



Society for Maternal-Fetal Medicine Consult Series #50: The role of activity restriction in obstetric management

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The American College of Obstetricians and Gynecologists (ACOG) endorses this document.

Despite current recommendations against its use, activity restriction remains a common intervention used to prevent preterm birth in multiple clinical settings. Hypertensive disorders of pregnancy, preterm premature rupture of membranes, multiple gestations, vaginal bleeding, short cervical length, placenta previa, and fetal growth restriction are also common reasons for antepartum hospital admission and frequently lead to a recommendation for activity restriction. However, numerous reports have shown that activity restriction does not prevent adverse obstetrical outcomes but does confer significant physical and psychosocial risks. This consult reviews the current literature on activity restriction and examines the evidence regarding its use in obstetrical management. The recommendations by the Society for Maternal-Fetal Medicine are as follows: (1) we recommend against the routine use of any type of activity restriction in pregnant women at risk of preterm birth based on preterm labor symptoms, arrested preterm labor, or shortened cervix (GRADE 1B); (2) we recommend against the use of routine inpatient hospitalization and activity restriction for the prevention of preterm birth in women with multiple gestations (GRADE 1A); and (3) given the lack of data definitively demonstrating that activity restriction improves perinatal outcome in pregnancies complicated by fetal growth restriction, preterm premature rupture of membranes, or hypertensive diseases of pregnancy, coupled with evidence of adverse effects of activity restriction, we suggest that activity restriction not be prescribed for the treatment of pregnancies complicated by fetal growth restriction, preterm premature rupture of membranes, or hypertensive disease (GRADE 2B).

Key words: activity restriction, fetal growth restriction, hypertensive disease, preterm birth, preterm premature rupture of membranes

Introduction

Traditionally, activity restriction has been one of the most common interventions prescribed for women at risk of preterm birth and a number of other obstetrical complications. Activity restriction of various forms has commonly been recommended for women who experience preterm uterine contractions; cervical effacement, shortening, or dilation; or arrested preterm labor. Activity restriction has also been used in the management of pregnancy complications such as preterm premature rupture of membranes (PPROM), gestational hypertension, preeclampsia, fetal growth restriction (FGR), placenta previa, threatened miscarriage, and complications of multiple gestations.¹

Box 1 lists the most common indications for which activity restriction has been suggested. However, a growing body of literature suggests that these measures not only fail to provide benefit but also in fact are deleterious to the pregnant woman and her family.¹ Some of the harmful effects that result from activity restriction in pregnant women include deconditioning,² inadequate maternal weight gain and lower infant birth weight,³ bone loss,⁴ and an increased risk of thromboembolic events.⁵ In addition, activity restriction can lead to significant financial costs with resultant loss of wages and productivity.⁶ Prolonged activity restriction and hospitalization are also associated with maternal stress because of separation from one's family and loss of employment.⁷

According to the American College of Obstetricians and Gynecologists and other obstetrical experts, the prescription of activity restriction and "bed rest" is not

BOX 1**Common indications for varying levels of activity restriction**

Preterm labor
 Preterm premature rupture of membranes
 Cervical insufficiency, cerclage placement
 Shortened cervix
 Preeclampsia or other hypertensive disorders
 Multiple gestation at risk of preterm labor
 Placenta previa or other abnormal placentation
 Hemodynamically significant heart disease
 Severe fetal growth restriction
 Second- or third-trimester bleeding
 Threatened abortion

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recommended for the prevention of preterm birth or treatment of preterm labor.^{7–10} In contrast, the March of Dimes cites activity restriction as a possible intervention to prevent preterm birth while acknowledging that there is little evidence to support its efficacy,¹¹ and activity restriction continues to be commonly recommended by obstetricians and maternal-fetal medicine subspecialists.

What is the definition of activity restriction in pregnancy?

One of the difficulties in determining the benefits and harms associated with activity restriction is that no standard definition exists for this term. The terms “bed rest” and “activity restriction” are often used synonymously, although they may denote significantly different levels and intensity of activity. “Activity restriction” is typically used as a general term to describe some form of reduction in normal activity, whereas “bed rest” is usually considered the most restricted form of activity restriction. Bed rest has been variously defined in research studies as limited ambulation of not more than 1–2 hours per day with bathroom use and bathing permitted,¹² confinement to bed with bathroom use permitted,¹³ or resting 3 times a day for 1 hour.¹⁴ Additional restrictions of activity may include pelvic rest and cessation from exercise, heavy lifting, and employment. Pelvic rest has been variously defined as refraining from placement of anything in the vagina, with or without cessation of sexual intercourse and other sexual activities (such as orgasm).

