

Male Involvement in Antenatal Care, Women's Reproductive and Child Health Service Utilisation, and Its Associated Factors: An Analytical Cross-Sectional Study in Dar es Salaam, Tanzania

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ABSTRACT

Background: Male involvement in antenatal care (ANC) is associated with improved maternal and child health outcomes; however, its influence on women's utilisation of reproductive and child health services remains unclear in Tanzania. Although some studies have linked partner participation to increased use of skilled birth attendance, there is limited evidence on whether women accompanied by their partners during ANC are more likely to utilise other essential reproductive and child health services. This study, therefore, examines the extent of male involvement in ANC, women's uptake of key ANC-related services, and the factors that determine this utilisation.

Methods: An analytical cross-sectional study was conducted at a primary healthcare facility in Dar es Salaam, Tanzania, involving 396 postnatal mothers who had delivered within the previous 3 to 18 months and attended under-five or family planning clinics. The timeframe ensured completion of the 42-day postnatal check-up and likely return for immunisation or family planning. Participants were selected consecutively, and data were collected using a structured questionnaire. Analyses were conducted in STATA version 15 using a modified Poisson regression model, with statistical significance defined as $P < .05$.

Results: Out of 396 women, more than half, 54.3% ($n=215$), were aged between 25 years and 34 years. Two-thirds of women 67% ($n=265$) reported being accompanied by a partner at least once during antenatal care (ANC), and 62% ($n=245$) had partner attendance at their first ANC visit, indicating moderate male involvement in this setting. Male involvement during ANC was associated with a 36% higher prevalence of early ANC initiation (adjusted prevalence ratio [aPR] 1.36; 95% CI, 1.04 to 1.77). However, no significant association was observed between male involvement and postnatal care (PNC) attendance within seven days postpartum or the use of modern family planning, indicating that partner presence alone may not be sufficient to influence all aspects of reproductive and child health service utilisation.

Conclusion: Male involvement during antenatal care was associated with earlier ANC initiation, showing that partner support can facilitate timely care-seeking. However, no significant association was found with postnatal care attendance or modern family planning use, suggesting that partner presence alone may not influence all aspects of reproductive and child health service utilisation. Interventions should therefore combine partner engagement with broader strategies to promote comprehensive maternal and child health services.

BACKGROUND

Antenatal care (ANC) is a critical component of maternal and child health, providing pregnant women with essential services such as health assessments, preventive interventions, and health education to promote positive pregnancy outcomes.¹ In recent years, global and national strategies have increasingly emphasised male involvement as an important factor in improving ANC uptake and overall maternal health. Male involvement (MI) in antenatal care (ANC) is widely recognised as a multidimensional concept encompassing physical,

emotional, financial, domestic, and shared decision making and support. However, the literature reflects diverse interpretations, with some studies defining MI narrowly as the husband's physical presence during ANC visits.²⁻⁴

Despite some studies, including this one using a narrow operationalisation of male involvement, men's physical presence at ANC remains an important entry point for strengthening maternal and child health and care.^{2,5} Men who attend ANC gain a deeper understanding of reproductive, maternal, and

newborn health issues, enabling them to provide informed support throughout pregnancy and childbirth. Their engagement facilitates shared decision-making, timely care-seeking, better preparedness for delivery, and access to financial and logistical resources, factors associated with increased use of skilled birth care and improved maternal and child health outcome.^{5,6} Participation in ANC also enhances men's knowledge of reproductive and child health (RCH) services, including postpartum care and modern family planning, which may promote women's continued use of these essential services.^{3,4}

The recognition of men's involvement originated at the 1994 International Conference on Population and Development (ICPD) in Cairo. The WHO recommends men's active involvement during pregnancy to improve maternal and newborn outcomes,⁷ cemented by national and international antenatal ANC guidelines.^{1,8} Evidence from across East Africa indicates that male involvement in antenatal care remains limited despite being recognised as a key determinant of maternal and newborn health outcomes. Studies from sub-Saharan Africa consistently report low to moderate partner attendance and involvement at ANC, often attributed to prevailing gender norms, stigma associated with considering ANC as a "women's issue" (with male involvement perceived as a sign of weakness), restrictive facility environments, and limited availability of male-friendly services.^{5,9-14} These findings align with patterns observed in Tanzania, where research has documented persistent barriers to male participation, including sociocultural expectations that frame pregnancy as a woman's responsibility, long waiting times, negative attitudes among caregivers, and the absence of structural and culturally appropriate mechanisms for engaging men during ANC visits.^{9,13,15}

