REPUBLIC OF GU
Ministry of Public Health

Projecto de saúde BANDIM

Impact of the husbands' club strategy implemented by PLAN International Guinea-Bissau on married men's knowledge, perceptions and behaviours in relation to gender roles within the household and health in the context of malaria control.

Preliminary report

UNDP NFM3, Global Fund

Bandim Health Project, February 2024

Index

Abbreviations

THE	Sanitary area
CS	Health Center
INASA	National Institute of Public Health
INE	National Institute of Statistics
MILDA	Mosquito net impregnated with long-lasting action insecticide
PSB	Bandim Health Project
RAS	Head of the Sanitary Area
ICC	Intermittent preventive treatment
UNFPA	United Nations Population Fund

1. Introduction

Social norms in our countries dictate an almost total dependence on women in all aspects of their lives, including their own health and that of their children. In our societies, decisions are usually made by husbands or male relatives.

Actions have been developed that aim to soften the impact of gender-related social norms, sensitizing and raising awareness among different community actors about women's rights, implementing interventions for women's empowerment in order to reduce their extreme dependence and its consequences.

Experiences from West African countries have shown a positive impact on women's and children's health from the creation of men's clubs that are not only made aware, but themselves serve as a vehicle for transmitting positive ideas and actions. In Guinea-Bissau, UNFPA has piloted men's clubs in some regions of the country to promote attitudes and behaviours that positively influence women's sexual and reproductive health.

PLAN International aims to pilot husbands' clubs to change married men's knowledge, perceptions and behaviour with regard to gender and health.

2. Goals

The overall objective of the study was to assess whether the intervention of husbands' clubs has an effect on positive changes in the knowledge, perception and behaviour of married men regarding the issue of gender and health within households, consolidating evidence for future implementation of the strategy.

Consolidate lessons learned from strategy implementation that can inform future programming.

The specific objectives are:

- To assess the impact of the intervention of husbands' clubs on the knowledge, perceptions and behaviours of married men;
- To analyse the underlying reasons and determinants of the positive or non-positive effect of the intervention of husbands' clubs on the knowledge, perceptions and behaviours of married men;

- Identify unintended positive or negative effects of husbands' club intervention.

3. Methods

3.1. Description of the intervention

PLAN International implemented the husbands' club intervention on a pilot basis in four villages, two in the sanitary area (AS) of Ondame in the Biombo region and two in the AS of Bambadinca in the region of Bafatá for six months. The aim of the intervention is to promote positive masculinity, address gender issues, contribute to the elimination of barriers to access to health and to improve the performance of the malaria program.

In each village, a husbands' club was created with two facilitators and made up of 15 members selected by the health committee made up of the head of the health area, community and administrative leaders.

The members of the husbands' club were trained in several discussion sessions on topics related to gender, the role of men and the relationship of power, domestic violence, family health, women and children related to malaria, among other related topics. The wives were also informed and sensitized about these issues. Members of the husbands' club implemented a package of awareness-raising activities through lectures and home visits.

3.2. Location and population

3.3. Study design, location, and population

In this quantitative study, a controlled quasi-experimental "Before and After" design was used. Cross-sectional surveys before and shortly after the interventions were conducted to compare the effect on baseline indicators before the intervention and after the intervention in the intervention and control tables.

The four intervention villages were Sidja and Blom in the sanitary area (AS) of Ondame in Biombo and Nhabidjos and Amedalai in the AS of Bambadinca in Bafatá. The control panels were Quita and Dorse in Ondame and Sabasilate and Fá-Mandinga in Bandadimca, in the same AS The control panels were selected in order to have characteristics similar to those of the intervention in terms of population size and

distance from the health center. The sanitary areas are covered by a health center and the regional hospital of Bafatá, and Bissau for the region of Biombo. Community Health Workers (ASC) support community activities.

According to INE estimates, the population of the Biombo region is around 107,075 and Bafatá 231,189 inhabitants, with 11,449 in the AS of Ondame and 24,980 in the Bambadinca. The region of Biombo is inhabited mainly by the Pepel ethnic group, while that of Bafatá by the Fula and Mandinga ethnic groups, the former essentially practicing the animist religion and the latter two the Muslim. In 2021, 46,438 cases of malaria were reported to the PNLP in the Bafatá region and 10,033 in the Biombo region.

The target groups for the interviews were the following resident couples:

- Married men (married formally, traditionally or in a de facto union);
- Married women of childbearing age (married formally, traditionally or in a de facto union);

Residents who had not lived in the study camps for at least four months during the intervention period were excluded because they would not have had sufficient exposure to internal factors, as well as those who refused to participate.

3.4. Sampling, procedures, and data collection

The calculation performed in STATA 18.0 had the following assumptions: the proportion of the evaluated indicator of 50%, detection of a difference ≥ 25% between baseline and after the intervention, study power of 80% and with 95% confidence interval on both sides; It was estimated that a minimum sample size of around 400 people from each target group was required.

In the villages, a census of all households was carried out and a questionnaire in Creole was applied to the target groups. The interviews were conducted in a place and under circumstances that guaranteed complete privacy, as they contained sensitive issues related to domestic violence.

3.5. Management, data analysis and indicators

The data collected directly on *Android* devices, the *Open Data Kit* (ODK) application, was sent daily to the *cloud server* using encrypted connections (SSL) and with access to *ODK Aggregate* restricted to the use of user codes and passwords. Quality control was done throughout all stages. The data exported in *csv format* were analyzed in STATA 18.0. The proportions and respective 95% confidence intervals were calculated for the main indicators for the intervention group and the control group separately. The indicators were calculated by adjusting for the population of the sanitary area and the conglomerate effect. The effect of the intervention on the indicators was compared by group after the intervention to baseline by group and the differences between the intervention and control groups.

4. Ethical considerations

The survey protocol was approved by the National Ethics Committee for Health Research (Ref. 005/CNES/INASA/2023 of January 9, 2023). Before the interview, each participant was asked for verbal informed consent. The explanation included the objectives, procedures, content of the interview, voluntary nature, and the guarantee of anonymity and confidentiality.

5. Findings

The pre-intervention survey (referred to in this report as "Before") to collect the baseline data took place in March 2023 and the post-intervention survey (referred to as "After") in the second half of November 2023.

5.1. Description of households at baseline

A total of 886 households were not included and the main reasons were that the man or woman did not live in the village or did not have a wife or husband (68%) and the absence of both (19%) (Table 1). It was necessary to revisit 320 AF.

Table 1. Reasons for non-inclusion of households.

Household	Bafatá	Screen	Total	%
No husband/wife	130	475	605	68
Male >75 years old	20	45	65	7,3
Missing	78	90	168	19
Refusal	7	8	15	1,7
Closed	0	33	33	3,7
Total	**235**	**651**	**886**	**100**

In the 598 PA included, 4149 people were registered, 1797 in the intervention PA and 2352 in the control PA. The composition of PS members was similar between the two groups, with wives accounting for approximately 18% and children accounting for 49% of the members (Figure 1).

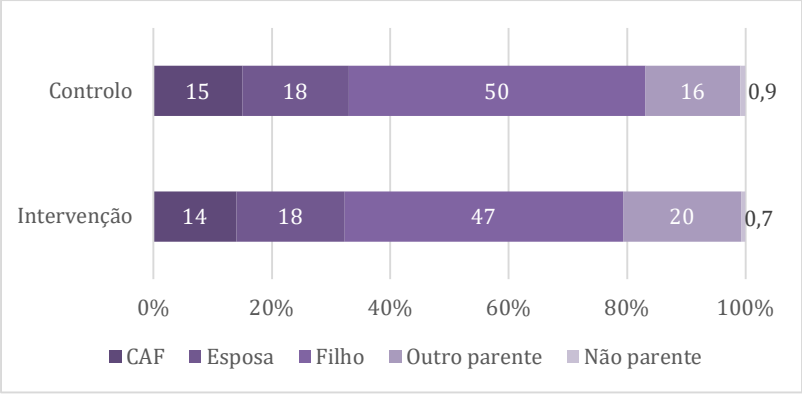


Figure 1. Composition of household members.