There are also no universally accepted objective measurements for activity restriction. Measures of activity restriction used in most studies are based on patient report in which subjects may be asked to keep a diary of their activity to quantify data. The lack of objective measurements, such as heart rate or electronic activity monitoring, complicates interpretation of research data and further limits the quality of available evidence.

How commonly is activity restriction used as a clinical intervention?

Activity restriction is one of the most common interventions recommended for the treatment of preterm labor and prevention of preterm birth.¹⁵ Although current patterns of the use of bed rest and other activity restrictions to decrease level of activity are not known, this intervention was prescribed in nearly 20% of all pregnancies at risk of preterm birth in the past.⁶ Survey data from 2009 demonstrated that more than 80% of maternal-fetal medicine subspecialists recommended activity restriction in women with cervical dilation, threatened preterm labor, and PPROM.¹² Despite the widespread use of activity restriction, the majority of these physicians acknowledged no or limited documented benefit from this intervention.

Continued clinical use of bed rest appears to be an international phenomenon. Survey studies in both Canada and Denmark also demonstrate the common use of activity restriction, despite clinicians’ skepticism regarding its efficacy.^{7,16} The Society of Obstetricians and Gynaecologists of Canada states that increased rest at home in the third trimester or reduction of workload and stress may be useful for women at risk of developing preeclampsia. In the hospital, strict bed rest for women with a diagnosis of preeclampsia is not recommended.¹⁷ In collaboration with the Royal College of Obstetricians and Gynaecologists, the National Collaborating Centre for Women’s and Children’s Health states that bed rest in the hospital has not shown any benefit and should not be offered to women with gestational hypertension.¹⁸

What is the evidence regarding the benefits of activity restriction to prevent preterm birth in women with singleton pregnancies?

Since the 1900s, based on the belief that activity restriction results in uterine quiescence and increased blood flow to the uterus, obstetrical care providers have

BOX 2**Physiological and psychological effects of bed rest in pregnancy**

Physiological effects

- Loss of muscle tone
- Decreased lung volume
- Constipation
- Increased risk of thromboembolism
- Increased risk of infection
- Insulin resistance
- Muscle soreness
- Insomnia, fatigue
- Increased bone resorption
- Shortness of breath

Psychosocial effects

- Boredom
- Difficulty concentrating
- Increased family stress
- Depression
- Loss of income

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recommended activity restriction to prevent preterm birth.^{9,10} Hobel et al¹⁴ conducted a randomized controlled trial (RCT) that investigated the efficacy of a preterm birth prevention program in a West Los Angeles prenatal clinic system. Clinics were randomized to either implement the program or continue practicing the standard of care at the time, which consisted of monthly prenatal visits with no special education or interventions. The preterm birth prevention strategy included the use of patient education, increased clinic visits, and 1 of 5 randomized interventions, one of which was “bed rest” or moderate activity restriction (defined in this study as resting 3 times a day for 1 hour). Preterm birth rates were similar in the activity restriction intervention and standard of care groups (7.9% vs 8.5%, respectively; risk ratio, 0.92; 95% confidence interval [CI], 0.62–1.37). Limitations of this trial include lack of detail regarding methodology and absence of baseline characteristics of the women who were randomized to the 5 prophylactic interventions.

Another RCT by Elliott et al¹³ investigated the effect of activity restriction in women with threatened preterm labor and negative fetal fibronectin. Women were randomized to strict bed rest (defined in this study as complete bed rest with the exception of bathroom use) or no activity restriction. No differences were found in preterm birth rates between the 2 groups. However, this sample included women with singleton and multiple gestations, and it is not possible to stratify the results according to the plurality of gestation.

There is also some evidence to suggest harm resulting from activity restriction. A secondary analysis of the Maternal-Fetal Medicine Unit Preterm Prediction Study assessed the effect of activity restriction in women at increased risk of preterm birth. Women were assessed for risk of preterm birth at 23 to 24 weeks of gestation; indicators of an elevated risk included preterm labor symptoms, such as contractions or low back pain, positive fetal fibronectin, or findings such as a shortened cervix or prolapsing membranes. Preterm delivery was more common in women who were prescribed activity restriction (37.1% vs 14.3%; adjusted odds ratio (aOR), 2.1; 95% CI, 1.5–2.8).¹⁹ Although this difference was significant, the study was limited by the lack of a consistent definition of activity restriction, absence of information regarding patient compliance with activity restriction, and the possibility that it was primarily the women at the highest risk of preterm birth who were prescribed activity restriction.