Although the Tanzanian antenatal care (ANC) guidelines promote male involvement, national survey data indicate that more than half of pregnant women attend only one ANC visit with their partners, reflecting persistent implementation gaps. Government interventions, such as invitation letters for male partners, prioritising couples during clinic visits, and community sensitisation campaigns,¹⁶ have yielded limited improvements in key reproductive and child health (RCH) outcomes, including early ANC initiation, postnatal care within seven days, and uptake of modern family planning.^{3,17,18} There is limited Tanzanian-specific evidence on the association between male involvement and women's utilisation of ANC, postnatal care, and family planning services. This emphasises the need for empirical data to guide policy and interventions. Against this backdrop, the present study investigates male involvement in antenatal care and examines its association with women's utilisation of essential reproductive and child health services.

METHODOLOGY

Study Design and Setting

A descriptive cross-sectional study was conducted at a primary health facility within the Dar es Salaam City Council, one of the five councils of the region (alongside Temeke, Kinondoni, Ubungu, and Kigamboni). In 2022, the council had a population of 1,220,611, with 49% males and 51% females. The council hosts 294 health facilities, including 155 dispensaries, 16 health centres,

109 medical clinics, and 14 hospitals. The selected facility serves a high volume of mothers seeking reproductive and child health (RCH) services. It provides outpatient, maternal, and RCH services, including antenatal care (ANC), postnatal care (PNC), under-five clinics, and family planning services.

Inclusion and Exclusion Criteria

We included mothers who had delivered within the past 3 to 18 months to ensure adequate recruitment within the predetermined study period while allowing sufficient time for postpartum service utilisation including family planning and immunisation. We recognise that this timeframe may introduce variability in recall accuracy, with women closer to delivery likely recalling events more accurately than those interviewed later. Mothers or infants with severe illness were excluded to avoid undue participant burden and because such conditions could influence health-seeking behaviours in ways not comparable to the general population. Severe illness was defined as an acute or chronic condition requiring hospitalisation or ongoing medical care that could limit participation, assessed through self-report and, where available, verification from clinic records.

Sample Size Estimation

The estimation of participants' sample size in the study was done by using Kish Leslie formula. Using the prevalence of 63% of men who accompany their female partners to antenatal care at least once during the pregnancy period, which was found in the recent study conducted in Central Tanzania,¹⁵ 95% confidence level, and a 5% margin of error, a minimum sample of 357 participants was required. The researcher adjusted sample size, with consideration of non-response rate by estimating the response rate (R) to be 90%. Our final sample of 396 thus provides adequate power (~80%) to detect moderate associations between male involvement and women's utilisation of reproductive and child health services.

Data Collection Procedure and Tools

Data were collected using a structured questionnaire developed through an extensive review of relevant literature. The tool was initially prepared in English and subsequently translated into Kiswahili, Tanzania's national language. It included three sections: (1) women's socio-demographic characteristics, (2) male involvement in ANC, and (3) utilisation of reproductive and child health (RCH) services. The questionnaire was pretested with 30 women attending RCH services at Mnazi Mmoja primary health facility in Dar es Salaam. Based on pretest feedback, minor revisions were made to improve clarity, and enhance the logical flow of questions.

The structured questionnaire captured women's socio-demographic characteristics, living arrangement with a partner, male involvement in ANC (measured as partner accompaniment), and women's utilisation of RCH services. No male partner socio-demographic characteristics (such as age, education, or occupation) were collected, as the study focused on women's reports of partner involvement rather than profiling male partners.

A registered nurse underwent a one-day training to support the first author in data collection. This session

included orientation to study objectives, ethical procedures, participant recruitment, and questionnaire administration, as well as brief mock interviews to ensure consistency. The first author provided close supervision throughout data collection. Eligible participants were identified with assistance from the RCH clinic in-charge and approached after completing their clinic visits. Each interview lasted approximately 20 to 25 minutes. The study purpose and procedures were explained, participation was emphasised as voluntary, and confidentiality was assured. Written informed consent was then obtained. All interviews were conducted in a private counselling room within the facility, ensuring audio and visual privacy, using an interviewer-administered format.

