

The Effects of Antepartum Bed Rest on the Pregnant Woman and her Family

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Full Text: Headnote ABSTRACT: Pregnant women have been prescribed bed rest for a variety of reasons: preterm labor, incompetent cervix, high-blood pressure, multiple gestation, placenta previa, and many other patient-specific complications. However, while the prescription of bed rest has become routine, the effectiveness of this potentially harmful treatment is still controversial. Pregnant women that are confined to bed rest are at an increased risk for physical, emotional and economic hardships. By understanding these effects, utilizing appropriate interventions and educating this at-risk population on coping strategies, we as health care providers, can improve the quality of care we give our patients during this life-changing event. KEY WORDS: Antepartum, bed rest, high-risk pregnancy. INTRODUCTION Bed rest is a common treatment modality that is prescribed for pregnant women during the antepartum period because their pregnancy is determined to be "high-risk". This means their pregnancy suggests that they are at an increased risk for adverse fetal conditions or maternal complications such as preterm labor, incompetent cervix, high-blood pressure, and multiple gestation. Surprisingly, bed rest is recommended to more than 700,000 women each year (Goldenberg et al., 1994). Hospitalization and bed rest are recommended to the high-risk patient in order to allow the medical community a more controlled environment in which frequent monitoring of the mother and fetus for signs and symptoms of deterioration can be provided. However, prolonged bed rest is an extremely stressful experience for the high-risk pregnant woman and her family. According to available research, pregnant women that are confined to bed are at an increased risk for physical, emotional, and economical hardships. These hardships include, but are not limited to depression, boredom, anxiety, role strain, sleep disturbances, bone demineralization, muscle atrophy, and domestic violence (Gupton, Heaman, & Ashcroft, 1997; Maloni et al., 1993). It is extremely important to understand the total impact of antepartum bed rest on the pregnant woman and her family. This includes the physical complications, emotional stressors, familial and financial hardships. Also, it is imperative to determine interventions we as health care providers can implement to facilitate coping. In order to improve the quality of care we give our patients, we must understand and strive to meet their needs by gaining insight into this particular life crisis. EFFECTS OF BED REST Physical Complications Antepartum bed rest consists of the confinement of an otherwise healthy, high-risk pregnant woman to bed for an extended period of time. This rather routine treatment has the potential of setting the woman up for numerous physical complications that can last well into the postpartum period. Due to the confinement and lack of mobilization, physical effects on the bed rest patient include all systems of the body. Several studies have been conducted on the physical effects of prolonged bed rest. LeBlanc et al. (1988) studied men on prolonged bed rest of more than five weeks and found significant muscle atrophy in the plantar flexor muscles (soleus and gastrocnemius) that are primarily used for ambulation. Maloni et al. (1993) determined that women who were placed on complete bed rest (consisting of confinement to bed with no weight bearing for two or more days) had increased weight loss, gastrocnemius muscle dysfunction and dysphoria than did women on partial bed rest (consisting of confinement for only part of the day and never on complete bed rest for two or more days) or on no bed rest at all. Dysphoria pertained to a composite score of anxiety, depression, and hostility. In addition, the researchers determined that the amount of weight gained during the overall pregnancy was lower for the bed rest group. Fifty-nine percent of the women either lost weight or failed to gain through the course of the pregnancy. This study also determined disturbances in sleep cycles due to prolonged bed rest. Lying in bed all day hindered the usual sleep-wake sequence and promoted frequent napping; thus, drastically altering sleep patterns. The