Demographic characteristics did not differ much, the mean age was about 24 years, and women of childbearing age (FIM) about 30% (Table 2).

Table 2. Demographic characteristics of households by group.

Variable	**Intervention Group % (nN)**	**Control Group % (n/n)**	***P-value***
Sex			
Female	52 (941/1797)	52 (1206/2352)	0,53
Male	48 (856/1797)	48 (1146/2352)	
Age (mean; standard error)	24 (1,5)	23 (17-35)	0,07
MIF	34 (598/1797)	32 (746/2352)	0,38
Pregnant women under FIM	3,6 (24/598)	6,2 (49/746)	0,17
Children under 5 years old where MIF	29 (178/598)	40 (296/745)	0,01

Interviews were conducted with a total of 456 husbands, 208 in the intervention villages and 248 in the control camps; A total of 640 wives were interviewed, 290 from the intervention group and 350 from the control group, according to the distribution below (Table 3).

Table 3. Inclusion by village.

Region	**Husbands**				**Wives**			
	Before		After		Before		After	
	Intervention	Control	Intervention	Control	Intervention	Control	Intervention	Control
Screen:								
Sidja	30	-	48	-	48	-	34	-
Blom	56	-	75	-	75	-	55	-
Quita	-	63	-	78	-	77	-	54
Dorse	-	67	-	117	-	110	-	53
Bafatá:								
Sambasilate	-	69	-	88	-	88	-	139
Fa-Mandinga	-	49	-	67	-	66	-	91
Nhabidjos	73	-	88	-	88	-	100	-
Amedalai	49	-	79	-	79	-	89	-
Total	208	248	290	350	290	341	278	337

5.2. Interview with husbands

5.2.1. Sample Description

A total of 456 husbands were included in the baseline survey (208 intervention and 248 control) and 447 in the post-intervention survey (201 in the intervention and 246 in the control). The mean age of the husbands was 49 years in the intervention group and 48 in the control group in the baseline survey and in the post-intervention survey was 46 and 43 respectively. The most represented ethnicities were Pepel, Balanta and Fula, and animist religion and Muslim in both surveys. No significant differences were observed between the groups (Table 4).

Table 4. Husbands' baseline characteristics by study group.

Variable	**Before**		**After**	
	Intervention % (n)	**Control % (n)**	**Intervention % (n)**	**Control % (n)**
No. included	208	248	201	246
Mean age (standard error)	49 (2,1)	48 (2,5)	46 (0,5)	43 (1,6)
Ethnicity				
Balanta	18 (46)	17 (70)	17 (34)	51 (113)
Fula	15 (42)	0,5 (3)	25 (53)	0,6 (2)
Mandinga	7,6 (20)	8,2 (45)	7,4 (15)	13 (43)
Pepel	54 (85)	74 (129)	40 (78)	35 (84)
Other	6,2 (15)	0,5 (1)	11 (21)	1,5 (4)
Religion				
Muslim	24 (65)	9,5 (50)	34 (71)	14 (47)
Catholic	7,0 (15)	4,7 (9)	9,3 (18)	7,8 (20)
Evangelical	3,2 (6)	4,7 (9)	5,9 (11)	1,7 (5)
Animist	54 (98)	79 (175)	38 (72)	55 (121)
No religion	12 (24)	2,3 (5)	18 (29)	21 (53)
Schooling				
Have some schooling	65 (137)	44 (124)	73 (146)	56 (136)
Middle class level completed (standard error)	6,1 (0,4)	5,6 (0,3)	5,8 (0,2)	6,6 (0,3)
Declaration of a disability	2,3 (4)	3,5 (10)	5,4 (10)	2,0 (5)

Has done paid work	64 (131)	56 (155)	63 (126)	45 (116)

Approximately 2.3% of the husbands in the intervention group and 3.5% in the control group were people with disabilities at baseline, i.e., they reported having a lot of difficulties or being unable to perform daily functional tasks due to some disease or condition. The types of disabilities reported by group are shown in Figure 2.

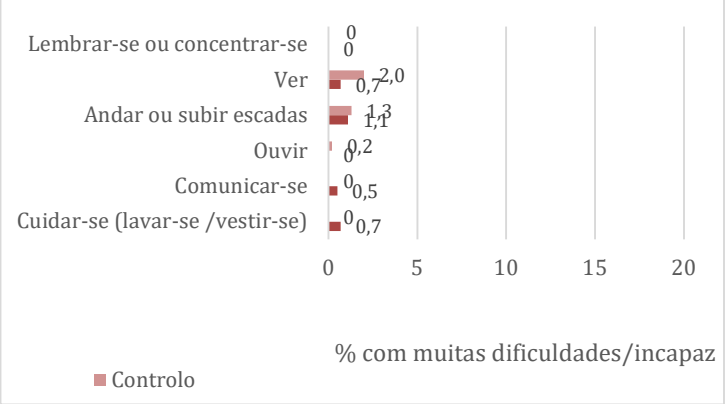


Figure 2. Types of husbands' disability by group at baseline.

At baseline, paid activities were performed in the last 3 months by 64% of the husbands in the intervention areas and by 56% in the control areas (Table 4). Artisanal activity (32%) and public or private employees (18%) were more common in the intervention villages, while agriculture (35%) and fishing (25%) in the control areas (Figure 3).

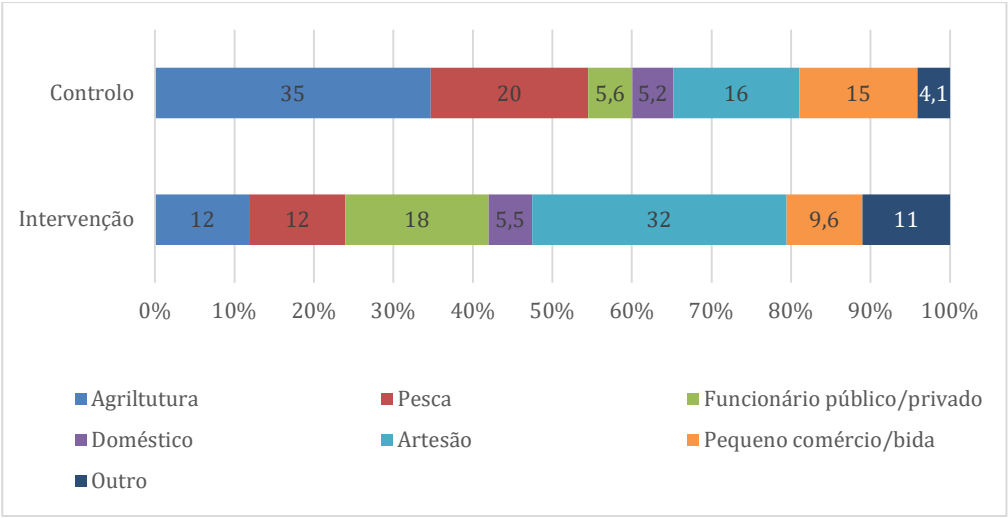


Figure 3. Husbands' paid activity type by group at baseline.

5.3. Assessment of the change in the level of indicators

5.3.1. Knowledge about antenatal visits and malaria

Table 5 shows the indicators on husbands' knowledge regarding the pre-health consultation and malaria prevention in pregnant women in the before and after survey. In the post-intervention survey, 83.5% of the husbands in the intervention and 71.9% in the control had heard of prenatal visits, and 28.0% and 15.7% respectively stated the need for at least four BCs. (Table 5).

