

ENHANCING PASTORALIST WOMEN'S KNOWLEDGE OF DANGER SIGNS THROUGH HOME-BASED LIFE-SAVING SKILLS INTERVENTION IN NORTHERN KENYA: A QUASI-EXPERIMENTAL STUDY.

P2-P1

Dabo G Halake^{1,2}, Elijah I Maranga², John M Gachohi², Japheth M Nzioki³

¹Umma University, Kajiado, Kenya, ²Jomo Kenyatta University of Agriculture and Technology, Nairobi, Kenya, ³Andrews University, Berrien Springs, USA

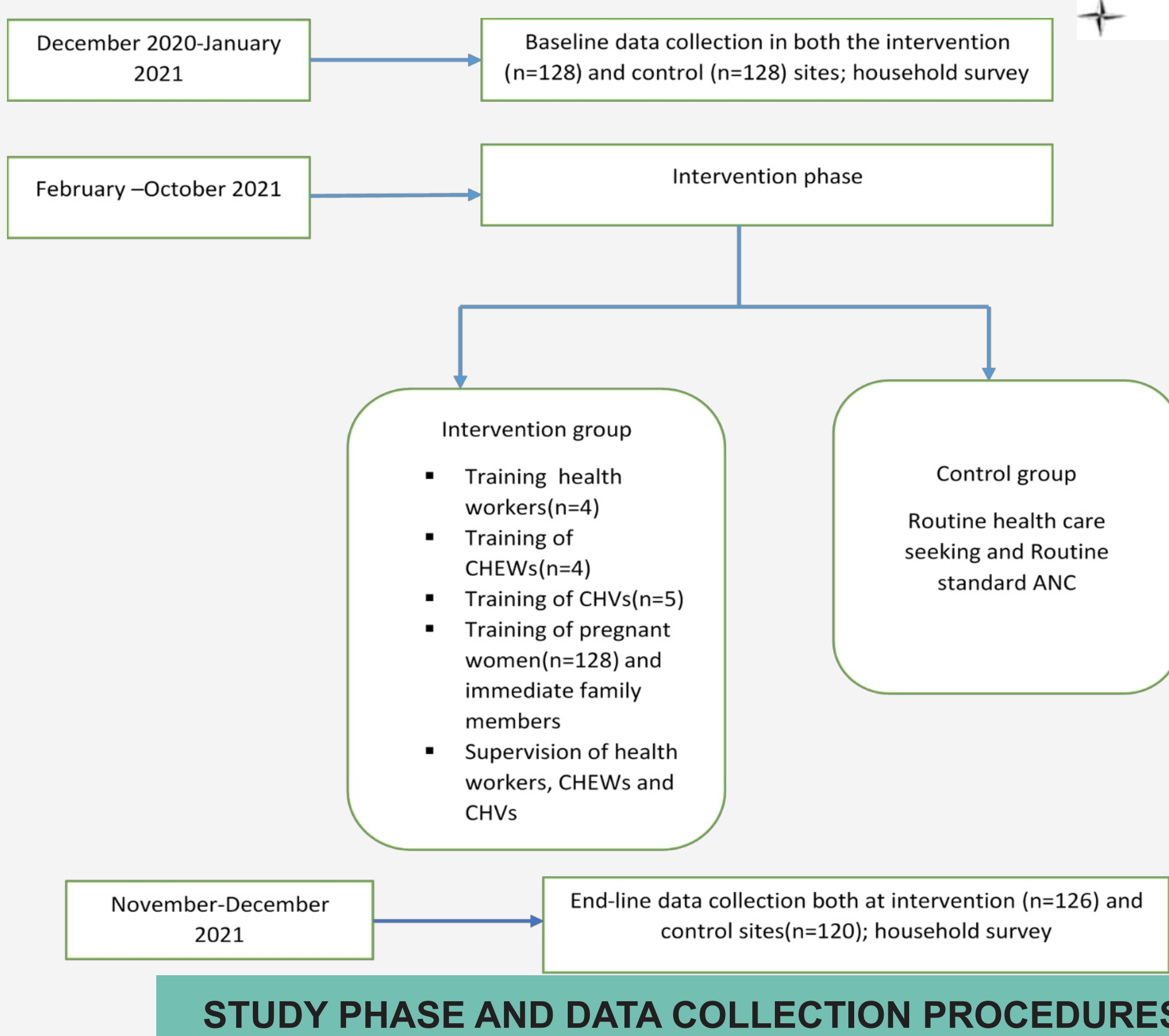
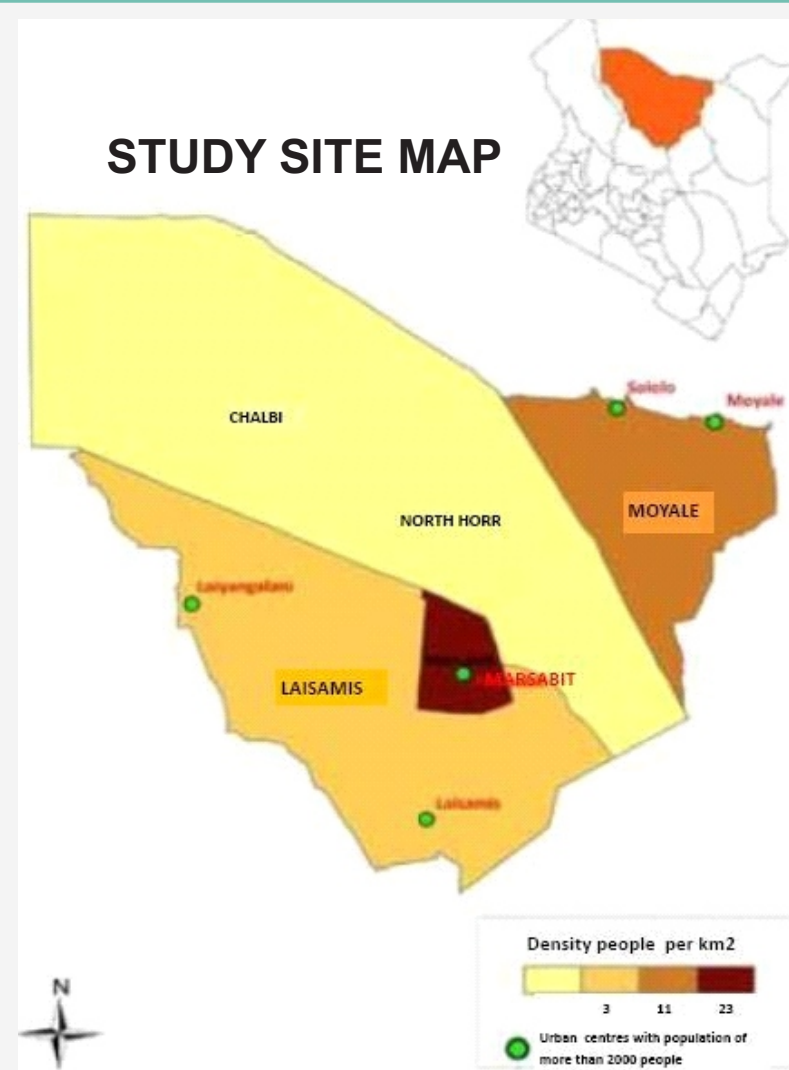
KEY FINDINGS: The integration of community-based interventions such as **Home-based Life-Saving Skills** with the existing healthcare systems **significantly improved knowledge of maternal and neonatal danger signs** among pastoralist women in rural settings, Northern Kenya.

BACKGROUND

- Recognition of obstetric danger signs is crucial for reducing maternal mortality and delays in seeking emergency care.
- However, there is insufficient knowledge about obstetric danger signs among women in rural Kenya, especially in the hard-to-reach pastoralist communities.
- This study aimed to determine whether home-based life-saving skills intervention improves knowledge about maternal and neonatal danger signs among pastoralist women in the rural setting of Northern Kenya.