postpartum recovery time and severity of side effects, such as muscular and cardiovascular deconditioning, was directly correlated with the amount and length of activity restriction and immobilization. For the women on complete bed rest shortness of breath on exertion, muscle soreness and difficulty climbing stairs continued for several weeks into the postpartum period. Additional complications found in prolonged bed rest include heartburn and reflux, increased heart rate and blood coagulation, decreased cardiac output and stroke volume, glucose intolerance, insulin resistance in skeletal muscle, bone demineralization, and constipation (Sandier & Vernikos, 1986). Sandier and Vernikos (1986) also stated that it is unknown if changes in bone and muscle caused by continued bed rest are completely reversible. Emotional Stressors Just imagine going to your health care provider's office for a routine scheduled prenatal visit and being told you must immediately be admitted to the hospital. You are to be restricted to bed rest due to a complication for an unknown duration of time, having every aspect of your daily routine taken away from you, as well as being thrown into an unfamiliar environment with overwhelming anxiety for the course and outcome of the pregnancy. What a life-altering experience this would be. That is why the emotional aspect of bed rest tends to be the most overwhelming. Lack of control, boredom, anxiety of possible negative outcomes, isolation, disruption of sleep, and guilt are some of the common emotions experienced by women on prolonged bed rest. Gupton, Heaman, and Ashcroft (1997) identified three groups of stressors commonly experienced by the antepartum bed rest patient: situational (lack of control, uncertainty, sick role, concerns regarding the fetus, and impatience), environmental (feeling imprisoned, bored, and missing out), and family (role reversal and concern for other children). These stressors tended to generate feelings of irritability, depression, and anger. Maloni et al. (1993) also determined that anxiety, depression, and hostility were more common in hospitalized bed rest patients than those whose activity was not restricted. In addition, Mercer and Ferketich (1988) determined that 51% of high-risk pregnant woman compared to 24% of low-risk pregnant women were found to be clinically depressed. These are important findings that give us insight to the adverse complication experienced by this patient population. Familial and Financial Hardships Prolonged bed rest significantly affects the family as a whole and disrupts the family dynamics. Maloni et al (1993) reported that separation from the family due to hospitalization was considered to be the most stressful aspect of bed rest, which is due to a disruption in routines, alterations in roles, increased family and marital stress. It is especially hard for the women who have small children at home and are unable to care for them as they did before. This creates a situation where there is role reversal, the spouse has to maintain occupational responsibilities and perform household duties while in addition to caring for the other children. Schroeder (1996) reported that spousal relationships became more problematic during bed rest and that women found their husbands to be uncooperative with domestic and childcare duties. Maloni and Ponder (1997) conducted a study and found that paternal stress increased due to taking on new roles and tasks in addition to previous responsibilities, coping with worries/fears, and anxieties related to the physical and/or emotional state of their mate and the outcome of the fetus. Nearly half of the men in this study reported "doing it all" was the most difficult aspect of the experience. This included taking on childcare and household responsibilities in addition to their previous obligations. Domestic violence frequently begins or escalates during pregnancy. Therefore, the risk of male violence against his pregnant partner may rise when she is unable to perform her standard duties due to activity restriction. According to May (1994) fathers-to-be reported emotional distress and family disruption due to maternal bed rest during pregnancy. Increased stress is placed on children of antepartum bed rest patients; they frequently are young and tend to be frightened and unable to comprehend the maternal absence during hospitalization. Titler et al. (1991) reported that children were affected by changes in childcare arrangements, meal patterns, school attendance, after-school activities, and household responsibilities. Economic hardships are often a common effect of prolonged bed rest. Goldenberg (1994) reported that prolonged bed rest costs more than 250 million dollars per year in the United States in lost wages. Most women have jobs and contribute to the family income, unless adequate sick time or disability is available, that lost income could have detrimental consequences on the economic status of the family. Maloni, Brezinski-

Tomasi, and Johnson (2001) reported seventy-one percent of families studied had financial difficulties due to loss of income/savings, lost jobs, incurred debts, and out-of-pocket expenses associated with bed rest.