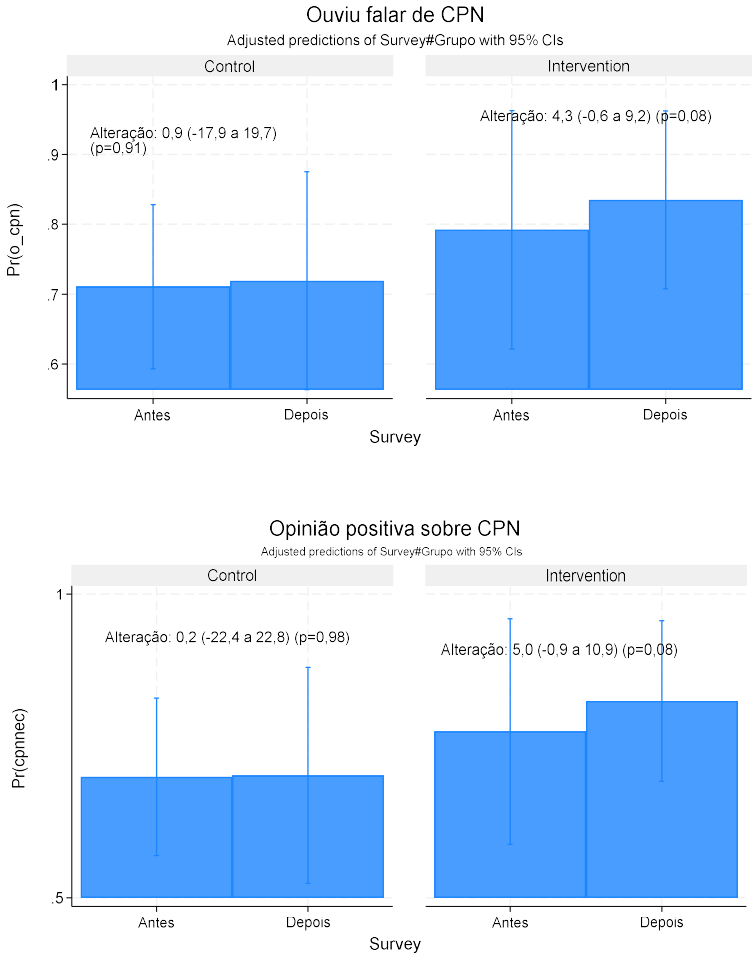
Regarding intermittent preventive treatment during pregnancy, 67.6% and 62.9% had heard of it and 8.7% and 8.1% respectively in the intervention and control stated that at least 3 doses of TPI were necessary to avoid risks due to malaria in pregnancy (Table 5).

Table 5. Knowledge of malaria control interventions by group.

	Intervention - % (CI); n			**Control - % (CI); n**		
Determinant	**Before (N=208)**	**After (N=201)**	P-value	**Before (N=248)**	**After (N=246)**	P-value
You've heard of prenatal consultations	79,2 (47,9-94,0); 172	83,5 (56,1-95,3); 169	0,92	71,1 (42,1-89,3); 183	71,9 (53,9-85,3); 181	0,05
Affirms the need for CPN	77,4 (43,5-93,8); 169	82,4 (54,6-94,8); 167	0,05	69,9 (38-89,7); 180	70,1 (46,5-86,4); 177	0,98
Affirms the need for CPN4+	29,1 (23,8-35,0); 61	28,0 (17,9-41,2); 56	0,75	19,2(4,8,6-52,8); 65	15,7 (0,8-80,7); 45	0,72
Have you heard of the ICC	50,4 (38,3-62,5); 113	67,6 (33,6-89,6); 136	0,19	42,8 (27,6-59,4); 117	62,9 (31,1-86,4); 160	0,06
Affirms the need for TPI 3+	6,9 (2,3-19,2); 15	8,7 (1,6-36,2); 16	0,71	1,8 (0,5-6,9); 9	8,1 (0,2-81,0); 24	0,12
It states that there is a risk if the pregnant woman does not take TPI	72,0 (49,0-87,3); 82	85,6 (70,2-93,7); 116	0,03	68,3 (32,8-90,5); 84	82,1 (32,3-97,8); 134	0,12

Comparisons of the level of change in these indicators relative to baseline in the intervention and control groups are shown in Figure 4 below. There was a tendency, although not significant, to improve general knowledge about the need for antenatal consultations, especially in the intervention group, but not in the control group, and in both groups there was no improvement in the exact knowledge about the number of BC needed.

Similarly, with regard to specific knowledge about the number of TPI required for malaria prevention and its effect on pregnant women, no progress has been observed. However, the perception of greater predisposition to health risks if the pregnant woman does not take TPI increased by approximately 13% in both the intervention and control groups (Figure 4).



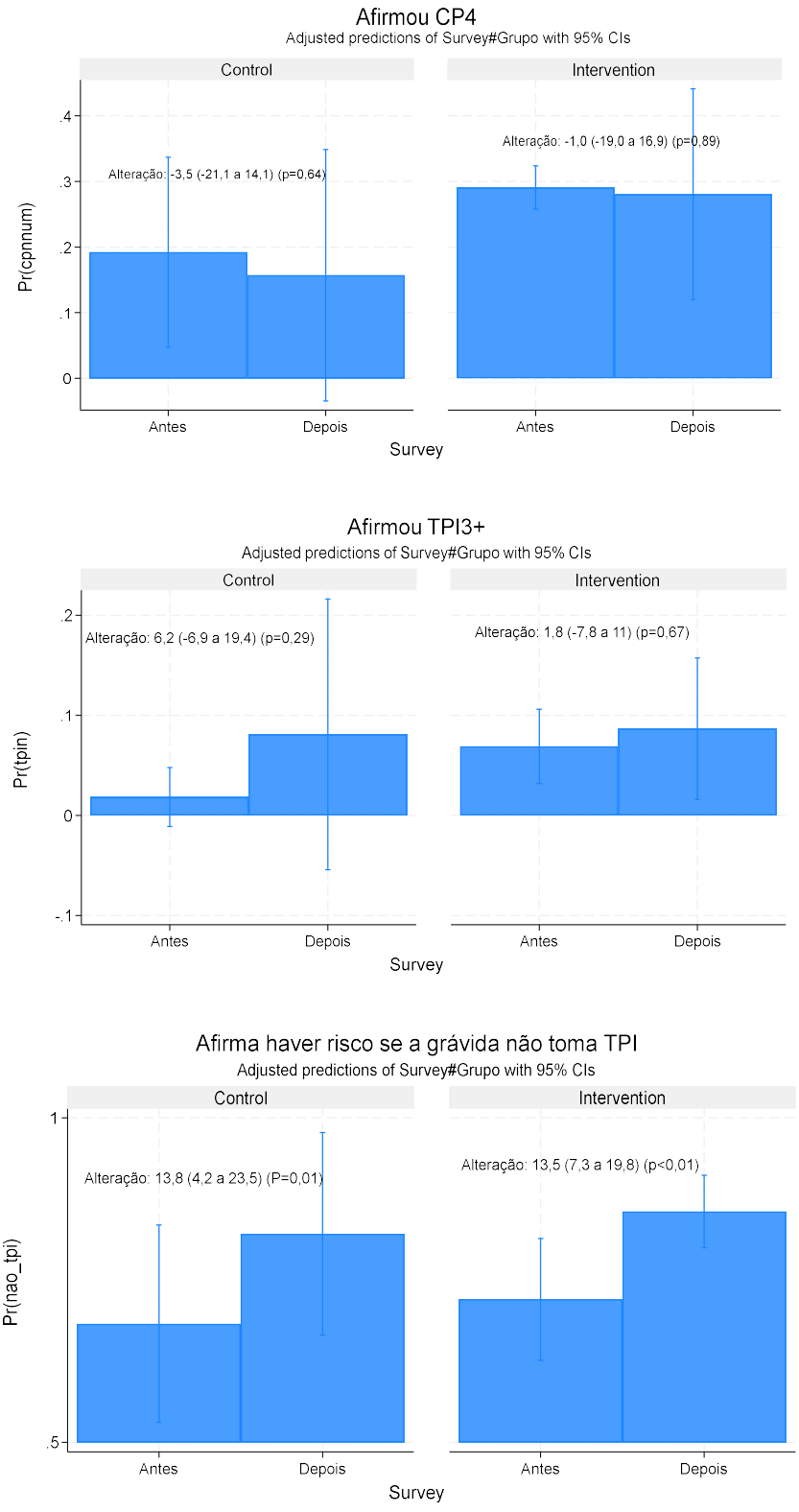


Figure 4. Alteration of the indicators of knowledge about health care and prevention in pregnant women in intervention and control.