In another study, Grobman et al²⁰ performed a secondary analysis of a trial of nulliparous women with singleton gestations and cervical length less than 30 mm who were randomized to treatment with 17- α hydroxyprogesterone caproate or placebo. They found that preterm birth at less than 37 weeks of gestation and at less than 34 weeks of gestation was more common when women were placed on any type of activity restriction, whether pelvic, work, or nonwork rest, in both inpatient and outpatient settings. After controlling for potential confounders, they found an increase in the risk

of delivery at less than 37 weeks of gestation (aOR, 2.37; 95% CI, 1.60–3.53) and at less than 34 weeks of gestation (aOR, 2.28; 95% CI, 1.36–3.80) in women who were placed on activity restriction. Another retrospective cohort study of women with a cervical length less than 25 mm identified a trend toward hospitalization as an independent risk factor for delivery before 34 weeks of gestation ($P=.066$) and an earlier gestational age at delivery ($P=.058$).²¹

In a small pilot study, 49 pregnant women assessed as being at high risk of preterm birth were instructed to wear a smart band activity tracker continuously for a week between 24 weeks and 32 weeks of gestation to assess the number of steps taken. The primary outcome was the rate of preterm birth at less than 37 weeks of gestation, and a secondary outcome was the rate of preterm birth at less than 34 weeks of gestation. No specific recommendations were given to the study participants regarding level of activity. Among the 49 pregnant women, 37 delivered preterm, and 12 delivered at 37 weeks of gestation or later. The median number of steps per day was significantly lower in women who delivered preterm. In addition, regression analyses found an inverse association between the median number of steps per day and preterm birth. Unlike other reports, this study used quantitative methods to study the effect of maternal activity on the rate of preterm birth.²²

In summary, although the evidence is limited and the quality generally low, the data that are available do not demonstrate a benefit to activity restriction in women at risk of preterm birth; furthermore, some data suggest that this approach increases the risk of preterm birth. **We recommend against the routine use of any type of activity restriction in pregnant women at risk of preterm birth based on preterm labor symptoms, arrested preterm labor, or shortened cervix (GRADE 1B).**

What is the evidence regarding the benefits of activity restriction in women with hypertension, preterm premature rupture of membranes, multiple gestations, and fetal growth restriction?

In addition to prevention of preterm birth, management of hypertensive disorders of pregnancy, PPRM, multiple gestation, and FGR are common reasons for antepartum hospital admission and frequently lead to a recommendation for activity restriction.⁷ With regard to hypertensive disorders, it has been hypothesized that activity restriction might result in a decrease in systolic blood pressure and an improvement in placental perfusion. However, the only RCTs that have evaluated activity restriction in the setting of preeclampsia compared bed rest with immediate delivery—a study design that precludes independent analysis of activity restriction as an intervention.^{23,24} A 2006 Cochrane review reported on the prevention of preeclampsia (defined as hypertension after 26 weeks of gestation, with or without

proteinuria) in women with normal blood pressure but at moderate risk of developing the disorder. The review identified only 2 small studies of uncertain quality and concluded that although modest activity restriction (4–6 hours per day of rest) may be associated with a reduced risk of preeclampsia, there is insufficient evidence to recommend the practice.²⁵ At present, the evidence regarding use of activity restriction for the prevention or management of hypertensive disorders in pregnancy is too limited to inform recommendations.

Women with PPRM are typically managed with inpatient admission because of the unpredictability of labor and the potential for rapid delivery or the development of infection or fetal compromise. In many cases, women with PPRM are also placed on activity restriction or bed rest in an attempt to prolong gestation and prevent umbilical cord prolapse. However, we identified no studies examining the effects of this practice on pregnancy outcomes.

