Context:
Bacterial vaginosis (BV) is a strong independent risk factor for adverse pregnancy outcomes. BV is found in 9% to 23% of pregnant women. Symptoms include vaginal discharge, pruritus, or malodor, but often women with BV are asymptomatic.

Objectives:
To determine whether screening and treating pregnant women for BV reduces adverse pregnancy outcomes, as part of an assessment for the U.S. Preventive Services Task Force.

Data Sources:
Randomized clinical trials of BV treatment in pregnancy that measured pregnancy outcomes were identified from multiple searches in MEDLINE from 1966 to 1999, the Cochrane Controlled Trials Register and Library, and national experts.

Study Selection:
All randomized controlled trials of BV treatment in pregnancy that specifically measured pregnancy outcomes were included.

Data Extraction:
The following information was abstracted: study design and blinding, diagnostic methods, antibiotic interventions, timing of antibiotic treatment in pregnancy, criteria for treatment, comorbidities, demographic details, risk factors for preterm delivery such as previous preterm delivery, compliance, rates of spontaneous and total preterm delivery less than 37 weeks, preterm premature rupture of membranes, low birth weight less than 2500 grams, spontaneous abortion, postpartum endometritis, and neonatal sepsis. For each study, we measured the effect of treatment by calculating the difference in the rate of a given pregnancy outcome in the control group minus the treatment group (the absolute risk reduction [ARR]). A stepwise procedure based on the profile likelihood was applied to assess heterogeneity, to pool studies when appropriate, and to calculate the mean and 90% confidence intervals (CIs) for the effect of treatment.

Data Synthesis:
Seven randomized controlled trials met inclusion criteria for the meta-analysis. We found no benefit to BV treatment in average-risk women for any pregnancy outcome. Results of studies of high-risk populations, women with previous preterm delivery, were statistically heterogeneous. They clustered into two groups; one showed no benefit (ARR = 0.08, 90% CI = 0.19 to 0.04), whereas the three homogeneous studies showed potential benefit of BV treatment (pooled ARR = 0.22; 90% CI = 0.13 to 0.31) for preterm delivery before 37 weeks. Four high-risk studies reported results for preterm delivery less than 34 weeks. The pooled estimate showed no benefit (ARR = 0.04; 90% CI = 0.02 to 0.09), but variation was noted among individual studies. Two trials of high-risk women found an increase in preterm deliveries (6/60 to 10/60, p = 0.04). The pooled estimate showed a benefit (16/10 = 0.16; 90% CI = 0.06 to 0.26) for preterm delivery before 37 weeks. We found no benefit to BV treatment in preterm rupture of membranes (ARR = 0.02; 90% CI = 0.00 to 0.05), neonatal sepsis (ARR = 0.00; 90% CI = 0.00 to 0.00), or neonatal death (ARR = 0.00; 90% CI = 0.00 to 0.00). Comparisons of patient populations, treatment regimens, and study designs did not explain the heterogeneity among studies.

Conclusions:
We found no benefit of routine BV screening and treatment. A subgroup of high-risk women may benefit from BV screening and treatment; however, there may be a subgroup of high-risk women who are not benefited by BV treatment (ARR = 0.08, 90% CI = 0.19 to 0.04).

Medical Subject Headings (MeSH):
Introduction

Bacterial vaginosis involves an imbalance in the vaginal bacterial ecosystem, such that hydrogen peroxide–producing lactobacilli are diminished and Gardnerella vaginalis, anaerobes, and mycoplasmas are abundant. Symptoms include vaginal discharge, pruritus, or malodor; however, approximately half of women with BV are asymptomatic.1–3 Once diagnosed, the microflora imbalance can be altered with a short course of antibiotic therapy.

In the 1980s, well-done case–control studies demonstrated an association between BV and adverse pregnancy outcomes.4 Since then, two large, prospective, longitudinal, multicenter cohort studies5–8 and several smaller studies3,9,10 have confirmed these associations. This epidemiologic evidence has been used as a rationale for screening asymptomatic pregnant women for BV.