When asked about the means of preventing malaria in general, the use of MILDA was the main means cited and was cited by 82.8% (CI: 47.6-96.2) in the intervention and 89.2% (CI: 59.3-97.9) in the control in the second survey, with no difference compared to baseline in both groups.

5.3.2. Understanding gender norms regarding masculinity that impact health

Men's perceptions of gender norms that impact the health of women and other household members were studied. In the second survey, approximately 44.5% of the husbands in the intervention and 25.9% in the control reported having had fever in the last two weeks, of which 31.1% in the intervention and 30.7% in the control had undergone the malaria test (RDT or thick drop) (Table 6).

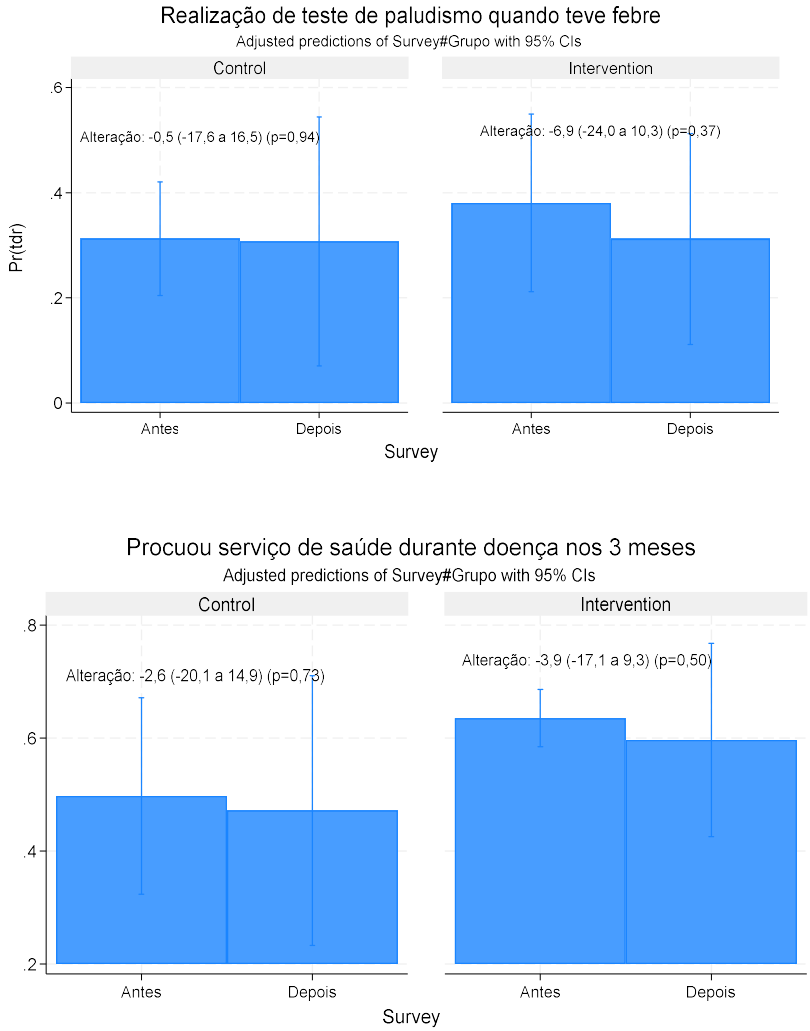
Regarding the occurrence of disease, 55.2% in the intervention groups and 31.5% in the control group had been ill in the last three months, of which 59.7% (CI: 32.1-82.2) versus 47.2% (CI: 10.2-87.5), respectively, sought a health service for treatment (Table 6).

Table 6. Occurrence of illness and search for health services among husbands.

Determinant	Intervention - % (CI); n			Control - % (CI); n		
	Before (N=208)	**After (N=201)**	P-value	**Before (N=248)**	**After (N=246)**	P-value
Had a malaria test (RDT or thick gout) when he had a fever	38, 1 (11,9-73,6); 27	31,2 (12,3-59,4); 28	0,033	31,3 (13,8-56,4); 22	30,7 (3,9-82,8); 23	0,93
You have sought a health service when you have been ill in the last 3 months	63,5 (52,2-73,5); 52	59,7 (32,1-82,2); 67	0,41	49,8 (18,2-81,5); 53	47,2 (10,2-87,5); 42	0,79
He thinks that in order to show strength and courage, a man should not show that he is sick	13,8 (8,8-21,1); 29	4,6 (2,0-10,2); 9	0,06	11,8 (8,9-15,3); 30	3,2 (0,6-15,2); 9	0,04

With regard to malaria testing when the husband had fever in the last two weeks or seeking a health service during the occurrence of illness in the last three months, no changes were observed either in the intervention group or in the control group.

Husbands' perceptions of whether men should not show vulnerability and that in order to appear strong and courageous they should not show when they are sick evolved positively in both groups, dropping from about 11% to about 4%. A significant change in this perception was observed both in the intervention and in the control (Figure 5).



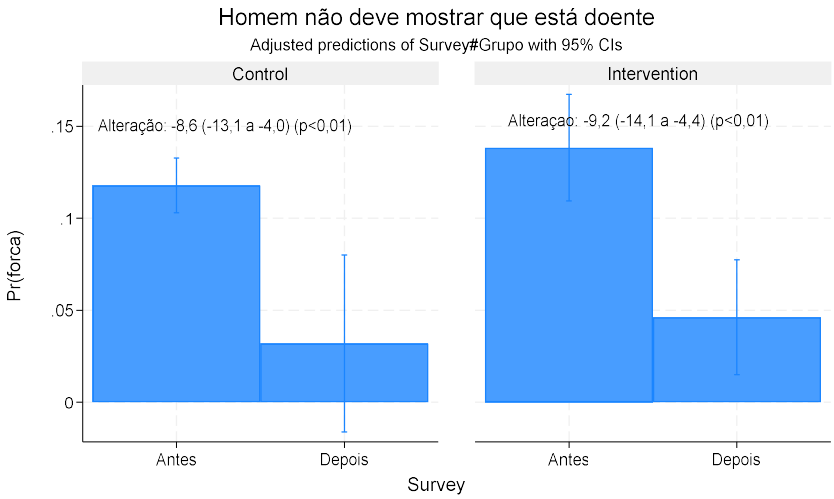


Figure 5. Changing indicators on husbands' understanding of gender and masculinity norms.

The main reasons for the husbands not having sought health services when they were sick in the last three months were lack of money for transportation (13.1% in the intervention and 20.5% in the control), lack of money to pay for the consultation, laboratory tests and medication (29.9% in the intervention and 36.6% in the control), and having done home or traditional treatment with herbs or another method (40.7% in the intervention and 30.5% in the control).

5.3.3. Husbands' perception of violence and men's demonstration of authority

Husbands' opinions about violence and the demonstration of their authority over their wives were assessed by asking whether or not they agree with three statements: a) It is normal for a husband to anger his wife if she disobeys or offends him; b) the husband may beat his wife to correct her attitudes; and c) the husband has the right to insult his wife if she disobeys or offends him.

