculum has also varied greatly. For example, topics like breathing and/or relaxation techniques are sometimes included, and sometimes left out of antenatal education programs (Brixval, 2015). Financial constraints and structural changes in the delivery of health care over time have also led to changes in the number of antenatal education sessions (Fabian et al., 2005).

Antenatal education classes with a small number of participants promote the creation of an environment that enables expecting parents to discuss their feelings and concerns (Brixval, 2015). Moreover, small class-size may enhance the participants' awareness of their own resources and provide them with problem-solving strategies that reinforce their own competencies to cope with birth and parenthood (Ip, Tang, & Goggins, 2009).

Antenatal education may have some positive effects on labor and birth including fewer episodes of false labor and less epidural use. Evidence with respect to the effect of antenatal education on mode of birth is contradictory. There is a need for further research to explore the impact of antenatal education on women's birthing outcomes (Ferguson, Davis & Browne, 2013).

"Parent education", on the other hand, describes a range of activities designed to meet specific learning objectives that promote the physical, psychological, and social growth and development of the child (Gilmer et al.,

2016).

The primary assumption on which parent education is based, both implicitly and explicitly, is that parental challenges and distress are the result of a knowledge deficit. This premise leads to the expectation that pre- and postnatal parent education will help to resolve the knowledge deficit by providing information to parents on topics such as breastfeeding, healthy eating strategies, and information on child development. Parent education is based on the additional assumption that parents who are equipped with this new knowledge will experience less distress and will go through positive changes in attitudes and ultimately behavior. These positive changes in parental behavior will then advance the overall goal of helping parents create a nurturing environment for their children. Parent education programs are also expected to produce benefits beyond simply educating parents including, for example, the development of a trusting relationship with the facilitator, a connection with other parents, and the reduction of isolation. The primary focus of these initiatives, however, is on providing a curriculum to educate people on becoming better parents (McDermott, 2006).

Models of care in Italy and appropriateness of health activities

Health care systems in industrialized countries are developed around acute health problems (Etzweiler, 1997).

The medicalized view of the full perinatal period calls into question the use of pathogenesis to frame maternity care services (Ferguson et al., 2015). Therefore, adopting a salutogenic model may reduce inequity of care and improve the quality of maternity care provided (Shorey et al., 2020).

In Italy, the Consultorio Familiare Centers provide the NHS's primary care services following a salutogenic model of maternal care dedicated to perinatal assistance. The centers employ a multidisciplinary, proactive, and holistic approach. They are tasked with providing both pre- and postnatal assistance to mothers and their families, including maternal and fetal assessments, antenatal classes, breastfeeding promotion, and postpartum support (Grussu, Lega, Quatraro & Donati 2020). Additionally, the centers carry out comprehensive promotional campaigns supported by the Ministry of Health such as "Genitoripiù" (www.genitoripiu.it).

Moreover, in Italy there is a new Surveillance System, coordinated by NHS (www.epicentro.iss.it/sorveglianza02anni/), on early childhood health determinants which promotes child health during the first 1000 days of life (Pizzi et al., 2019). The latest data, collected through a questionnaire compiled by mothers in NHS's vaccination centers, highlighted the need for early

intervention – even as early as the preconception period – with targeted methods and the involvement of diverse professionals (Pizzi et al., in press) and services like Consultorio Familiare centers.

Unlike a few years ago (Baglio et al., 2000), Italian antenatal classes offered by the Consultorio Familiare of the NHS are today the primary means by which suitable health pathways, relevant behavioral patterns, good habits and risk prevention in the perinatal period are consolidated within the daily life of pregnant and postnatal women, couples and families.

Reducing maternal mortality (Donati et al., 2018), reducing caeserean sections, as well as developing additional care models to support parenting, assisting emotionally fragile women and couples, safeguarding perinatal psychological well-being with early detection of those at risk and those suffering from perinatal emotional disorders – these goals must find their legitimate place in the work of the Italian agencies dedicated to the perinatal experience.

"*... Podcasts in the waiting room, posters, flyers, and apps for one's smartphone are all viable methods to support women with information that will facilitate women's awareness of and responsibility for their health and wellbeing, help them to ask relevant questions, and promote formal help seeking when needed*" (Kwee and McBride, 2015, page 7).