INTERVENTIONS Shock and disbelief are usually the first emotions that surface after a woman is informed that her pregnancy is determined to be high-risk. It is important to give explanations on the complication and details of what might be expected for the duration of the pregnancy. It is helpful to repeat this information frequently, providing pamphlets, books, videotapes, and organizations that can assist in the understanding of the current condition for the pregnant woman and her family. Including the father-to-be in this education process is imperative in reducing feelings of being left out and uninformed. Lack of control and helplessness are common emotions voiced by many bed rest patients. Arranging the room so that everyday items are organized, available and within reach provides a more functional environment and reduces the need for the patient to have to ask for assistance. Also, suggesting to the patient that she bring her own toiletries and wears her own nightgown is also stress-reducing. Moreover, by adjusting daily routines of AM care, changing of linens, and fetal monitoring to her preference we can enhance a sense of autonomy. Antepartum bed rest can last days, weeks or even months. Decreased mental stimulation and boredom can lead to depression. Diversional activities such as calligraphy, playing cards, reading a book, "surfing the web", word puzzles, and board games help stimulate the mind and help time go by. In addition, planning a weekly "date night" and having the spouse/family bring in pizza/take out and movie helps to provide a sense of normalcy. Several "alternative therapies" have been used to promote relaxation and mental stimulation. Therapeutic touch, massage therapy, and pet therapy have been proven to have healing capabilities. Therapeutic touch and massage therapy are great in helping to relieve muscle soreness, stimulate blood flow, reduce stress, and facilitates relaxation. It is important, however, to have individuals that are knowledgeable about high-risk pregnant women and their current physiological state perform these therapies. In 1860 Florence Nightingale wrote, "a small pet animal is often an excellent companion for the sick, for long chronic cases especially." Pet therapy has been researched for decades and determined to have tremendous physiological and psychological benefits such as assisting to alleviate stress, boredom, loneliness, and social isolation; thereby promoting emotional well being. Baun, Bergstrom, Langston, and Thoma (1983) determined that petting one's own dog produces a relaxing effect thus reducing the blood pressure, heart rate, and respiratory rate. Therefore, if a patient on bed rest is hospitalized and unable to be with her pets, arrangements should be made for pet visitation. Research has shown that support groups provide a safe environment in which women can express similar concerns, stressors, and coping strategies. Maloni and Kutil (2000) conducted a study to evaluate the effectiveness of support groups and identify common themes and stressors of women on antepartum bed rest. The most common themes were coping activities, family concerns, negative emotions, relationships with caregivers, side effects of medical treatment, psychosocial losses associated with bed rest and concerns for safety. The researchers determined that the support group itself was beneficial because it allowed the women to see they were not alone in this particular life crisis. Therefore, it makes sense that support groups should be offered on a frequent basis to patients and their families. The group time allows the women to socially interact, express their fears/concerns, and share coping strategies; while instilling hope within the group members. Daily journals are also useful in allowing the woman to express her emotions, concerns, and stressors that may be difficult to share otherwise. There are also online resources available to pregnant women that provide support, prenatal and pregnancy information, etc. Sidelines (www.sidelines.org) is a national non-profit network of support chapters for pregnant women on bed rest. They also have local chapters throughout the United States. They offer peer counseling and have a resource center that is accessible to families. Parents Place (www.parentsplace.com) also provides information on nutrition, childbirth, bed rest and more.

INTERDISCIPLINARY TEAM APPROACH As a result of identifying these stressors, we can utilize a collaborative interdisciplinary team of health care professionals (physician, perinatologist, advanced nurse practitioner/certified nurse midwife, registered nurse, dietitian, chaplain, social worker, case manager, etc.) that can help foster coping strategies for the established stressors. By having the

health care providers collaborate on the plan of care regularly, keeping in mind the family as a unit, adaptations can take place that will more effectively provide family-centered care. Maloni et al. (1993) reported that 57% of the hospitalized antepartum patients in their study fell outside the lower limits of "normal" pregnancy weight gain. Therefore, the dietitian has an important role of discussing the potential for decrease or failed weight gain with the high-risk pregnant woman. Together they need to establish a meal plan that is both adequate for caloric consumption and desirable to the patient. The social worker, chaplain, and case manager can assist the woman and her family on available community resources for childcare assistance, economic support, or domestic violence intervention. This interdisciplinary team of health care professionals will be beneficial to the antepartum bed rest patient and her family by increasing the benefits and decreasing the potential risks of prolonged bed rest. CONCLUSION Bed rest was found to be a frequently used treatment for various high-risk pregnancies such as: preterm labor, incompetent cervix, multiple gestation, and pregnancy-induced hypertension.