The proportion of husbands who disagreed that it was normal for them to reprimand their wives if they disobeyed or offended them was similar in both groups, with 61.5% in the intervention group and 60.9% in the intervention group, 76.6% in the intervention and 79.2% in the control group, and insulting the wife was 73.1% in the intervention and 86.4% in the control group. In both groups, there was no difference between the opinions in the survey before and after the intervention (Figure 6).

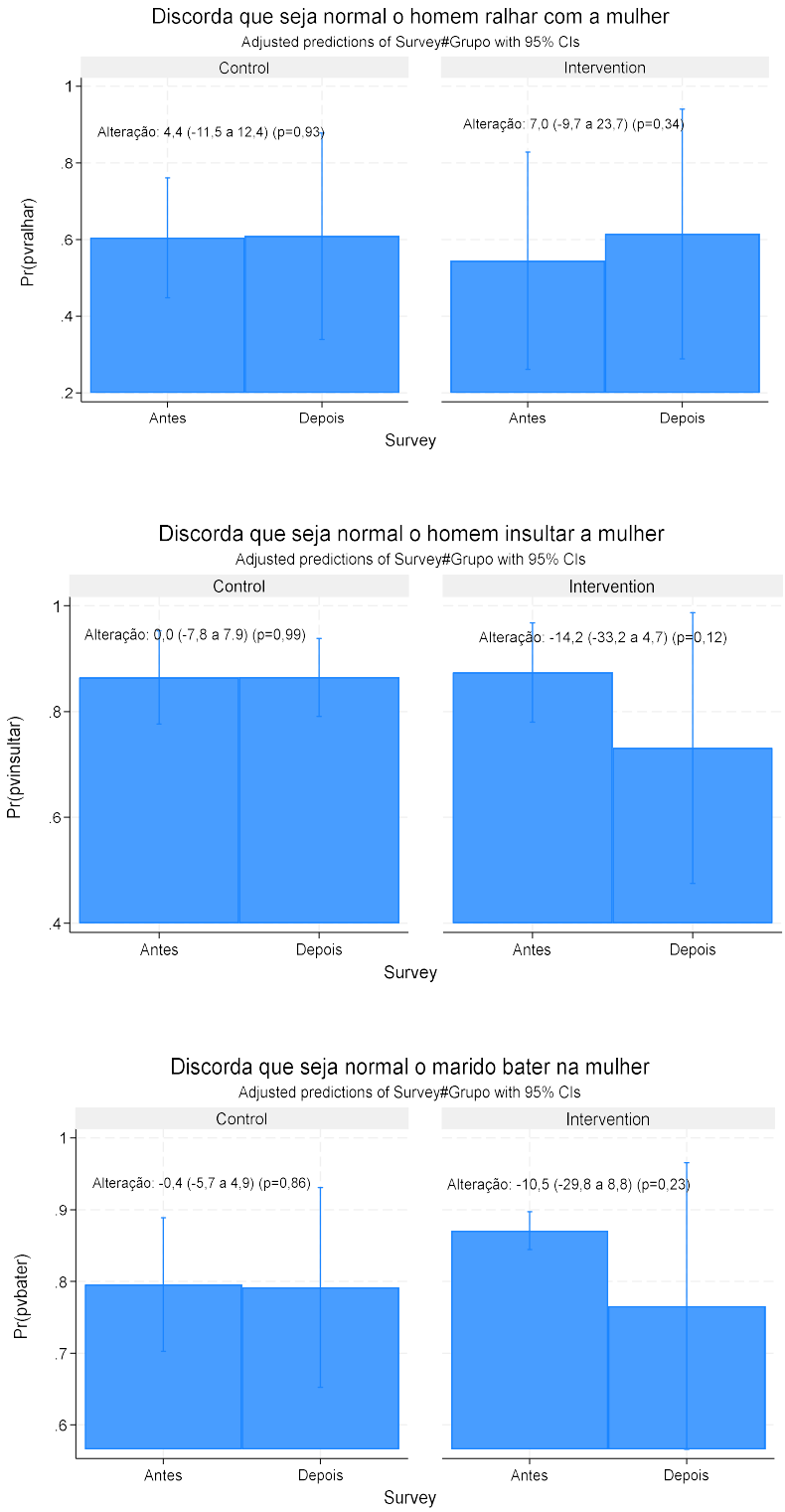


Figure 6. Evolution of husbands' perceptions of violence against wives.

The way in which they exercised their authority over their wife in practice in relation to the second survey is described in Figure 7 where the majority said they chose to talk

(67.2% in the intervention and 83% in the control), but talking loudly (18.1% in the intervention and 22.3% in the control), threatening to hit her (6.2% in both groups) and hitting her (6.2% in the intervention and 4.7% in the control) were still mentioned, There was no difference between the two groups, except for dialogue, nor in relation to the baseline.

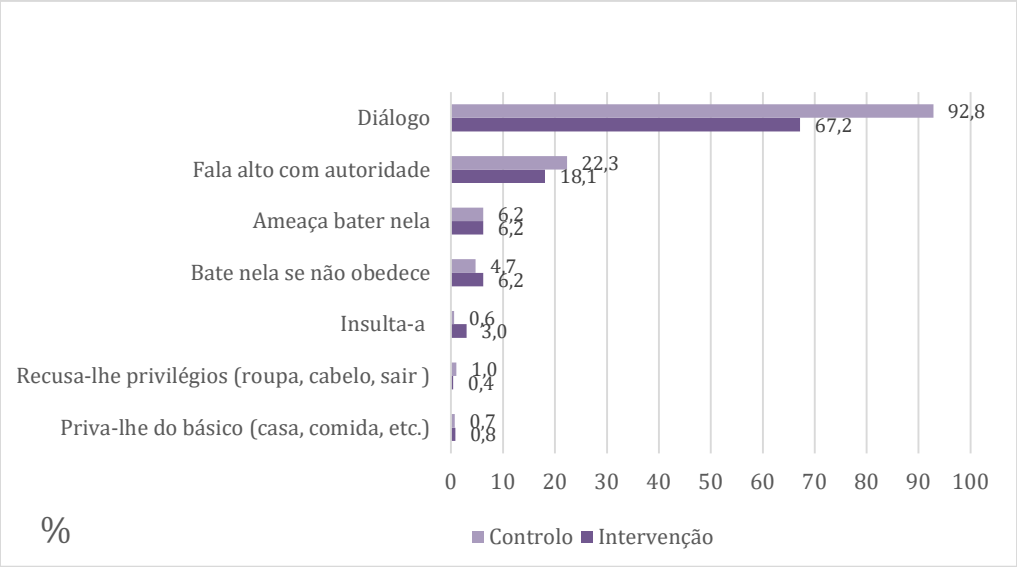


Figure 7. Husbands' exercise of authority over their wives.

As for the exercise of their authority over their children, this is manifested through conversation (86% in the intervention and 78% in the control), but the practice of violence was observed: talking loudly (22.1% in the intervention and 19.9% in the control), threatening to hit (18.9% in the intervention and 16.9% in the control) or hitting them (9.4% in the intervention and 16.5% in the control).

5.3.4. Support of husbands in the health care of the wife and members of the household

In the second survey, approximately 33.7% of the husbands said that one of the wives had given birth in the last 12 months or the wife was pregnant in the intervention villages, and 45.4% in the control areas. According to the husbands, 84.9% of the wives in the intervention and 94.1% in the control had regular prenatal visits during the pregnancy that occurred in the last two years. Most husbands reported having supported their wives during pregnancy (96.0% in the intervention and 97.5% in the control group) (Table 7).

In the last three months, 39.0% of the wives in the intervention villages and 35.0% in the control clinics complained of an illness, regardless of whether they were pregnant or not, of which 84.9% and 72.5% expressed to their husbands the desire to go to the consultation or to the pharmacy. Husbands provided support in 82.7% and 76.9% of the cases, respectively, in the intervention and control camps (Table 7).

Table 7. Wives' health care and husbands' support.