In the face of these health necessities, the pressing need is to build care models appropriate to local realities and to draft documents that describe in detail the objectives of care and the procedures used to achieve them. All of this must consider the most recent scientific evidence, the recommendations developed by the major scientific societies, and the current local health legislation.

In the Italian health context, antenatal classes represent a significant effort by women and families as well as a substantial cost to the NHS's maternity services. This allocation of resources calls for careful evaluation. The measurement of outcomes, the assessment of the effectiveness of the services offered to the perinatal population, not to mention the users' satisfaction with the care received, are therefore basic elements for measuring what has been done, justifying the significant economic expenses incurred and further disseminating these types of services throughout the national territory. Effectiveness, efficiency, equity (Rodrìguez & des Rivières-Pigeon, 2007) and appropriateness are the hallmarks of "Best Practice" and should always be linked to the activities of the Italian antenatal and parental education classes of the NHS.

Conclusions

Maternal and child health is a public health priority, because pregnancy, childbirth and puerperium are leading determinants contributing to the hospitalization of women. Furthermore, birth-related events are internationally considered to be among the principal measures for assessing health-care quality (Pileggi et al., 2019).

Providing safe, first-rate perinatal care is a complex process focused on achieving maximum health potential for the fetus, the newborn, and the mother. Correspondingly, the evaluation of the quality of perinatal care is also a complex process because it involves different populations (Pileggi et al., 2019).

Optimality in perinatal health care can be described as the maximal perinatal outcome with minimal intervention placed against the dynamic context of the woman's social, medical, and obstetric history. However, optimal perinatal health care is likely to be defined differently by various groups with different risk orientations, such as women, clinicians, health care administrators, policymakers, and insurers (Kennedy, 2006). To improve outcomes, health professionals need the right tools to assess perinatal health problems and their causes, and there is the further need to monitor the impact of policy initiatives over time (EURO-PERISTAT project, 2018).

Practices in perinatal care impact a woman's self-experience (Redshaw & Van den Akker, 2008). Intervention and psychosocial support are effective in reducing emotional distress and improving a woman's resilience and ability to cope during the perinatal period (Kwee & McBribe, 2015). Psychosocial care not only improves psychological outcomes but also improves medical outcomes and reduces birth complications (Griffiths & Barker-Collo, 2008; Saisto et al., 2006; Williams et al., 2009).

More specifically, providing a woman with psychosocial support during pregnancy and during the postpartum period reduces her risk of distress, increases her ability to thrive, and contributes to her ability to nurture the healthy development of her child (Kwee & McBride, 2015). At the same time, involving fathers in antenatal classes or parental education may have positive outcomes for the health of the father, his wife, and their baby (Plantin et al., 2011).

The future

"*... Bringing together data from civil registration, medical birth registers, other registers, hospital discharge systems, and European surveys presents exciting research possibilities. This common framework could be used to*

develop epidemiological surveillance in perinatal health and to provide opportunities for collaboration among health researchers in Europe who wish to undertake more focussed studies to gain knowledge about the specific causes of adverse perinatal outcomes, interventions for prevention and treatment, and the potential for improving perinatal health by improving the socioeconomic circumstances of parents and babies" (EURO-PERISTAT project, 2018, page 16).

References

Baglio. G., Spinelli. A., Donati. S., Grandolfo, M.E., & Osborn, J. (2000). Evaluation of the impact of birth preparation courses on the health of the mother and the newborn [in Italian]. *Annali dell'Istituto Superiore di Sanità*, 36, 465-478.

Baldwin, S., Malone, M., Sandall, J., & Bick, D. (2018). Mental health and wellbeing during the transition to fatherhood: a systematic review of first-time fathers' experiences. *JBI Database System Rev Implement Rep*, 16, 2118–2191.

Britton, J.R. (2012). The assessment of satisfaction with care in the perinatal period. *Journal of Psychosomatic Obstetrics & Gynecology*, 33, 37–44.