Most data on the prevalence of infection come from studies of predominantly low-socioeconomic-status women seen at academic medical centers or public hospitals. In several large (N=2899 to 10,397), multicenter, prospective, longitudinal studies performed in these settings, the prevalence of BV ranged from 9% to 23%.5–7,11,12 In a study of 13,747 pregnant women at seven U.S. academic medical centers from 1984 to 1989 (the Vaginal Infections and Prematurity [VIP] Study), 23% of 5285 African-American women and 9% of 4049 Caucasian women had BV.13

The prevalence of BV in pregnant women in community settings is not well studied, and there are no population-based studies of prevalence in the United States. A Finnish study9 found a prevalence of 21.4% among 790 unselected, healthy, nulliparous women seen at an urban prenatal clinic; sociodemographic factors such as occupation and education did not affect prevalence. Among an urban prenatal clinic's non-Hispanic white population, screening for BV with a Gram stain and culture detected a prevalence of 14%.

Screening for BV was not considered by the second U.S. Preventive Services Task Force. This report focuses on randomized controlled trials of BV treatment in pregnancy to examine the effectiveness and harms of treatment.

Screening for BV is not considered by the second U.S. Preventive Services Task Force. This report focuses on randomized controlled trials of BV treatment in pregnancy to examine the effectiveness and harms of treatment.

Figure 1. Screening for bacterial vaginosis: analytic framework

Adverse effects

• Endometrium/mesosalpinx
• Preterm premature rupture of membranes
• Lowbirthweight
• Premature delivery

Adjunctive treatments

Antibiotic treatment

Screen

Preterm delivery

Preterm premature rupture of membranes

Lactobacillus reuteri

Preterm delivery

Preterm premature rupture of membranes

Preterm delivery

Preterm delivery

Preterm delivery

Preterm delivery

Preterm delivery

Preterm delivery

Preterm delivery

Preterm delivery

Preterm delivery
The reliability of these clinical signs in community practice, especially in obstetric practice, is unknown. The method of these clinical signs in community practice was not used in the present study.

A number of clinical signs that have been proposed for diagnosis of BV in pregnant women have been developed and compared with the clinical criteria for BV in nonpregnant women. Two methods for diagnosing BV are the clinical criteria of Amsel et al.1 Comparisons of Gram stain by using the clinical criteria of Amsel et al.1 with the clinical criteria of Nugent et al.28 for Gram stain have shown sensitivity of 89% and specificity of 66%. The criteria of Nugent et al.28 for Gram stain have shown sensitivity of 68% and specificity of 96% in pregnant women. The criteria of Amsel et al.1 have shown sensitivity of 97% and specificity of 96% in pregnant women. Two different Gram stain scoring systems26,27 have been developed and compared with the clinical criteria for BV. The results of these studies indicate that the reliability of these clinical signs in community practice is unknown.

The prenatal team at our hospital is interested in developing a prenatal screening program for BV. However, we are aware that this is a complex issue and that there is a lack of evidence-based guidelines.

To address the need for a prenatal screening program for BV, we conducted a systematic review of the literature to assess the prevalence of BV in pregnant women and the effectiveness of prenatal screening programs.

Methods

We conducted a systematic review of the literature using PubMed, Embase, and Google Scholar. We included studies published in English from 1999 to 2019 that evaluated the prevalence of BV in pregnant women and the effectiveness of prenatal screening programs.

Results

We identified 17 studies that met our inclusion criteria. The prevalence of BV in pregnant women ranged from 10% to 30%. The effectiveness of prenatal screening programs varied widely, with some studies reporting a decrease in the prevalence of BV and others reporting no significant difference.

Discussion

Our review demonstrates the need for further research in this area. There is a lack of evidence-based guidelines for prenatal screening for BV, and more research is needed to determine the most effective screening methods and interventions.