Determinant	Intervention - % (CI); n/n			Control - % (CI); n/n		
	Before	After	P-value	Before	After	P-value
Regular attendance of BC by wives	93,0 (38,7-99,7); 43/46	84,9 (69,8-93,2); 58/68	0,36	84,6 (64,4-94,3); 58/67	94,1 (84,0-98,0); 104/111	0,08
Husband supported sick wife during pregnancy	98,1 (45,6-99,9); 46/47	96,0 (72,4-99,5); 65/68	0,46	99,0 (67,3-99,9); 68/69	97,5 (85,0-99,6); 108/111	0,51
The husband supported when the wife needed to go to the appointment/pharmacy in the last 3 months	84,3 (71,3-92,2); 42/49	82,7 (49,6-95,9); 64/77	0,69	76,4 (58,1-88,4); 53/69	76,9 (75,3-78,5); 67/87	0,89

No changes were observed in indicators of husbands' support for wives during pregnancy or for health care of sick wives in the past 3 months (Figure 8).

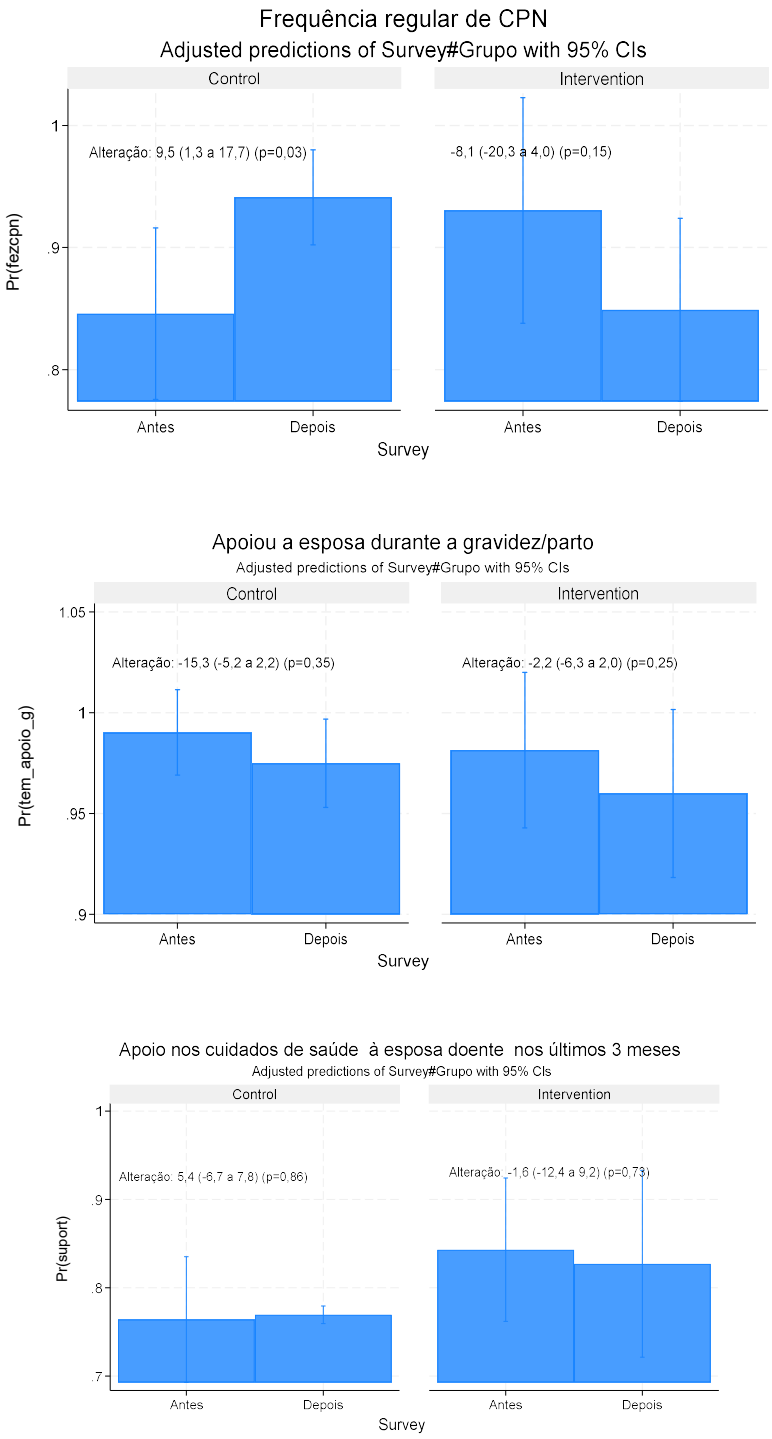


Figure 8. Alteration of the indicators of support from the husband to the wife during pregnancy and illness.

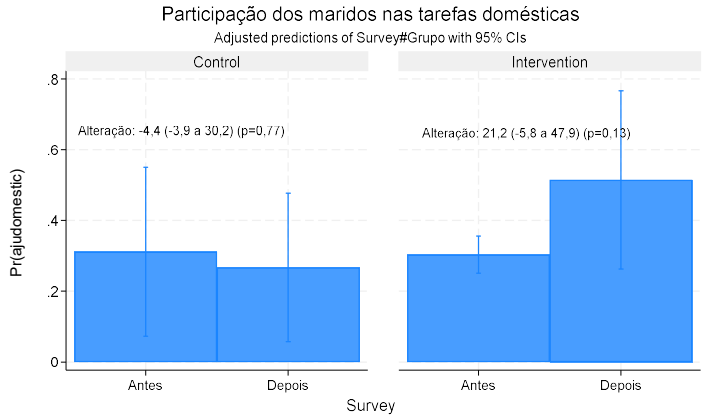
5.3.5. Husbands' participation in household chores and care for sick children

The participation of husbands in household chores was assessed by asking them about the frequency of their participation in the last month in performing some of the household chores such as cooking, cleaning the house, washing the dishes or doing the laundry. The participation of husbands in any of these household chores more frequently than once a month was reported by 51.5% in the intervention and 26.8% in the control, and participation in child care by 93.6% and 94.1%, respectively (Table 8).

Table 8. Husbands' participation in household chores and the care of sick children.

	Intervention - % (CI); n/n			**Control - % (CI); n/n**		
Determinant	**Before**	**After**	P-value	**Before**	**After**	P-value
Husband supported with household chores for the past month	30,4 (22,0-40,3); 65/207	51,5 (19,4-82,4); 103/201	0,11	31,1 (4,0-83,3); 74/248	26,8 (6,5-65,8); 67/246	0,81
Husband participated in the care of the children	90,8 (52,2-98,9); 189/208	93,6 (83,9-97,6); 188/201	0,64	86,5 (70,5-94,5); 219/248	94,1 (69,8-99,1); 232/246	0,09

No significant change was observed in these indicators in either group, except for the control groups with regard to child care (Figure 9).



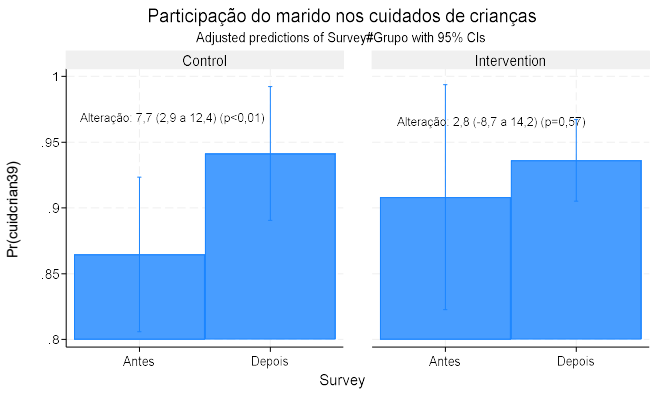


Figure 9. Alteration of the husband's participation in household chores and support for sick children.