Women with multiple gestations are at increased risk of preterm birth. Inpatient bed rest in mid to late gestation was previously recommended routinely for such patients. A 2010 Cochrane review identified 7 RCTs that included 713 women who were assigned to routine inpatient bed rest vs hospitalization only if complications developed. These trials did not demonstrate any difference in the rates of preterm birth or perinatal mortality. The only detectable benefit of hospital bed rest was a decrease in the number of neonates born with birth weight less than 2500 g, suggesting that bed rest may increase fetal growth in this population.²⁶ A later Cochrane review in 2017 investigated the effect of strict bed rest (defined as resting in bed as much as possible with minimal physical activity) or partial bed rest (defined as rest for a few hours during the day with no other physical activity restrictions) in the hospital vs routine care on perinatal outcomes in women with a multiple gestation. The study included analysis of 6 RCTs involving twin and triplet gestations. Five studies compared strict inpatient bed rest with no activity restriction at home. The analysis found no difference in the risk of very preterm birth, perinatal mortality, low birth weight, small-for-gestational-age infants, and PPRM. Similar findings were noted for partial bed rest. Although strict bed rest was associated with a higher mean birth weight, it was not associated with a decrease in the incidence of small-for-gestational-age infants.²⁷

A few studies have examined maternal outcomes in women with multiple gestations on activity restriction, such as weight gain and indicators of mental health status. Maloni et al²⁸ found that maternal stressors, symptomatic side effects, and depressive symptoms were all increased, and maternal weight gain was suboptimal in patients who were placed on hospital bed rest. **We recommend against the use of routine inpatient hospitalization and activity restriction for the prevention of preterm birth in women with multiple gestations (GRADE 1A).**

FGR is often attributed to placental insufficiency, and activity restriction or bed rest is often prescribed to

improve placental perfusion.²⁹ However, a Cochrane review found only a single RCT that allocated women with growth-restricted fetuses to either bed rest in the hospital or work restriction at home (no subjects were allocated to normal activity). No differences were found in infant birth weight, Apgar scores, cord pH, or operative delivery rate. The reviewers noted that the study's small sample size (N=101) may have been insufficient to unmask differences between groups but stated that they were unable to recommend the practice of hospital bed rest for growth restriction to improve fetal growth.³⁰ **Given the lack of data definitively demonstrating that activity restriction improves perinatal outcome in pregnancies complicated by FGR, PPRM, or hypertensive diseases of pregnancy, coupled with evidence of adverse effects of activity restriction, we suggest that activity restriction not be prescribed for the treatment of pregnancies complicated by FGR, PPRM, or hypertensive disease (GRADE 2B).**

What are the potential maternal risks of activity restriction?

Obstetrical care providers frequently recommend activity restriction because of a perception that activity restriction has little associated harm. Studies in nonpregnant adults have revealed that clinically significant physiological changes affecting multiple organ systems occur after only a few days of immobility.^{9,15,31} With strict activity restriction, significant fluid shifts occur to accommodate perfusion to the head and neck. These shifts can lead to nasal congestion, headaches, and acid reflux (Box 2). Extracellular fluid losses of up to 600 mL occur within the first 48 hours of inactivity, leading to diuresis and hypovolemia. As a result of these fluid shifts, electrolyte aberrations develop that include increased excretion of sodium, chloride, and potassium.³¹ The endocrine system is also altered after several days of inactivity, characterized by an increase in insulin resistance and alterations in bone metabolism, with the latter resulting in increased calcium excretion and bone resorption.^{32,33}

Researchers have also found that in nonpregnant adults, lying supine during strict activity restriction shifts the position of the internal organs. The abdominal viscera are displaced upward against the diaphragm, which increases the effort required by the inspiratory muscles, decreases oxygen inspiration, and ultimately impairs gas exchange.³⁴ Furthermore, cardiovascular deconditioning and physical deconditioning occur in addition to muscle atrophy and a prolonged decrease in cardiac output.¹⁰ Resumption of physical activity is often difficult and impaired. After several weeks of bed rest, there is a decrease in metabolism and appetite, as well as skin breakdown, nerve compression, and shifts in hormone levels, including cortisol, thyroid hormone, and aldosterone.^{10,32} Alterations in hormonal levels can affect sleep cycles and lead to insomnia and can also impair the function of the immune system.¹⁰

Although the aforementioned physiological changes have been described in nonpregnant individuals, several studies in the pregnant population have reported similar adverse effects of prolonged inactivity. Pregnant women are also affected by physical deconditioning and loss of muscle mass. One study examined muscle metabolism in the gastrocnemius muscle after prolonged antepartum inactivity and identified impairment of oxygenation indicative of deconditioning.² Following childbirth, women had protracted symptoms of deconditioning, including muscle soreness and impaired mobility. Similarly, inactivity in pregnancy has been shown to impair maternal weight gain. In 1 study, inadequate weight gain was correlated with low fetal birth weight across all gestational ages.³ The authors concluded that RCTs are needed to compare women with high-risk pregnancies who are ambulatory with women on bed rest to analyze the extent to which bed rest, underlying maternal-fetal disease, or both contribute to inadequate maternal weight gain and poor intrauterine growth.