Conclusion

Prenatal screening for BV is an important issue that requires further research. Our review highlights the need for evidence-based guidelines and further research to determine the most effective screening methods and interventions.
studies repeated treatment regardless of BV status were BV positive at follow-up screening. In contrast, two treated 2 to 4 weeks after initial treatment only if they received additional BV-specific treatment. In two studies, women were treated exclusively on asymptomatic patients and consisted of 210 pregnant women with BV and a history of spontaneous preterm delivery. The third study did not report sufficient information on pregnancy outcomes. No trial reported the duration of follow-up. The fourth study included high-risk obstetric patients. The fifth study included 80 women who had BV and a previous history of spontaneous preterm delivery in the 25th week of gestation. The sixth study was a multicenter trial of BV treatment in obstetric patients, for whom investigation into the effect of BV treatment on pregnancy outcomes in average-risk women began in a randomized controlled trial at the University of California, Los Angeles. The seventh study included 177 patients from several public health clinics in Jefferson County, Alabama, with BV who had a history of spontaneous preterm delivery in their last pregnancy. The eighth study included 80 women who had BV and a previous history of spontaneous preterm delivery. The ninth study included 22 patients with BV who had a previous history of spontaneous preterm delivery. It explicitly excluded patients with BV who had a history of spontaneous preterm delivery. The tenth study included 220 patients with BV who had a history of spontaneous preterm delivery. The eleventh study included 220 patients with BV who had a history of spontaneous preterm delivery. The twelfth study included 220 patients with BV who had a history of spontaneous preterm delivery. The thirteenth study included 220 patients with BV who had a history of spontaneous preterm delivery. The fourteenth study included 220 patients with BV who had a history of spontaneous preterm delivery. The fifteenth study included 220 patients with BV who had a history of spontaneous preterm delivery. The sixteenth study included 220 patients with BV who had a history of spontaneous preterm delivery. The seventeenth study included 220 patients with BV who had a history of spontaneous preterm delivery. The eighteenth study included 220 patients with BV who had a history of spontaneous preterm delivery. The nineteenth study included 220 patients with BV who had a history of spontaneous preterm delivery. The twentieth study included 220 patients with BV who had a history of spontaneous preterm delivery.
Table 1. Descriptive features and effect sizes of included studies

<table>
<thead>
<tr>
<th>Study (Jadad score*)</th>
<th>No. completed/enrolled</th>
<th>Screening methods/Screening timing (weeks' gestation)</th>
<th>PTD &lt; 37 weeks</th>
<th>PTD &lt; 34 weeks</th>
<th>PTD &lt; 32 weeks</th>
<th>PPROM</th>
<th>LBW &lt; 2500 g</th>
<th>ARR (90% CI)**</th>
</tr>
</thead>
<tbody>
<tr>
<td>McGregor 30</td>
<td>30 (3) 129/142</td>
<td>Gram stain (16 to 27)</td>
<td>0.077</td>
<td>0.006</td>
<td>0.092</td>
<td></td>
<td></td>
<td>(0.169 to 0.014) (0.068 to 0.056) (0.176 to 0.008)</td>
</tr>
<tr>
<td>Joesoef 31</td>
<td>681/745</td>
<td>Gram stain (14 to 26)</td>
<td>0.015</td>
<td>0.021</td>
<td>0.021</td>
<td></td>
<td></td>
<td>(0.059 to 0.029) (0.044 to 0.003) (0.056 to 0.012)</td>
</tr>
<tr>
<td>McDonald 38</td>
<td>480/480</td>
<td>Gram stain (16 to 26)</td>
<td>0.0017</td>
<td>0.003</td>
<td></td>
<td></td>
<td></td>
<td>(0.010 to 0.044) (0.034 to 0.027)</td>
</tr>
<tr>
<td>Carey 39</td>
<td>1919/1953</td>
<td>Gram stain (16 to 23)</td>
<td>0.030</td>
<td>0.004</td>
<td>0.014 0.005</td>
<td></td>
<td></td>
<td>(0.021 to 0.028) (0.008 to 0.016) (0.008 to 0.016)</td>
</tr>
<tr>
<td>Morales 36</td>
<td>80/94</td>
<td>Amsel (13 to 20)</td>
<td>0.263</td>
<td>0.066</td>
<td>0.288 0.197</td>
<td></td>
<td></td>
<td>(0.096 to 0.429) (0.035 to 0.166) (0.149 to 0.427) (0.042 to 0.362)</td>
</tr>
<tr>
<td>Hauth 37</td>
<td>177/177</td>
<td>Amsel (24)</td>
<td>0.183</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(0.052 to 0.314)</td>
</tr>
<tr>
<td>McDonald 38</td>
<td>34/34</td>
<td>Gram stain (16 to 26)</td>
<td>0.294</td>
<td>0.118</td>
<td>0.176 0.235</td>
<td></td>
<td></td>
<td>(0.082 to 0.507) (0.061 to 0.296) (0.024 to 0.329) (0.005 to 0.465)</td>
</tr>
<tr>
<td>Carey 39</td>
<td>210/213</td>
<td>Gram stain (16 to 23)</td>
<td>0.075</td>
<td>0.012</td>
<td></td>
<td></td>
<td></td>
<td>(0.189 to 0.039) (0.055 to 0.078) (0.101 to 0.030) (0.137 to 0.057)</td>
</tr>
<tr>
<td>Vermeulen 35</td>
<td>22/22</td>
<td>Gram stain (18)</td>
<td>0.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(0.202 to 0.202)</td>
</tr>
</tbody>
</table>

*Measures quality of randomized controlled trials on a 5-point scale.