Validity and Reliability

To ensure validity, an extensive literature review was conducted on male involvement in antenatal care (ANC) and women's utilisation of reproductive and child health services (RCH). The questionnaire was reviewed by two senior nurse-midwives with extensive midwifery experience, and adjustments were made based on their recommendations. Questions were kept simple, clear, and precise to enhance participants' understanding and improve the accuracy of responses. A pilot study was conducted at Mnazi Mmoja Health Centre with 30 conveniently selected mothers who had delivered within the past 3 to 18 months. The pilot study assessed participants' comprehension of the questions and the time required to complete the questionnaire. Necessary adjustments were made to address identified discrepancies before the main data collection.

Data Analysis

Data were analyzed using STATA software version 15. Continuous variables, such as participants' age, were summarised using means and standard deviations, while categorical variables were described using frequencies and percentages. Associations between male involvement and RCH service utilisation were initially explored using Chi-square tests.

Modified Poisson regression was employed to estimate prevalence ratios (PRs) and 95% confidence intervals for the relationship between independent variables, such as male involvement defined as partner accompaniment to ANC and dependent variables, including early ANC initiation, PNC attendance within seven days, and current use of modern family planning. Independent variables for multivariable analysis were selected based on both bivariable significance ($P < .05$) and prior evidence from the literature to ensure inclusion of key potential confounders. Competing multivariable models were compared using the Akaike Information Criterion (AIC), and the final model was selected based on theoretical relevance, statistical significance, and the lowest AIC. Multicollinearity was assessed using Variance Inflation Factors (VIFs), with all values < 5 , indicating no significant collinearity. Statistical significance was set at $P < .05$.

Ethical Consideration

Ethical approval was obtained from the Muhimbili University of Health and Allied Sciences Institution Review Board (Ref. No. DA.282/298/01.C/MUHAS-03-2022-1063). Permissions were secured

from the Dar es Salaam Regional Commissioner and the Dar es Salaam City Medical Officer for the research conducted at the primary health facility in Chanika Ward. All participants received comprehensive information about the study's objectives, confidentiality measures and their voluntary participation rights. Written consent was obtained from eligible participants, with assurance of their freedom to withdraw at any time. Participant anonymity was maintained by using numbers to identify participants instead of personal names.

RESULTS

Socio-demographic Characteristics of Respondents

Table 1 presents the socio-demographic characteristics of the 396 participants. The mean age was 28.4 years ($SD=5.8$), with the majority aged from 25 years to 34 years. Over half of the participants had completed primary education, and most reported living with a partner. Nearly half were not employed or were housewives, and a little more than a third had three or more children.

TABLE 1: Distribution of Sociodemographic Characteristics of Study Participants (N=396)

Variables	Frequency (n)	Percentage (%)
Age in years		
18-24	119	30.1
25-34	215	54.3
35-49	62	15.7
Live with partner		
Yes	347	87.6
No	49	12.4
Education level		
No formal education	9	2.3
Primary education	201	50.8
Secondary education and higher	186	46.9
Occupation		
Employed	216	54.5
Not employed/not earning	180	45.5
Number of children		
1	145	36.6
2	108	27.3
3 and above	143	36.1

Women's Utilisation of Reproductive and Child Health Services and Male Involvement in the Antenatal Care of Their Partners

Table 2 presents the prevalence of women's utilisation of reproductive health services and male involvement in antenatal care. Nearly half of the participants attended their first ANC visit during the first trimester. The majority had 4 to 7 ANC contacts while only a small proportion, achieved eight or more contacts in line with current ANC guidelines. Regarding postnatal care follow-up, most women completed the recommended check-up within seven days after delivery; however, attendance for the second postnatal visit within 28 days was low. Attendance for the final follow-up within 42 days was much higher among all women.

In terms of male involvement, a predominant number of women were accompanied by their partners to ANC at least once, and had partner attendance at their first ANC booking. About half of the women were accompanied two or more times during pregnancy. Regarding family planning, about one-third of women reported using modern methods currently, with implants being the most preferred, followed by Depo-Provera injectable contraception.

Associations Between Male Involvement, Sociodemographic Characteristics, and Women's Utilisation of Reproductive and Child Health Services

Table 3 presents the factors associated with women's utilisation of RCH services using chi-square analysis. The results show that being accompanied to ANC by a male partner and having a higher level of education were significantly associated with initiating ANC within the first trimester. Other variables, such as women's age, living together with a male partner, number of children, and occupation, were not statistically significantly associated with early ANC initiation. Additionally, none of the

variables assessed showed a significant association with PNC attendance within seven days after delivery or with the use of modern family planning methods postpartum.

