

1. Provision Of Fortified Blended Foods Supplements Combined With Social And Behaviour Change Interventions Improves Dietary Diversity Among Pregnant And Breastfeeding Women In Shuhada And Shari Buzurg Districts

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Background and Objectives

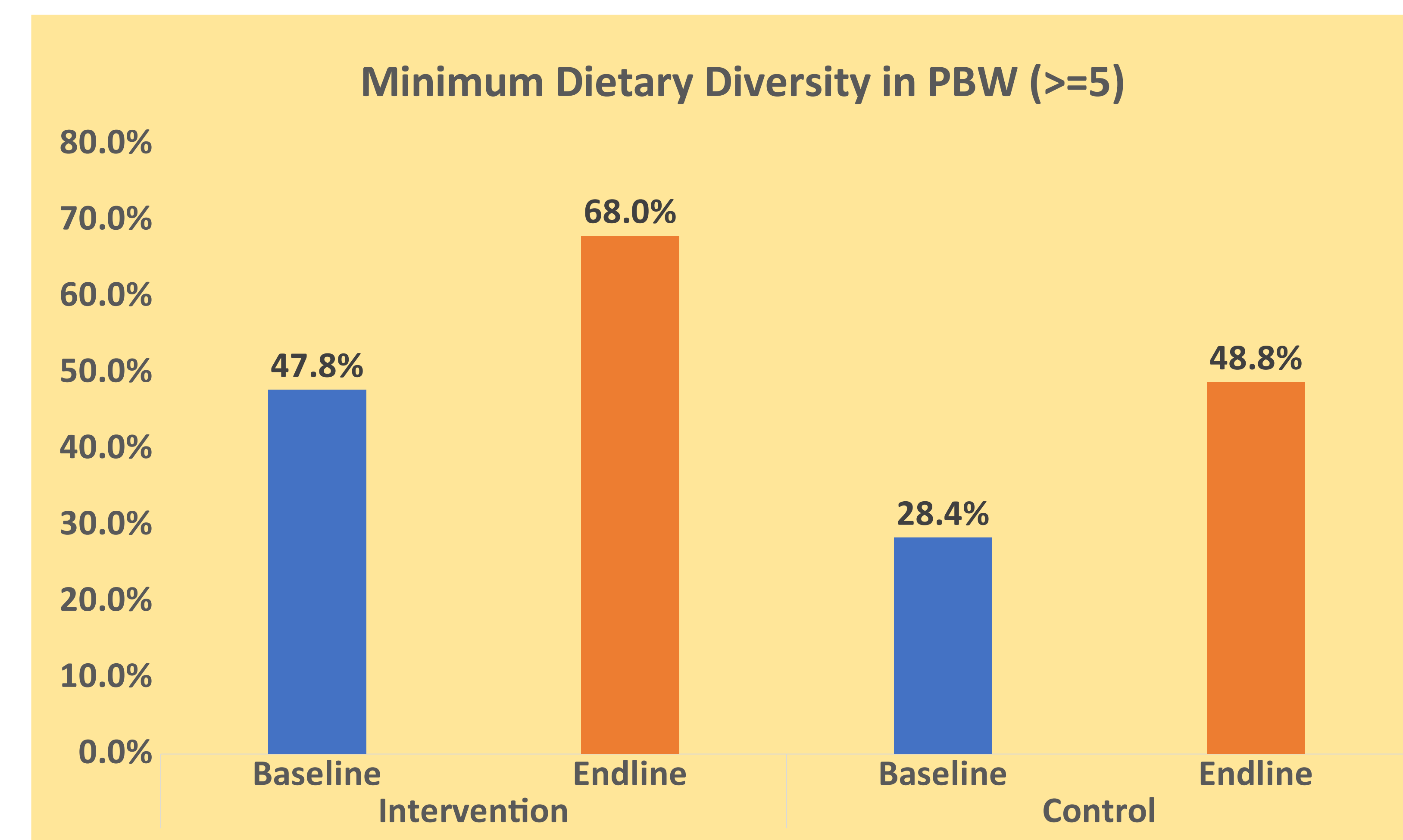
In Afghanistan, only 20% of pregnant and breast-feeding mothers meet the required dietary diversity (MDD-W). women's diet diversity has a strong and positive correlation with micronutrient adequacy of the diet and quality. Women were provided with monthly rations of fortified blended flour and SBCC throughout the project duration.

Methodology

The intervention was implemented in Shuhada and Shari Buzurg in Badakhshan. Rustaq and Worsaj in Takhar province served as the two control districts. A quasi-experimental pretest-posttest study design. 2,912 children <2 years of age and their mothers (1,456 per group per survey) were estimated to provide reasonable precision (80% power, 95% confidence interval, design effect of 1.5 and response rate of 95%) for baseline and endline surveys. Baseline survey was conducted between October and December 2020, and the endline was conducted in July and August 2022. Analysis was performed using Stata version 15.