5.4. Interview with the women

5.4.1. Sample Description

A total of 631 wives were interviewed at baseline (290 in the intervention and 341 in the control groups), and 615 wives were included in the post-intervention survey (278 in the intervention and 337 in the control). The median age was similar in both groups and was approximately 34 years; Approximately 43% were in a polygamous home in the intervention and 36% in the control.

5.4.2. Health care and support from husbands

Of the wives who participated in the study, 61 (21%) in the intervention group and 94 (27%) in the control group, of which 22 (7.6%) in the intervention and 32 (9.2%) in the control group were pregnant at the time.

The frequency of regular antenatal visits reported by women who were pregnant or had given birth in the last 12 months was 87.1% at baseline and 85.2% post-intervention in the intervention group, and 79.8% at baseline and 83.7% later in control, with no difference in the change in the level of the indicator. The proportion of those who performed at least 4 BC from the card was 54.8% before and 78.2% after in the intervention group, and 72.9% before and 58.7% after, with no differences observed (Figure 10).

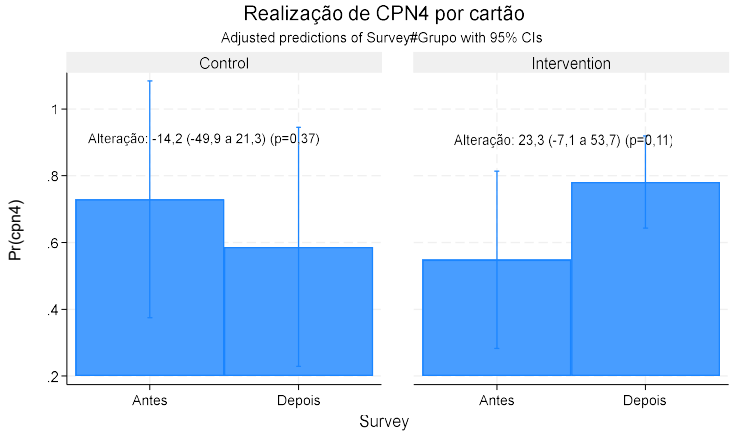


Figure 10. Change in the proportion of CPN4 performed from the card.

Regarding intermittent preventive treatment during pregnancy, 33.8% in the intervention group took TPI3 before and 60.7% after (p=0.02), and in the control group 72.9% before and 74.0% after (p=0.92). The change was significant only in the intervention group (Figure 11).

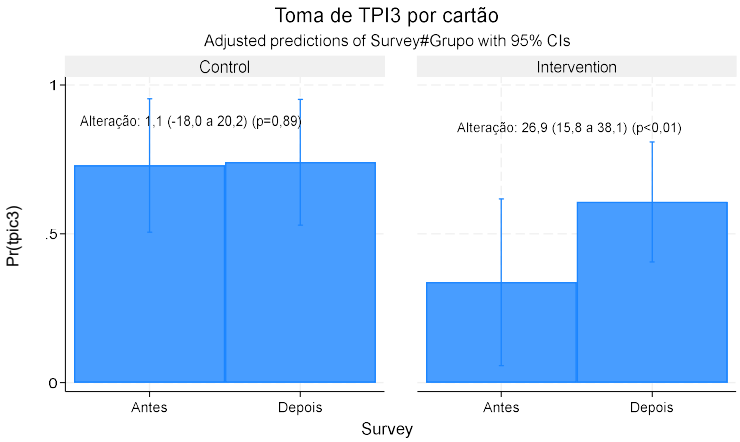


Figure 11. Change in the proportion of TPI3 from the card.

Most of the wives said they had received some support from their husbands during their last pregnancy. In the intervention, 84.8% before and 90.6% after said they had received support from their husbands, and in the control group, 90.0% before and 76.0% after, and it was no different (Figure 12).

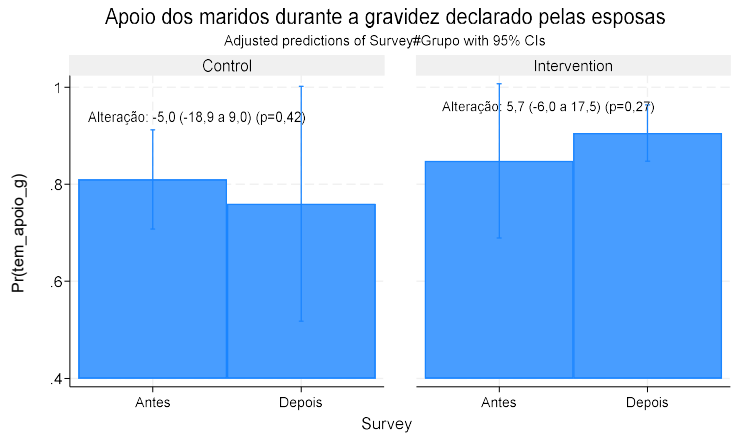


Figure 12. Change in support for wives by the husband during pregnancy declared by the wives.

An average of approximately 40% of the wives reported a fever in the last two weeks prior to the interview. Approximately 29.0% before and 39.6% after in the intervention

group, and 18.5% before and 35.8% after in the control group had a malaria test. In both groups, a significant increase in testing was observed, which would probably be explained in part by the fact that the second survey took place at a time of higher malaria transmission and, therefore, more use of the test (Figure 13).

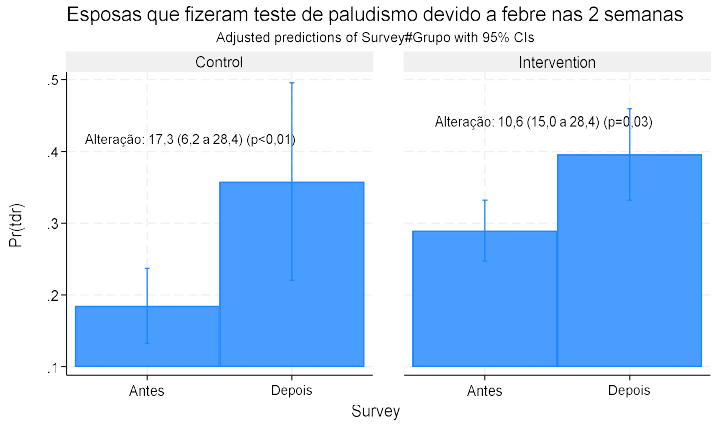


Figure 13. Change in malaria testing by wives who had fever in the last 2 weeks.

A little more than a third of the wives complained of some illness in the last 3 months, of which about 80% told the husband that they wanted to look for a health facility or buy medicines. Of the latter in the intervention group, 49.9% before and 54.0% after, and 44.5% before and 39.4% after in the control group, stated that they had their husband's support in the search for a health structure or in the purchase of medicines. There was no difference between the groups, nor between the differences.

In the last two weeks, just over a third of children under five years of age reported fever, of which 24.4% before and 43.4% after in the intervention areas, and 32.4% before and 28.0% after in the control were tested for malaria, with no difference between before and after.

5.4.3. Participation in decision-making in the household

Women's decision-making about their own health, including whether they can make the decision to go to the health centre or pharmacy on their own without asking for their husband's approval, was assessed. The proportion of wives who could make decisions about their health on their own in the intervention villages was 43.4% before and 72.9% after, and in the control was 19.5% before and 49.5% after. A difference was observed mainly in the control, although there was a trend in the intervention (Figure 14).