Brixval, C.S., Axelsen, S.F., Lauemøller, S.G., Andersen, S.K., Due, P., & Koushede, V. (2015). The effect of antenatal education in small classes on obstetric and psycho-social outcomes - a systematic review. *Systematic Reviews*, 4, 20.

Cowan, C.P., & Cowan, P.A. (2000). *When partners become parents: The big life change for couples*. Mahwah, NJ: Erlbaum.

Dahlen, H.G., Barclay, L.M., & Homer, C.S. (2010). Processing the first birth: Journeying into "motherland." *Journal of Clinical Nursing*, 19(13–14): 1977–1985.

Deave, T., & Johnson, D. (2008). The transition to parenthood: what does it mean for fathers? *Journal of Advanced Nursing*, 63, 626-633.

Donati, S., Maraschini, A., Lega, I., D'Aloja, P., Buoncristiano, M., Manno, V., & Regional Maternal Mortality Working Group (2018). Maternal mortality in Italy: Results and perspectives of record-linkage analysis. *Acta Obstetricia et Gynecologica Scandinavica*, 97, 1317-1324.

Doss, B.D., Rhoades, G.K., Stanley, S.M., & Markman, H.J. (2009). The effect of the transition to parenthood on relationship quality: An 8-year prospective study. *Journal of Personality and Social Psychology*, 96, 601 – 619.

Downe, S., Finlayson, K., Oladapo, O., Bonet, M., & Guëlmezoglu, A.M.

(2018). What matters to women during childbirth: a systematic qualitative review. *PLoS One*,13, e0194906 .

Downe, S., Finlayson, K., Tunçalp, Ö., & Gülmezoglu, A.M. (2016). What matters to women: a systematic scoping review to identify the processes and outcomes of antenatal care provision that are important to healthy pregnant women. *British Journal of Obstetrics and Gynaecology*, 123, 529–539.

EURO-PERISTAT project (2008). European Perinatal Health Report. Data from 2004. Available: www.europeristat.com

Etzweiler, D.D. (1997). Chronic care: a need in search of a system. *The Diabetes Educator*, 23, 569–573.

Fabian, H.M., Rådestad, I.J., & Waldeström, U. (2005). Childbirth and parenthood education classes in Sweden. Women's opinion and possible outcomes. *Acta Obstetricia et Gynecologica Scandinavica*, 84, 436-443.

Falceto, O.G., Fernandes, C.I., Baratojo, C., & Giugliani, E.R.J. (2008). Factors associated with father involvement in infant care. Revista de Saúde Publica, 42, 1034-1040

Ferguson, S., Davis, D., & Browne, J. (2013). Does antenatal education effect labour and birth? A structured review of the literature. *Women and Birth*, 26, e5-e8.

Ferguson, S., Davis, D., Browne, J., & Taylor, J. (2015). Sense of coherence and childbearing choices: a cross sectional survey. *Midwifery*, 31, 1081–1086.

Fukkink, R., Vink, C., & Bosscher, N. (2014). *Think parents! Putting parents at the heart of parenting support.* Amsterdam: SWP.

Garcia, E.R., & Yim, I.S. (2017). A systematic review of concepts related to women's empowerment in the perinatal period and their associations with perinatal depressive symptoms and premature birth. *BMC Pregnancy Childbirth*, 17, 347.

Gawley, L., Einarson, A., & Bowen, A. (2011). Stigma and attitudes towards antenatal depression and antidepressant use during pregnancy in healthcare students. *Advances in Health Sciences Education,* 16(5): 669–679.

Gilmer, C., Buchan, J.L., Letourneau, N., Claudine, T., Bennett, C.T., Stuart, G. Shanker, S.G., Fenwick, A., & Smith-Chant, B. (2016). Parent education interventions designed to support the transition to parenthood: A realist review. *International Journal of Nursing Studies*, 59, 118–133

Goodman, J., & Santangelo, G. (2011). Group treatment for postpartum depression: A systematic review. *Archives of Women's Mental Health*, 14(4): 277–293.

Griffiths, P., & Barker-Collo, S. (2008). Study of a group treatment program for postnatal adjustment difficulties. *Archives of Women's Mental Health*, 11: 33–41.