Results

Minimum dietary diversity among pregnant and breastfeeding women improved in the intervention (47.8% to 68%), as was the consumption of Vitamin-A rich fruits and vegetables (39.6% to 73.4%), and other vegetables (48.8% to 73.8%). Consumption of dairy products improved in the intervention group (69.7% at baseline and 78.6% at endline)



Minimum Dietary Diversity Among Pregnant and Breast-feeding Women and Consumption Patterns of Key Food Items

| Food groups consumption and MDD | Intervention | | | | Control | | | |
|--|---------------------|--------------------|-----------------|---------|---------------------|--------------------|-----------------|---------|
| | Baseline N=1,461 | Endline N=1,601 | % difference | P-value | Baseline N=1,467 | Endline N=1,604 | % difference | P-value |
| Minimum dietary diversity (>=5 food groups) | 47.8 | 68.0 | 20.2 | <0.001 | 28.4 | 48.8 | 20.4 | <0.001 |
| Grain, pulses, nuts & seed | | | | | | | | |
| Grains, roots and tubers | 99.0 | 99.7 | 0.7 | 0.023 | 99.3 | 99.9 | 0.6 | 0.002 |
| Pulses | 66.4 | 57.0 | -9.4 | <0.001 | 33.8 | 23.4 | -10.4 | <0.001 |
| Nuts and seeds | 23.9 | 18.9 | -5 | <0.001 | 5 | 19.9 | 14.9 | <0.001 |
| Animal source foods | | | | | | | | |
| Dairy products(Milk, yogurts, Cheese) | 69.7 | 78.6 | 8.9 | <0.001 | 46.7 | 59.4 | 12.7 | <0.001 |
| Flesh foods(Meat, fish, poultry and liver/organ meats) | 25.8 | 28.4 | 2.6 | 0.110 | 11.9 | 36.2 | 24.3 | <0.001 |
| Eggs | 27.8 | 19.2 | -8.6 | <0.001 | 13.3 | 15 | 1.7 | 0.18 |
| Fruits and vegetables | | | | | | | | |
| Dark green leafy vegetables | 20.1 | 42.5 | 22.4 | <0.001 | 10.8 | 19.1 | 8.3 | <0.001 |
| Vitamin-A rich fruits and vegetables | 39.6 | 73.4 | 33.8 | <0.001 | 28.8 | 61.3 | 32.5 | <0.001 |
| Other vegetables | 48.8 | 73.8 | 25 | <0.001 | 52.3 | 80 | 27.7 | <0.001 |
| Other fruits | 53.6 | 32.1 | -21.5 | <0.001 | 26.9 | 30.7 | 3.8 | 0.02 |

Conclusion

Exposure to behavior prioritization interventions alongside provision of specialized blended food supplements enhances the dietary diversity of pregnant and breastfeeding women and girls. Integrated programmes should ensure the incorporation of strong SBC components.

2. Improving Uptake Of Ante And Postnatal Care In Low Resource Settings Through Provision Of Fortified Blended Foods Supplements Combined With Social And Behaviour Change Communication Interventions In Shuhada And Shari Buzurg Districts

Background and Objectives

WHO recommends Focused antenatal care and balanced energy and protein dietary supplementation for undernourished pregnant and breastfeeding women and girls to reduce the risk of low birth weights. These are more effective if combined with behaviour change education to increase daily energy and protein intake. Mothers were provided with fortified blended foods supplements combined with social and behavior change interventions from January 2021 to June 2022.

