**Summary**

The aim of this dissertation ‘the aberrant third stage of labour’ is outlined in the introduction (part 1). The introduction further includes a paragraph on physiology and pathophysiology of the third stage of labour and risk indicators for postpartum haemorrhage are presented and clustered. In addition, the theory by Abrams and Rutherford on the evolutionary reason why humans bear the burden of postpartum haemorrhage is discussed. The next paragraph handles the management of the third stage of labour and the different approach of the third stage by midwives and obstetricians. Furthermore, the clinical problems ‘retained placenta’ and ‘puerperal uterine inversion’ are outlined and the cohort study on uterine inversion and the randomised controlled trial on misoprostol versus placebo for retained placenta are introduced. In the last paragraph, the terms ‘quality of life’ and ‘illness perceptions’ are introduced and clarified. The way illness perceptions can be measured through drawings of the uterus by women who experienced major obstetric haemorrhage is explained as well as the importance of knowing the relation between illness perceptions and quality of life.

Part 2 of this dissertation contains the Dutch contribution to explore a possible global rise in incidence of postpartum haemorrhage (chapter 1). Several high-income countries report an increasing trend, which is also the case in the Netherlands. The methodological and statistical difficulties in determining the cause of the rise in incidence of postpartum haemorrhage are discussed. Furthermore, the current knowledge and practice regarding active management of the third stage of labour in midwifery practices and obstetric departments in the Netherlands is presented (chapter 2). Obstetric healthcare workers have dramatically increased the use of active management of the third stage of labour in the period 1995-2011. Primary care midwives are urged to develop national guidelines on active management of the third stage in the low-risk population and encourage them to perform more research in order to make primary care obstetrics in the Netherlands more ‘evidence based’.

In part 3 of this dissertation, the problems associated with abnormal placentation are explored. Misoprostol turned out not to be beneficial over placebo in the management of retained placenta (chapter 3 and 4). Although time will expel many retained placentas spontaneously, we do not advise to extend the period of expectant management. In fact, we advise to start the procedure of manual removal, 30 minutes after birth of the neonate, to prevent postpartum haemorrhage.

In chapter 5, a cohort of 15 women with puerperal inversion of the uterus who were part of a two-year nationwide cohort of 357000 deliveries is presented. Risk indicators such as prolonged duration of second and third stages of labour, macrosomia and retained placenta are confirmed in our cohort. Another previously described risk indicator, nulliparity, was not found in our cohort. Every obstetric healthcare worker must have knowledge about recognition and management of uterine inversion because it has a high risk for severe maternal morbidity, it is rare and can occur in low-risk women.

Experiencing an event such as major obstetric haemorrhage does not seem to be associated with diminished quality of life, which is studied in part 4 of this dissertation. Clinical characteristics of major obstetric haemorrhage imply a big impact of the event on women and their partners. Fortunately, the couples showed great resilience and similar quality of life compared to reference groups. Women who underwent embolisation of the uterine artery seem to do better than women who had to undergo hysterectomy. Among several somatic reasons, embolisation is superior over hysterectomy concerning quality of life, although no concessions should be made in relation with the safety of these women while trying to preserve fertility. Partners shoud be kept informed during the absence of their wives in the operation theatre and couples should be offered more extensive follow up than the regular six weeks, which is currently customary in the Netherlands.

In part 5 the methodological problems of postpartum haemorrhage research are discussed. A uniform definition for post partum haemorrhage and major obstetric haemorrhage is needed in order to facilitate scientific research on the subject.

It is strongly advised to add postpartum blood loss in millilitres in the Netherlands perinatal registration and abandon the different definitions for blood loss after vaginal and caesarean delivery. Aside clinical characteristics, altered awareness due to obstetric training and research on estimation of postpartum blood loss may partially explain the observed increased incidence of postpartum haemorrhage.

Although controlled cord traction is indicated in case of retained placenta, the procedure may be complicated by uterine inversion. If the latter should be considered as iatrogenic or as a complication is still a subject of debate. As a preventive measure it is advised to only perform controlled cord traction in a well-contracted uterus. Alike postpartum haemorrhage, retained placenta is defined in several ways. As long as a safe treatment for retained placenta is not available, women at high risk for abnormal adhered placenta should deliver in a hospital where interventions like embolisation of the uterine artery are present.

Massive obstetric haemorrhage has a big impact on women and their partners. The way a woman handles such a calamity depends on illness perceptions, which are partially influenced by caregivers. Doctors and nurses working at obstetric wards should be aware of the influence they have on the quality of life of women and their partners.