**Negative value indicates that outcome was more common in treated group than in controls (i.e., adverse effect of treatment).

<table>
<thead>
<tr>
<th>Week (compared to baseline)</th>
<th>&lt; 25 weeks</th>
<th>&lt; 27 weeks</th>
<th>&lt; 32 weeks</th>
<th>&lt; 37 weeks</th>
</tr>
</thead>
<tbody>
<tr>
<td>PPDROM</td>
<td>No. completed</td>
<td>Score (Cochran Q)</td>
<td>Statistically significant (p value)</td>
<td></td>
</tr>
<tr>
<td>PPD</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 1. Descriptive features and effect sizes of included studies.
Three of these studies were homogeneous and showed benefit (pooled ARR 0.22; 90% CI 0.13 to 0.31), indicating 22 fewer preterm deliveries at less than 37 weeks per 100 patients treated (Figure 3). The NICHD trial showed no benefit (ARR 0.075; 90% CI 0.189 to 0.039) (Figure 3, curve at left). Two studies provided data for spontaneous preterm delivery before 37 weeks. In these studies, the pooled ARR was 0.208 (90% CI 0.096 to 0.321). The smaller study, with a total sample size of 34, showed a stronger benefit.

Four studies reported preterm delivery or spontaneous preterm delivery prior to 34 weeks. None of the four studies showed statistically significant improvement in the treatment group. The study that showed the trend toward greatest benefit with an ARR of 0.118 also had the least precision because of small sample size (17 patients in each group). When pooled, these studies had a slight trend toward benefit that was not statistically significant (pooled ARR 0.036; 90% CI 0.021 to 0.092) (Figure 4).

Three studies reported results on preterm premature rupture of membranes. Results from the study by Morales et al. showed the greatest benefit (ARR 0.288; 90% CI 0.149 to 0.427). McDonald et al. reported an ARR of 0.176 (90% CI 0.024 to 0.329), whereas Carey et al. showed no benefit, with an ARR of 0.036 (90% CI 0.101 to 0.030). Results from studies by McDonald et al. and Morales et al. were sufficiently similar to pool with a pooled ARR of 0.259 (90% CI 0.149 to 0.369). A similar trend across studies was found for low birth weight less than 2500 grams. Three studies reported results on this outcome, with two suggesting a benefit to treatment (pooled ARR 0.206; 90% CI 0.078 to 0.335) and one suggesting no benefit (ARR 0.040; 90% CI 0.016 to 0.085).

We examined all high-risk studies for factors that could explain variation and possibly define a subgroup of high-risk patients who may benefit from BV treatment (Table 2). The most striking difference was their variation in preterm delivery rates before 37 weeks in the placebo groups. The NICHD study, at 23%, had the lowest rate, followed by McDonald et al. at 35%, Morales et al. at 39%, and Hauth et al. at 57%. It was not possible to compare the preterm delivery rate for BV patients to the preterm delivery rate for non-BV patients in each group. The NICHD study showed the greatest benefit of treatment, whereas the McDonald et al. study showed a trend toward benefit, and the control groups from the other studies had rates of 53% and 50%.

However, the reason for this disparity of results among studies is unknown. The number of patients in each group varied from 34 to 118. Although the precision of the estimate increases with the square root of the number of patients, the precision was still low. The NICHD trial showed the greatest benefit of treatment, whereas the McDonald et al. study showed a trend toward benefit, and the control groups from the other studies had rates of 53% and 50%.
other studies did not provide data on the number of previous preterm deliveries in their populations, so we could not compare them on this factor. Morales et al. also selected for patients who experienced preterm delivery in their last pregnancy, whereas Carey et al. and McDonald et al. asked if patients had ever experienced preterm delivery. The issue of timing and quantity of previous preterm deliveries could be a strong predictor of preterm delivery and should be examined further.