Methodology

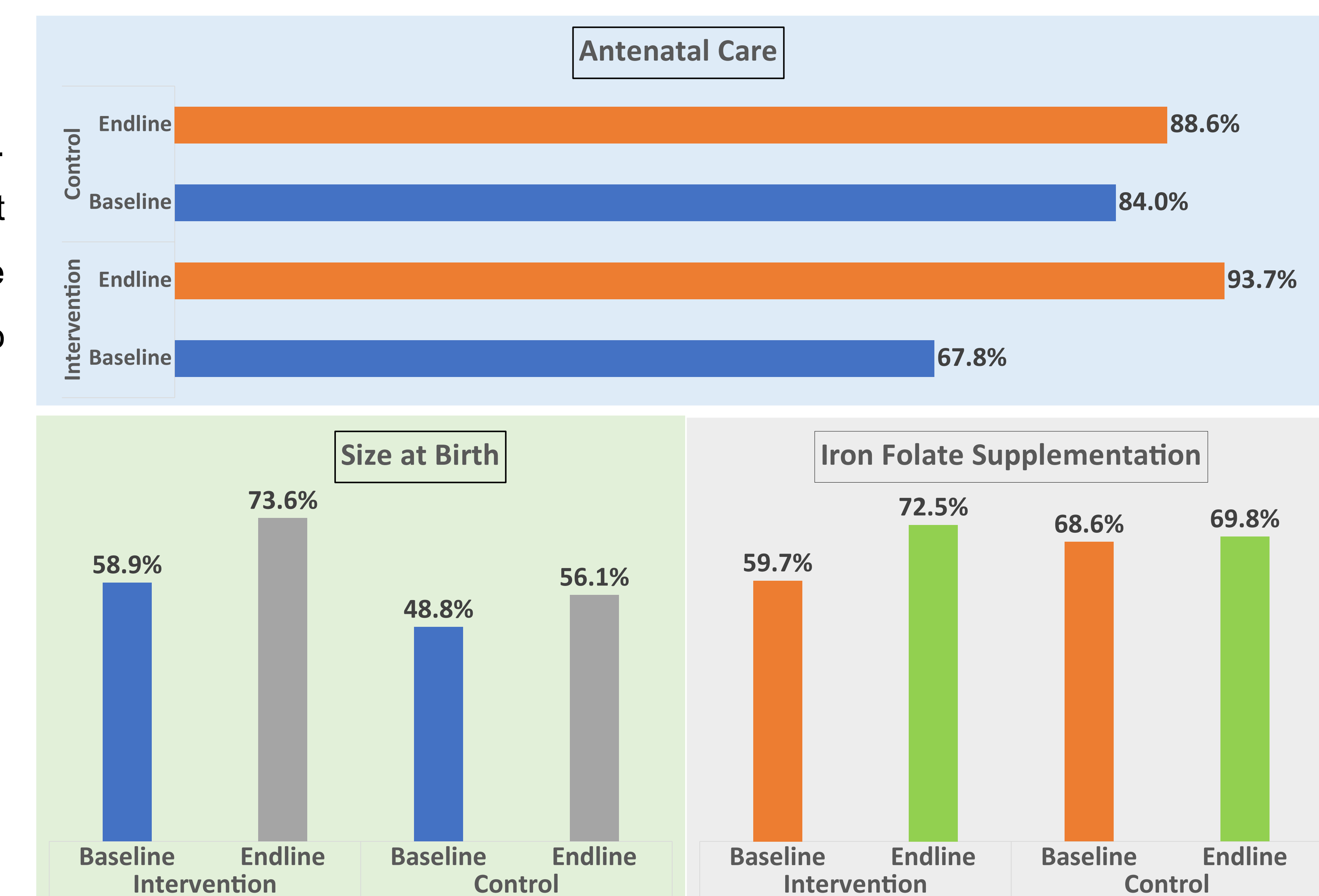
Intervention was implemented in Shuhada and Shari Buzurg with controls in Rustaq and Worsaj districts. A quasi-experimental design with cross sectional pre-posttest surveys were utilized. 3205 household with pregnant and breastfeeding mothers were sampled. A structured questionnaire was used to collect data on socio-economic status and antenatal and postnatal care; Surveys were conducted between October and December 2020, and the endline was conducted in July and August 2022. Analysis was performed using Stata version 15.

Results

Antenatal care improved in the intervention group from 67.8% at baseline to 93.7% at endline(p<0.001). In the control group there was little change (84% at baseline vs. 88.6% at endline). women receiving iron folate increased in the intervention households (59.7% at baseline and 72.5% at endline) with no change in control (68.6% vs. 69.8%).

Size at birth increased in the intervention group (58.9% at baseline to 73.6% at endline-intervention vs. 48.8% at baseline and 56.1% at endline-control). women whose children were very small at birth dropped from baseline to endline (18.2% at baseline vs. 2.7% at endline) in the intervention group.

Institutional deliveries increased in both groups .44.6% at baseline and 66.6% at endline in the intervention group; 49.5% at baseline and 76.6% in endline in the control group. Two or more tetanus toxoid (TT) vaccinations during their last pregnancy increased from baseline to endline (72.8% vs. 76.7%, p = 0.012). An 18% decrease in the percentage of women who received two or more TT injections during their last pregnancy was observed in the control area (69.3% at baseline vs, 51.1% of women at endline, p<0.001).



Conclusion

Reduced low birthweight, improved uptake of vaccinations and increased contact with health facilities through focused ante natal and post-natal care visits are some of the positive outcomes of an integrated nutrition programme providing supplements and SBCC to pregnant and breastfeeding women. Stakeholders should invest in this type of approach for impact.