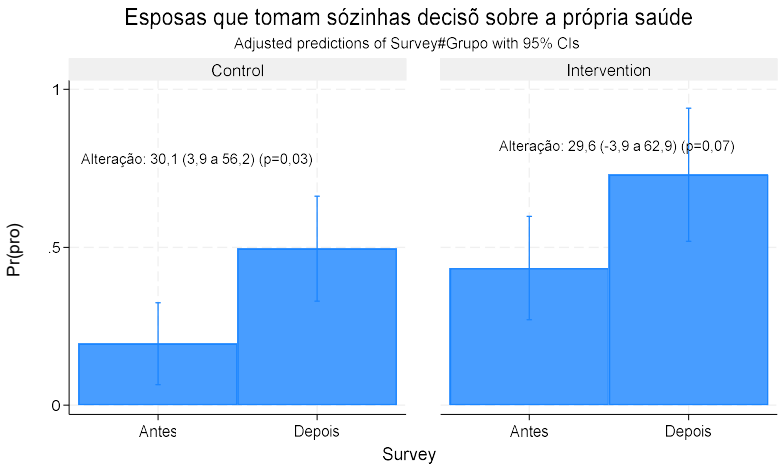


Figure 14. Alteration in the wife's decision-making about her own health.

5.5. Use of MILDA in households

Regarding the use of MILDA reported by the inhabitants of households in general, it was evaluated in the intervention villages in 1797 inhabitants before and 1823 after, and in 2352 before and 1943 after in the control villages.

In the intervention group, 87.5% before and 98.7% reported having slept under a MILDA the night before, and in the control group 88.5% before and 98.9% after, a significant difference between the second survey conducted in November and the baseline in March in both groups ($p<0.05$), but there was no difference between the differences (Figure 15).

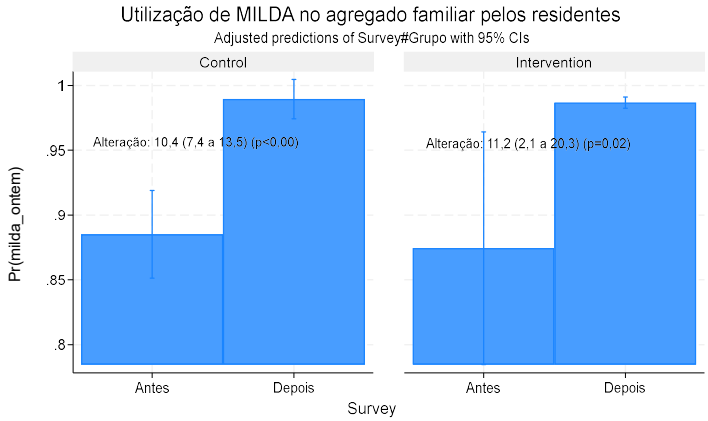


Figure 15. Use of MILDA the night before by household members by study group.

6. Conclusions and recommendations

Comparison of the level of change of the indicators from baseline in the intervention and control groups showed improvement in some of the indicators and a non-significant trend in others. However, it was not possible to attribute the differences to the intervention specifically, as the differences were observed in both groups or were not significant.

On the other hand, there was an improvement in the general perception, but not in specific knowledge, for example about the number of ANCs and ICTs, and it was observed that in some cases mainly in the intervention group, but not in the control group, and in both there was no improvement in the exact knowledge about the number of BCCs required.

The most likely effect that can be expected from this type of intervention in a short period of time may be in alerting about certain situations rather than in specific knowledge or changes in behavior. In malaria, some differences may have been due to the period in which the second survey was conducted, which coincided with higher transmission and, probably, more sensitization or risk perception by the malaria themselves, for example in the use of MILDA. This indicator was much higher than in other studies, as it was based only on respondents' responses, without confirmation through observation, and subject to the respondent's subjective consideration of MILDA.

The fact that the changes also occur in the control group in the same size limits the attribution of the effects to the intervention. There may have been evolution due to interventions by other actors, but also the fact that the same questions were asked of people in the baseline survey and may have influenced more interest, discussion or conversations with others, but also influenced positive responses in the subsequent survey conducted after a short time. Finally, the multiplicity of indicators d0 effect is not ideal, as associations may occur due to chance.

In conclusion, the intervention should benefit from a longer period and on a larger scale to allow significant differences to be observed.

7. References

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8. List of Figures and Tables

Tables

Figures

9. ATTACHMENTS

9.1. Annex 1: Main indicators

Indicator		
A1. Increase in the number of pregnant women attending 4 antenatal visits	Proportion of pregnant women who had at least 4 antenatal visits	
R2. Increase in the number of pregnant women taking their 3 doses of TPI	Proportion of pregnant women who attended at least one antenatal visit who took at least 3 doses of TPI	
R3. Increased support from husbands for their wives' health	Proportion of pregnant wives or those with children under one year of age who reported that their husbands provided support to attend antenatal visits during their current/last pregnancy	-
	Proportion of wives who wanted to go to the health center in the last three months and received support from their husbands to go	
	Proportion of wives who needed to buy medicines in the last three months and who received support from their husbands to buy them	
	Proportion of wives who said they could make decisions about their health themselves	
	Proportion of married men who say they are in favour of their wives making decisions about their own health care (disaggregated by club facilitator status of husbands, club members and other men in the community)	
R4. Increased number of pregnant women and children aged 0-5 years who slept under MILDA the night before	Proportion of residents who spent the night at home and slept under MILDA the night before	
	Proportion of children aged 0-5 years who spent the night at home and slept under MILDA the night before	
	Proportion of pregnant women who spent the night at home and slept under MILDA the night before	
R5. Increasing number of	Proportion of pregnant women who reported having had a fever in the past two weeks and	

pregnant women, children aged 0-5 years, and men with fever who are screened for malaria	who underwent a TDR for malaria or thick gout	
	Proportion of children aged 0-5 years who reported having had a fever in the past two weeks and who underwent a TDR for malaria or thick gout	
	Proportion of pregnant women who reported having had a fever in the past two weeks and who underwent a TDR for malaria or thick gout	
	Proportion of women who reported having had a fever in the past two weeks and who had undergone a TDR for malaria or thick gout	
R8. Greater participation of men in domestic work	Proportion of wives who stated that their husbands contribute to traditional women's household chores (cooking, cleaning, washing dishes or laundry, fetching water) at least once a week (disaggregated by club facilitator status of husbands, club members and other men in the community)	
R9. Increasing male participation in child and patient care	Proportion of wives who stated that their husbands take care of their children (bathing, feeding, spilling, taking to school) at least once a week (disaggregated by status of club facilitator of husbands, club members and other men in the community)	
	Proportion of wives who stated that their husbands share the care of their sick children whenever a child is sick (disaggregated by status of club facilitator of husbands, club members and other men in the community)	
	Proportion of wives who stated that their husbands accompanied a family member to the health center in the last 3 months (disaggregated by club facilitator status of husbands, club members, and other men in the community)	
R10. Decrease in cases of domestic violence	Proportion of men who think physical or verbal aggression is necessary to assert authority in the household (disaggregated by club facilitator status of husbands, club members, and other men in the community)	
	Proportion of wives who report that their husbands use physical aggression to assert their authority	

	Proportion of wives who report that their husbands use verbal aggression to assert their authority	
R12. Increased men's understanding of gender norms that have a negative impact on their health	Proportion of married men who say that being expected to be strong and never showing weakness limits their willingness to seek testing or treatment	

9.2. Annex 2 : Datasheet

Project Title:	Impact of the husbands' club strategy implemented by PLAN International Guinea-Bissau on married men's knowledge, perceptions and behaviours in relation to gender roles within the household and health in the context of malaria control
Drawing:	Quantitative controlled before-and-after study
Study site:	Communities of Ondame and Banbadinca, Guinea-Bissau
Principal Investigators:	Amabélia Rodrigues, Epidemiologist, PhD Contact: a.rodrigues@bandim.org; TM: (245) 966 078 659/ 956 098 322 Bandim Health Project, Guinea-Bissau Cesário Martins, MD, PhD Contact: c.martins@bandim.org; TM: (245) 966 604 119/ 955 900 303 Bandim Health Project, Guinea-Bissau
Implementation of the study:	Bandim Health Project, Guinea-Bissau
Implementation of the intervention:	PLAN Guinea-Bissau
Financing:	UNDP NFM3, Global Fund
Duration and Period:	November 2022–December 2023