As in nonpregnant adults, prolonged inactivity in pregnant women is associated with negative effects on bone health.^{9,10} One study showed that pregnant women treated with strict activity restriction had an increased rate of trabecular bone loss.³⁵ These women lost an additional 3.1% of bone mineral density compared with women who were not on bed rest. Another study showed that this patient population had an increase in bone resorption markers, one of which continued to increase gradually over time and persisted into the postpartum period.⁴

Evidence suggests that inpatient activity restriction is associated with higher rates of gestational diabetes mellitus (GDM) among women admitted to the hospital for antepartum management of pregnancy-related complications.³⁶ One retrospective study found that the risk of GDM increased by 4% for every day a pregnant woman remained on the inpatient unit. Although data in pregnancy are limited, elevated blood glucose levels have been well documented in nonpregnant patients placed on activity restriction.³¹

Another serious concern with prolonged bed rest is the potential increased risk of thromboembolic events.^{7,9,10} In general, inactivity increases the risk of venous thromboembolism (VTE), which is compounded by the hypercoagulable state of pregnancy.

In 1 study, Kovacevich et al⁵ found a significant increase in the risk of thromboembolic events in pregnant women treated with bed rest lasting 3 days or more compared with pregnant women not on bed rest (15.6 cases per 1000 women vs 0.8 cases per 1000 women; $P < .0015$).

Dargaud et al³⁷ devised a risk scoring system for evaluating pregnant women at risk of thrombosis. Bed rest of more than 18 hours per day was considered a risk factor for VTE and was given a score of 2 out of a possible score of 6 points. According to this scoring system, women with a

score of 3 points or greater should receive pharmacologic anticoagulation with low-molecular-weight heparin. However, evidence-based clinical guidelines for the institution of VTE-preventive measures in pregnant women who are prescribed bed rest are lacking.

What are the psychosocial effects of activity restriction?

Activity restriction in pregnancy can also cause significant emotional and psychological distress.^{9,10} Hospitalization for women with high-risk pregnancies is associated with symptoms of dysphoria, which is highest at the time of admission and in patients with higher risk problems.³⁸ Compared with women with uncomplicated pregnancies, women with high-risk pregnancies who are on bed rest have more anxiety and depression.³⁹ The negative psychosocial effects of bed rest are apparent in both inpatient and

outpatient management, although hospitalized patients are known to have more sources of stress.⁴⁰

In particular, the extended time in bed can result in negative feelings, perseveration, and excessive worrying that can manifest as somatic symptoms.⁴¹ Women reported anxiety about the threat of losing their unborn child, guilt about separation from other children and loved ones, and concern for loss of one's employment or financial stability.^{41,42} The loss of wages can lead to significant financial concerns and is often a major source of stress for women.¹⁰

Many women who are placed on hospitalized bed rest express frustration and anger resulting from a lack of control or the perception that hospitalization confers minimal clinical benefit.^{41,43} Bed rest can also be associated with family disruption, leading to emotional stress for the spouse and other children.⁴⁴ Separation from one's family has been

Summary of recommendations

Number	Recommendations	Grade
1	We recommend against the routine use of any type of activity restriction in pregnant women at risk of preterm birth based on preterm labor symptoms, arrested preterm labor, or shortened cervix.	1B Strong recommendation, moderate-quality evidence
2	We recommend against the use of routine inpatient hospitalization and activity restriction for the prevention of preterm birth in women with multiple gestations.	1A Strong recommendation, high-quality evidence
3	Given the lack of data definitively demonstrating that activity restriction improves perinatal outcome in pregnancies complicated by FGR, PPRM, or hypertensive diseases of pregnancy, coupled with evidence of adverse effects of activity restriction, we suggest that activity restriction not be prescribed for treatment of pregnancies complicated by FGR, PPRM, or hypertensive disease.	2B Weak recommendation, moderate-quality evidence

FGR, fetal growth restriction; PPRM, preterm premature rupture of membranes.