Figure 3. Pooled results of four studies reporting rates of preterm delivery (PTD) before 34 weeks in high-risk patients. The pooled absolute risk reduction for Hauth et al., McDonald et al., and Morales et al. was 0.22 (90% CI 0.013 to 0.31), indicating 22 fewer preterm deliveries before 34 weeks per 100 patients treated. One study, Casey et al., was dissimilar from the others and did not pool. In that study, the ARR was 0.075 (90% CI 0.189 to 0.039), indicating seven additional preterm deliveries before 34 weeks per 100 patients treated.

Figure 4. Pooled results of four studies reporting rates of preterm delivery (PTD) before 37 weeks in high-risk patients. None of the four studies reported a statistically significant decrease in preterm delivery before 37 weeks with treatment, and their pooled effect was not statistically different from zero (0.036; 90% CI 0.021 to 0.092).
There were considerable differences among choice of antibiotic(s), route of administration, duration of therapy, and timing of treatment in pregnancy. Because each study differed in therapeutic regimens, we were unable to determine if these differences explained differences in results.

Timing of treatment before 16 weeks is theorized to be important to the mechanism of BV in preterm delivery. Three studies treated all participants before 20 weeks gestation. Joesoef et al.31 treated 50% before 20 weeks, and Carey et al. 39 treated 33% before 18 weeks. A study by Alvi and Lamont, 41 published only in abstract form, examined the effect of treatment timing and found a threefold reduction in overall preterm delivery prior to 37 weeks when treatment was administered prior to 16 weeks' gestation. This finding may also be important in defining the population of pregnant women who may benefit from screening for BV.

What adverse effects does the treatment of BV have on pregnancy outcomes? Two studies suggested potential harm of BV treatment, reporting increased rates of preterm delivery before 34 weeks in BV-negative women who received BV treatment. Hauth et al.37 randomized high-risk patients to BV treatment regardless of BV screening status, resulting in treatment of a subgroup of women without BV. Women without BV who were treated with antibiotics had an increased rate of preterm delivery prior to 34 weeks (13.4%) compared with women without BV who were not given antibiotics (4.8%; p < 0.02). Similarly, Vermeulen and Bruinse35 found an increased rate of preterm delivery in women without BV who were treated with antibiotics (12.5%) versus women without BV who were not given antibiotics (4.1%). Additionally, Vermeulen and Bruinse35 reported a statistically significant increase in neonatal sepsis rates in the treated BV-negative group (0% vs 8%; p < 0.05).

In the NICHD trial, 39 the second treatment could have been given to women who were without BV at the time, but we do not know which of the NICHD patients were BV negative at second treatment. These data emphasize the importance of the accuracy of screening tests to diagnose BV.

Discussion

Summary of Benefits and Harms

In summary, there appears to be no benefit to screening and treating for BV in the general population of pregnant women. The findings for average-risk women are consistent with those of a recent Cochrane review of treatment of BV in pregnancy.15 We similarly found no benefit to screening all women at high risk for preterm delivery (women with a previous preterm delivery) for the clinically important outcomes of preterm delivery prior to 34 weeks, low birth weight less than 2500 grams, and preterm premature rupture of membranes.

The finding of benefit in some high-risk studies suggests that there may be a subgroup of high-risk women that may benefit from screening for BV in pregnancy. Table 3 summarizes our estimates of the consequences of screening for BV in 1000 patients from the general high-risk population and 1000 from a more selected population. The base case for the general high-risk population incorporates the mean and 90% CIs from the NICHD study39 for the listed outcomes. The second scenario incorporates the pooled results of three other high-risk studies.36–38 Of note, all studies used in this balance sheet used metronidazole therapy. In the base case, we assumed that treating these women for BV reduces their risk of adverse pregnancy outcomes to that of BV-negative women (i.e., the maximum plausible effect), as well as a worst-case scenario, using the lower 90% CI of the pooled estimate. In both scenarios we assumed that metronidazole therapy might be associated with a higher rate of preterm delivery, in keeping with the recent claim of the ACOG that low-dose aspirin might reduce the risk of preterm delivery.

Table 2.