Grussu, P., Lega, I., Quatraro, R.M., & Donati, S. (2020). Perinatal mental health around the world: priorities for research and service development in Italy. *British Journal of Psychiatry International*, 17, 8-10.

Huston, T., & Holmes, E.K. (2004). Becoming parents. In A. Vangelisti (Ed.), *Handbook of family communication* (pp. 105 – 133). Hillsdale, NJ: Erlbaum.

Kennedy, H.P. (2006). A concept analysis of optimatility in perinatal health. *Journal of Obstetric, Ginecologic, and Neonatal Nursing*, 35, 763-769.

Kim, P., & Swain, J. E. (2007). Sad dads: Paternal postpartum depression. *Psychiatry*, 4, 35–47.

Koehn M.L. (2002). Childbirth education outcomes: an interpretative review of the literature. *The Journal of Perinatal Education an ASPO/Lamaze Pubblication*, 11, 10-19.

Kwee, J.L., & McBride H.L. (2015). Working together for women's empowerment: Strategies for interdisciplinary collaboration in perinatal care. *Journal of Health Psychology*, 21, 2742-2752.

Ip, W.Y., Tang, C.S., & Goggins, W.B. (2009). An educational intervention to improve women's ability to cope with childbirth. *Journal of Clinical Nursing*, 18, 2125–2135.

Lewis, L., Hauck, Y.L., Crichton, C., Barnes, C., Poletti, C., Overing, H., Keyes, L., & Thomson, B. (2018). The perceptions and experiences of women who achieved and did not achieve a waterbirth. *BMC Pregnancy Childbirth*, 18, 23.

Long, N. (2016). Future trends in parenting education. In J. J. Ponzetti, Jr. (Ed.), *Evidence-based parenting education: A global perspective* (pp. 311-328). New York: NY, Routledge.

McBride, H.L., & Kwee, J.L. (2016).Focusing on the Mother in Maternal Health Care: A Literature Review of Perinatal Mental Health Needs and Favourable Interventions. *Journal of Psychological Therapies in Primary* Care, 5, 1–25.

McDermott, D., 2006. Thinking mindfully about parenting and parenting education. *Child Welfare*, 85, 741–750.

Nilsson, L., Thorsell, T., Hertfelt, W.E., & Ekström, A. (2013). Factors influencing positive birth experiences of first-time mothers. *Nursing Research and Practice*, 2013, 349124.

Olza, I., Leahy-Warren, P., Benyamini, Y., Kazmierczak, M., Karlsdottir, S.I., Spyridou, A., Crespo-Mirasol, E., Takács, L., Hall, P.J., Murphy, M.,

Jonsdottir, S.S., Downe, S., & Nieuwenhuijze, M.J. (2018). Women's psychological experiences of physiological childbirth: a meta-synthesis. *British Medical Journal Open*, 8, 1–10, e020347.

O'Meara, C.M. (1993). Childbirth and parenting education – the providers' viewpoint. *Midwifery*, 9, 76-84.

Perleth, M., Jakubowski, E., & Busse, R. (2001). What is 'best practice' in health care? State of the art and perspectives in improving the effectiveness and efficiency of the European health care systems. *Health Policy*, 56, 235–250.

Petch, J., & Halford, WK. (2008). Psychoeducation to enhance couples' transition to parenthood. Clinical Psychology Review 28, 1125–1137.

Philpott, LF, Leahy-Warren, P., FitzGerald, S. (2017). Stress in fathers in the perinatal period: A systematic review. *Midwifery*, 55, 113–127.

Pileggi, C., Squillace, L., Giordano, M., Papadopoli, R., Bianco, A., & Pavia, M. (2019). Quality in perinatal care: applying performance measurement using joint commission on accreditation of healthcare organizations indicators in Italy. *BMC Medical Research Methodology*, 19, 83.

Pizzi, E., Salvatore, M.A., Lauria L., et al. (in press). Il nuovo Sistema di Sorveglianza sui determinanti della salute nella prima infanzia: sintesi dei risultati della raccolta dati 2018-2019. *Bollettino Epidemiologico Nazionale*.