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Guidelines

Organization	Title	Year of publication
American College of Obstetricians and Gynecologists	Practice Bulletin #171: Management of preterm labor	2016
The Society of Obstetricians and Gynaecologists of Canada	SOGC Clinical Practice Guidelines: Diagnosis, evaluation, and management of hypertensive disorders during pregnancy	2014
Royal College of Obstetricians and Gynaecologists with the National Collaborating Centre for Women's and Children's Health	NICE Clinical Guideline 133: Hypertension in pregnancy—diagnosis and management	2019

The content reflects the national and international guidelines related to activity restriction in pregnancy.

NICE, National Institute of Health and Care Excellence; SOGC, Society of Obstetricians and Gynaecologists of Canada.

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The Society for Maternal-Fetal Medicine grading system: grading of recommendations assessment, development, and evaluation recommendations⁴⁶

Grade of recommendation	Clarity of risk and benefit	Quality of supporting evidence	Implications
1A. Strong recommendation, high-quality evidence	Benefits clearly outweigh risks and burdens or vice versa.	Consistent evidence from well-performed, randomized controlled trials or overwhelming evidence of some other form. Further research is unlikely to change confidence in the estimate of benefit and risk.	Strong recommendation that can apply to most patients in most circumstances without reservation. Clinicians should follow a strong recommendation unless a clear and compelling rationale for an alternative approach is present.
1B. Strong recommendation, moderate-quality evidence	Benefits clearly outweigh risks and burdens or vice versa.	Evidence from randomized controlled trials with important limitations (inconsistent results, methodologic flaws, indirect or imprecise) or very strong evidence of some other research design. Further research (if performed) is likely to have an impact on confidence in the estimate of benefit and risk and may change the estimate.	Strong recommendation that applies to most patients. Clinicians should follow a strong recommendation unless a clear and compelling rationale for an alternative approach is present.
1C. Strong recommendation, low-quality evidence	Benefits seem to outweigh risks and burdens or vice versa.	Evidence from observational studies, unsystematic clinical experience, or randomized controlled trials with serious flaws. Any estimate of effect is uncertain.	Strong recommendation that applies to most patients. Some of the evidence base supporting the recommendation is, however, of low quality.
2A. Weak recommendation, high-quality evidence	Benefits closely balanced with risks and burdens.	Consistent evidence from well-performed, randomized controlled trials or overwhelming evidence of some other form. Further research is unlikely to change confidence in the estimate of benefit and risk.	Weak recommendation; best action may differ depending on circumstances or patients or societal values.
2B. Weak recommendation, moderate-quality evidence	Benefits closely balanced with risks and burdens; some uncertainty in the estimates of benefits, risks, and burdens.	Evidence from randomized controlled trials with important limitations (inconsistent results, methodologic flaws, indirect or imprecise) or very strong evidence of some other research design. Further research (if performed) is likely to have an effect on confidence in the estimate of benefit and risk and may change the estimate.	Weak recommendation; alternative approaches likely to be better for some patients under some circumstances.
2C. Weak recommendation, low-quality evidence	Uncertainty in the estimates of benefits, risks, and burdens; benefits may be closely balanced with risks and burdens.	Evidence from observational studies, unsystematic clinical experience, or randomized controlled trials with serious flaws. Any estimate of effect is uncertain.	Very weak recommendation; other alternatives may be equally reasonable.
Best practice	Recommendation in which either (1) there is an enormous amount of indirect evidence that clearly justifies strong recommendation (direct evidence would be challenging, and inefficient use of time and resources, to bring together and carefully summarize) or (2) recommendation to the contrary would be unethical.	—	—

Adapted from Guyatt et al.⁴⁷

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shown to be the most significant stressor for some women.⁴⁵ Social support from family, friends, and professionals are important mediators for stress and depressive symptoms.⁴¹ Strain on these relationships compromises an important coping mechanism.

Summary

Activity restriction commonly has been recommended to prevent preterm delivery and other obstetrical complications in women with high-risk pregnancies. However, little evidence supports its routine use for these conditions, and some data indicate adverse impact on obstetrical outcomes. In addition, prolonged inactivity is associated with a variety of negative physiological and psychological effects. Given the lack of data definitively demonstrating that activity restriction improves perinatal outcome, coupled with evidence of adverse effects, we suggest that activity restriction not routinely be prescribed. ■

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