Antepartum bed rest was shown to be a controversial therapy with numerous side effects and little proof of its effectiveness. Based on the review of literature physical, emotional, as well as familial stressors were most prevalent. By increasing the knowledge of health care practitioners on the effects of antepartum bed rest, we will be able to improve the quality of care given to that population by gaining insight into that particular life crisis. Some of the studies reviewed revealed how bed rest affects the family as a whole. For that reason, family-centered care is an extremely important factor in helping these families deal with this life-altering experience. Therefore, by evaluating the family as a unit and incorporating that into our plan of care, we will be able to more effectively provide holistic care to our patients. Also, by allowing antepartum patients to participate in their own care and increase the sense of control, we will foster an environment that will aid in coping. Given that bed rest remains a primary treatment of high-risk pregnancies, it is important to anticipate the needs (physical, emotional, financial, familial, etc.) of our patients in order to provide enhanced comprehensive care. References

REFERENCES Baun, M. M., Bergstrom, N., Langston, N. F., &Thoma, L. (1983). Physiological effects of human/companion animal bonding. *Nursing Research*, 33(3), 126-130. Goldenberg, R. L., Oliver, S. P., Bronstein, J., Cutter, G. R., Andrews, W. W., &Mennemeyer, S.T. (1994). Bed rest in pregnancy. *Obstetrics and Gynecology*, 84(1), 131-135. Gupton, A., Heaman, M., &Ashcroft, T. (1997). Bed rest for the perspective of the highrisk pregnant woman. *Journal of Obstetric, Gynecologic, and Neonatal Nursing*, 26(4), 423-430. LeBlanc, S., Gogia, P., Schneider, V., Krebs, J., Schonefeld, E., &Evans, H., (1998). Calf muscle area and strength changes after five weeks of horizontal bed rest. *American Journal of Sports Medicine*, 16, 624-629. Maloni, J. A., Brezinski-Tomasi, J. E., &Johnson, L. (2001). Antepartum bed rest: Effect upon the family. *Journal of Obstetric, Gynecologic, and Neonatal Nursing*, 30(2), 165-172. Maloni, J. A., Chance, B., Zhang, C., Cohen, A. W., Betts, D., &Gange, S. J. (1993). Physical and psychosocial side effects of antepartum hospital bed rest. *Nursing Research*, 42(4), 197-203. Maloni, J. A. &Kutil, R. M. (2000). Antepartum support group for women hospitalized on bedrest. *American Journal of Maternal Child Nursing*, 25(4), 204-210. Maloni, J. A. &Ponder, B. (1997). Father's experience of their partners' antepartum bed rest. *Image: Journal of Nursing Scholarship*, 29(2), 183-187. May, K. A. (1994). Impact of maternal activity restriction for preterm labor in the expectant father. *Journal of Obstetric, Gynecologic, and Neonatal Nursing*, 23, 246-251. Mercer, R., &Ferketich, S. (1988). Stress and social support as predictors of anxiety and depression during pregnancy. *Advanced Nursing Science*, 10, 26-39. Nightingale, F. (1969). *Notes on nursing: What it is, and what it is not*. New York: Dover Publications. Sandler, H., &Vernikos, J. (1986). *Inactivity; Physiological effects*. Orlando; Academic Press. Schroeder, C. A. (1998). Bed rest in complicated pregnancy: A critical analysis. *The American Journal of Maternal Child Nursing*, 23(1), 45-49. Titler, M., Cohen, M., &Craft, M. (1991). Impact of adult critical care hospitalization: Perceptions of patients, spouses, children, and nurses. *Heart and Lung*, 20(2), 174-182. AuthorAffiliation Holly Ruhlig, M.S., A.R.N.P. AuthorAffiliation Holly Ruhlig, M.S., A.R.N.P. is a Labor and Delivery nurse at University Community Hospital in Tampa, Florida and recently graduated from the Family Nurse Practitioner Program at University of South Florida. Correspondence about this article may be sent to

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