Pizzi, E., Spinelli, A., Battilomo, S., Azzarito, C., Balducci, MT., Bettinelli, ME., Campostrini, S., Germinario, C., Mazzarella, G., Mignuoli, AD., Morbidoni, M., Porchia, S., Simeoni, L., Speri, L., & Gruppo sorveglianza bambini 0-2 anni. (2019). The health determinants in young children: testing a new surveillance system in Italy. *Epidemiologia & Prevenzione*, 43, 66-70.

Plantin, L., Olukoya, A.A., & Ny, P. (2011). Positive health outcome of father's involvement in pregnancy and childbirth paternal support: a scope study literature review. *Fathering*, 9, 87-102

Poh, H.L., Koh, S.S.L., & He, H.-G. (2014). An integrative review of fathers' experiences during pregnancy and childbirth. *International Nursing Review*, 61, 543-554.

Polomeno, V., (2000). The polomeno family intervention framework for perinatal education: preparing couples for the transition to parenthood. *Journal of Perinatal Education*, 9, 31–48.

Polomeno, V. (2014). The teaching of conjugal vulnerability during the transition to parenthood. *International Journal of Childbirth Education*, 29,78–85.

Raymond, N.C., Pratt, R.J., Godecker, A., Harrison, P.A., Kim, H., Kuendig,

J., & O'Brien, J.M. (2014). Addressing perinatal depression in a group of underserved urban women: a focus group study. *BMC Pregnancy Childbirth*, 14, 336.

Redshaw, M., & Van den Akker, O. (2008). Understanding factors which can influence the experience of pregnancy. *Journal of Reproductive and Infant Psychology*, 26, 71–73.

Rodrìguez C., & des Rivières-Pigeon, C. (2007). A literature review on integrated perinatal care. *International Journal of Integrated Care*, 7, 1-15.

Saisto, T., Toivanen, R., Salmela-Aro, K., & Halmesmäki, E. (2006). Therapeutic group psychoeducation and relaxation in treating fear of childbirth. *Acta Obstetrica et Gynecologica*, 85, 1315–1319.

Salazar, M., Högberg, U., Valladares, E., & Öhman, A., (2012). The supportive process for ending intimate partner violence after pregnancy: The experience of nicaraguan women. *Violence Against Women*, 18, 1257–1278.

Shorey, S., & Ng, E.D. (2020). Application of the salutogenic theory in the perinatal period: A systematic mixed studies review. *International Journal of Nursing Studies*, 101, 103398.

Singley, D.B., & Edwards, L.M. (2015). Men's Perinatal Mental Health in the Transition to Fatherhood. *Professional Psychology: Research and Practice*, 46, 309–316.

Sistema di Sorveglianza sui Determinanti di Salute della Prima Infanzia (2019). Zerodue. Convegno, Roma 26 novembre 2019, Istituto Superiore di Sanità.

Traviss, G.D., West, R.M., & House, A.O. (2012). Maternal mental health and its association with infant growth at 6 months in ethnic groups: Results from the Born-in-Bradford Birth Cohort Study. *PLoS ONE*, 7(2):e30707.

Walker, D.S., Visger, J.M., & Rossie, D. (2009). Contemporary childbirth education models. *Journal of Midwifery & Women's Health*, 54, 469-476.

Williams, K.J., Zolotor, A., & Kaufmann, L. (2009). Does group prenatal care improve pregnancy outcomes? *The Journal of Family Practice*, 58, 384a–384c.

World Health Organization HQ (2019). Quality of care for maternal and newborn health: A monitoring framework for network countries. Department of Maternal, Newborn, Child, and Adolescent Health (MCA). Genève, Switzerland

Xue, W.L., Wang, W., & He, H.-E. (2018) Fathers' involvement during pregnancy and childbirth: An integrative literature review. *Midwifery*, 62, 135-145.

Zaers, S., Waschke, M., & Ehlert, U. (2008). Depressive symptoms and symptoms of post-traumatic stress disorder in women after childbirth. *Journal of Psychosomatic Obstetrics and Gynaecology*, 29, 61–71.