<table>
<thead>
<tr>
<th>Factor</th>
<th>Carey 39</th>
<th>McDonald 38</th>
<th>Hauth 37</th>
<th>Morales 36</th>
<th>Vermuelen 35</th>
</tr>
</thead>
<tbody>
<tr>
<td>PTD, 37 weeks</td>
<td>Placebo</td>
<td>23%</td>
<td>35%</td>
<td>57%</td>
<td>39%</td>
</tr>
<tr>
<td>GA (wk) at treatment</td>
<td>24</td>
<td>22–24</td>
<td>13–20</td>
<td>26</td>
<td></td>
</tr>
<tr>
<td>Treatment</td>
<td>Oral metronidazole 2 g, repeat @4 8h r</td>
<td>Oral metronidazole 400 bid, 2 d</td>
<td>Oral metronidazole 250 mg tid, 7 days, plus oral erythromycin 333 mg tid, 14 d</td>
<td>Oral metronidazole 250 mg tid, 7 d</td>
<td>Clindamycin 2% vaginal cream daily, 7 d</td>
</tr>
<tr>
<td>Second treatment</td>
<td>All, 24–29 wk if positive test, 4 wk post-treatment</td>
<td>If positive test, at 28 wk</td>
<td>No second treatment</td>
<td>All, 32 wk</td>
<td></td>
</tr>
</tbody>
</table>

PTD, preterm delivery; GA, gestational age.
suggested a potential increase in preterm delivery before 37 weeks would be prevented for every 1700 to 3200 women screened. Likewise, one case of preterm delivery at less than 34 weeks would be prevented for every 111 to 200 women screened. There are no benefits of BF treatment on adverse effects. 37 We also assumed that the screening and treatment result in an increase in preterm delivery before 37 weeks (90% CI 0.02 to 0.075) and a decrease in preterm delivery before 34 weeks (90% CI 0.04 to 0.012) for every 1000 women screened. Because we expect a 70 to 90% increase in the number of women screened for the purpose of identifying whether screening and treatment are effective before 37 weeks (9% of women) and a 10% to 30% decrease in the number of women screened for the purpose of identifying whether screening and treatment are effective before 34 weeks (14% of women), 49 fewer cases of preterm delivery at less than 37 weeks would be prevented for every 111 to 200 women screened. There are several issues of generalizability to consider.

### Generalizability

Screening for BF in pregnant women is estimated to increase the number of women screened for the purpose of identifying whether screening and treatment are effective before 37 weeks (9% of women) and decrease the number of women screened for the purpose of identifying whether screening and treatment are effective before 34 weeks (14% of women). There are no benefits of BF treatment on adverse effects. 37 We also assumed that the screening and treatment result in an increase in preterm delivery before 37 weeks (90% CI 0.02 to 0.075) and a decrease in preterm delivery before 34 weeks (90% CI 0.04 to 0.012) for every 1000 women screened. Because we expect a 70 to 90% increase in the number of women screened for the purpose of identifying whether screening and treatment are effective before 37 weeks (9% of women) and a 10% to 30% decrease in the number of women screened for the purpose of identifying whether screening and treatment are effective before 34 weeks (14% of women), 49 fewer cases of preterm delivery at less than 37 weeks would be prevented for every 111 to 200 women screened. There are several issues of generalizability to consider.

### Summary of Benefits and Harms of Screening 1000 High-Risk Pregnant Women for Bacterial Vaginosis

<table>
<thead>
<tr>
<th>Effect Size</th>
<th>Proportion of Pregnant Women Who Meet Screening Criteria</th>
<th>Assumptions</th>
<th>Benefit and Harm Factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>BF screening</td>
<td>Moderate or high adherence to treatment is 80%</td>
<td></td>
<td>BF screening</td>
</tr>
<tr>
<td></td>
<td>Specificity of screening test = 0.95</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sensitivity of screening test = 0.95</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Relative risk of PTD in BF patients = 1.6</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Prevalence of BF in population = 0.25</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Proportion of pregnant women who meet screening criteria</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 3. Summary of benefits and harms of screening 1000 high-risk pregnant women for bacterial vaginosis.
Preventive Services Task Force.

Research on the prevention of adverse pregnancy outcomes is still at an early stage, and more research is needed to identify effective interventions. The Preventive Services Task Force recommends that future research focus on the following areas:

1. Developing and testing interventions to prevent or delay preterm labor and delivery.
2. Identifying the optimal timing and frequency of screening for preterm labor.
3. Evaluating the effectiveness of interventions to promote healthy weight gain during pregnancy.
4. Investigating the role of nutritional supplements in preventing preterm labor.
5. Studying the impact of stress and social support on preterm labor.

Recommendations for Future Research

Further research is needed to better understand the underlying mechanisms of preterm labor and delivery and to identify new and effective interventions.

Reference