METHODS

- A quasi-experimental design with pre-posttests was conducted.
- 256 pregnant women, were recruited using purposive sampling method from 2 sub-counties in Marsabit rural settings.
- Eligibility criteria: Women of reproductive age in their first trimester who consented and severely ill women were excluded.



- Descriptive statistics was used to summarize the data. Chi-square test and Difference-in-Difference analysis were used to compare the intervention's proportion differences and net effect between intervention and control groups.

RESULTS

- This study found that the proportion of women knowledgeable of ≥ 3 danger signs increased significantly during pregnancy, birth, postpartum and neonatal period in intervention group than control group post intervention.

TABLE 1. PROPORTION OF WOMEN KNOWLEDGABLE OF ≥ 3 DANGER SIGNS AT BASELINE

Maternal knowledge level	% of mothers		
	High % (n)	Low % (n)	Total % (n)
Knowledge level of neonatal danger signs			
Control	43.0(55)	57.0(73)	50.0(128)
Intervention	46.9(60)	53.1(68)	50.0(128)
p-value	0.530		
Knowledge level of danger signs during pregnancy			
Control	50.8(65)	49.2(63)	50.0(128)
Intervention	57.8(74)	42.2(54)	50.4(128)
p-value	0.259		
Knowledge level of danger signs during birth			
Control	52.3(67)	47.7(61)	50.0(128)
Intervention	46.1(59)	53.9(69)	50.0(128)
p-value	0.317		
Knowledge level of danger signs after birth			
Control	43.0(55)	57.0(73)	50.0(128)
Intervention	47.7(61)	52.3(67)	50.0(128)
p-value	0.133		

Proportion of Women Knowledgeable of ≥ 3 Danger signs at endline

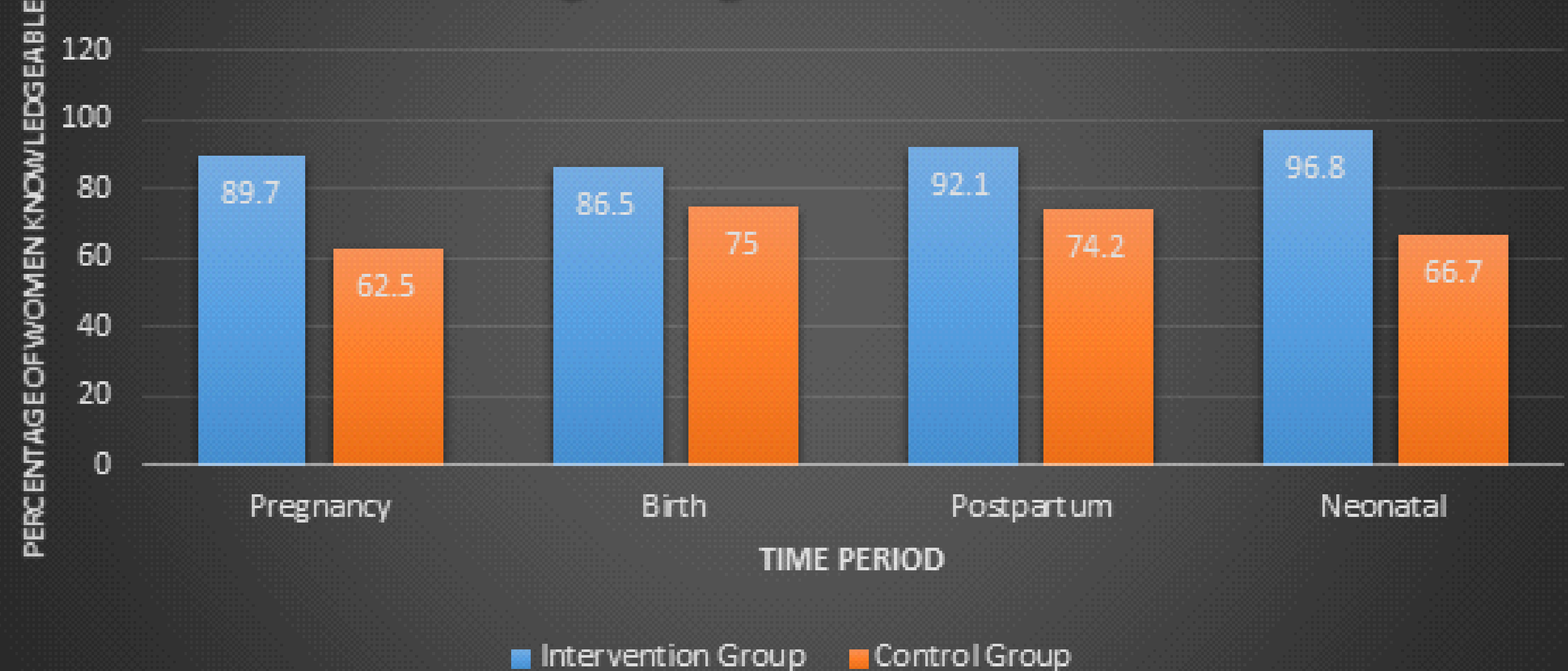


TABLE 2. KNOWLEDGE OF MATERNAL AND NEONATAL DANGER SIGNS IN CONTROL AND INTERVENTION GROUP AT ENDLINE

Maternal knowledge level	% of mothers		
	High % (n)	Low % (n)	Total % (n)
Knowledge level of neonatal danger signs			
Control	66.7(80)	33.3(40)	48.8(120)
Intervention	96.8(122)	3.2(4)	51.2(126)
p-value	.000		
Knowledge level of danger signs during pregnancy			
Control	62.5(75)	37.5(45)	48.8(120)
Intervention	89.7(113)	10.3(13)	51.2(126)
p-value	.000		
Knowledge level of danger signs during birth			
Control	75.0(90)	25.0(30)	48.8(120)
Intervention	86.5(109)	13.5(17)	51.2(126)
p-value	.022		
Knowledge level of danger signs after birth			
Control	74.2(89)	25.8(31)	48.8(120)
Intervention	92.1(116)	7.9(10)	51.2(126)
p-value	.000		

TABLE 3. DIFFERENCE IN DIFFERENCE ANALYSIS OF EFFECTS OF HBLSS INTERVENTION ON MATERNAL AND NEONATAL DANGER SIGNS BETWEEN INTERVENTION AND CONTROL GROUPS

Knowledge of maternal danger signs	Baseline survey			End line survey			Contribution
	C (%)	I (%)	Diff(I-C)	C (%)	I (%)	Diff(I-C)	
Knowledge level of neonatal danger signs	30.3	29.6	-0.7	62.6	98.6	36***	36.7***
Knowledge level of danger signs during pregnancy	34.9	33.4	-1.5	35.6	58.6	23***	24.5***
Knowledge level of danger signs during birth	39.9	37.3	-2.6	46.3	58.8	11.7***	14.3***
Knowledge level of danger signs after birth	26.2	26.1	-0.1	31.8	53.4	21.6***	21.7***

CONCLUSION

- These results imply that it is possible to improve knowledge of obstetric danger signs among women from hard-to-reach pastoralist communities through home-based life-saving skills intervention.
- Consequently, it improves health-seeking behavior and reduces maternal morbidity and mortality among women of reproductive age in a rural population.
- Our work contributes to the United Nation's sustainable development goal 3, which focuses on equity and commitment to reaching people needing health services regardless of where they live and their circumstances.

ADDITIONAL KEY INFORMATION

AUTHOR CONTACT: DABO GALGALO HALAKE
EMAIL: dgalgalo@umma.ac.ke
MOBILE NO: +2547 07550845
ACKNOWLEDGMENT: PHD Supervisors: Dr John Gachohi, Dr Betsy Rono and Dr Japheth Mativo
 UMMA University for Travel Grants.