Factors Associated with the Utilisation of Reproductive and Child Health Services Among Women

Multivariable modified Poisson regression analysis was performed to adjust for potential confounders. Women accompanied by their male partners during ANC had a 36% higher likelihood of initiating ANC in the first trimester compared to those who were not accompanied. Conversely, women with secondary education had an 11% lower likelihood of attending PNC within seven days postpartum compared to women with no formal education. Male involvement during ANC was not significantly associated with the uptake of modern family planning methods. Table 4 presents the full results of the multivariable analysis.

TABLE 2: Women's Utilisation of Reproductive and Child Health Services and Male Involvement in the Antenatal Care of Their Partners (N=396)

Question	Yes n (%)	No n (%)	Mean (SD)	Notes/Subcategories, n (%)
At what gestational age (in months) did you begin antenatal care during your last pregnancy?	-	-	3.7(1.4); Median=4	ANC initiation time: - First trimester: 168(42.4%) - After the first trimester: 228(57.6%)
How many times did you attend ANC during your last pregnancy?	-	-	5.3(1.6); Median=5	- Less than 4 times: 40(10.1%) - 4-7 times: 306(77.3%) - 8 times or more: 50(12.8%)
Where did you give birth?	-	-	-	Health facility: 395 (99.7%) Home: 1 (0.3%)
What was the mode of delivery?	-	-	-	Spontaneous vaginal delivery: 322(81.3%) Caesarean section: 74(18.7%)
Did your male partner accompany you to the ANC clinic?	264 (66.7)	132 (33.3)		
How many times did your male partner accompany you to ANC during pregnancy of your last pregnancy?	-	-	2.9(1.9); Median=3	-
Did your partner accompany you to ANC during the first visit?	244 (61.6)	20 (5.1)		
Did you attend postnatal care for assessment within 7 days after delivery?	339 (85.5)	57 (14.4)		
Did you attend postnatal care for assessment at 28 days after delivery?	72 (18.2)	324 (81.8)		
Did you attend postnatal care for assessment at 42 days after delivery?	396 (100)	0 (0)		
Do you currently use modern family planning methods (Implants, Depo-Provera, IUCD, Pills)?	120 (30.3)	276 (69.7)		
After delivery, how many months passed before you began using a modern family planning method?	-	-	5.4(4.1); Median=4	-
Which type of modern family planning method do you use?	-	-	-	IUCD: 3 (0.8%) Implants: 72 (18.2%) Pills: 7 (1.8%) Depo Provera (Injectable): 38 (9.8%) Total: 120 (30.3%)

Abbreviation key: ANC, antenatal care; IUCD, intrauterine contraceptive device; SD, standard deviation.

TABLE 3: Associations Between Male Involvement, Sociodemographic Characteristics, and Women's Utilisation of Reproductive and Child Health Services (N=396)

Variables	ANC Initiation		P Value	PNC Within 7 days		P Value	Use of Modern Family Planning		P Value
	After The First Trimester n (%)	In First Trimester n (%)		No n (%)	Yes n (%)		No (n%)	Yes n(%)	
Accompanied by a partner			.031			.362			.215
No	86 (65.2)	46 (34.8)		16 (12.1)	116 (87.9)		87 (65.9)	45 (34.1)	
Yes	142 (53.8)	122 (46.2)		41 (15.5)	223 (84.5)		190 (72.0)	74 (28.0)	
Age group in years			.316			.337			.745
18-24	68 (57.1)	51 (42.9)		21 (17.6)	98 (82.4)		86 (72.3)	33 (27.7)	
25-34	119 (55.4)	96 (44.6)		30 (13.9)	185 (86.1)		147 (68.4)	68 (31.4)	
35-49	41 (66.1)	21 (33.9)		6 (9.7)	56 (90.3)		44 (71.0)	18 (29.0)	
Education			.026			.649			.717
No formal	6 (66.7)	3 (33.3)		2 (22.2)	7 (77.8)		7 (77.8)	2 (22.2)	
Primary	127 (63.2)	74 (36.8)		26 (12.9)	175 (87.1)		143 (71.4)	58 (28.6)	
Secondary and higher	95 (51.1)	91 (48.9)		26 (16.5)	132 (83.5)		106 (67.1)	52 (32.9)	
Live with a partner			.139			.397			.809
No	33 (67.4)	16 (32.6)		9 (18.4)	40 (81.7)		35 (71.4)	14 (28.6)	
Yes	195 (56.2)	152 (43.8)		48 (13.8)	299 (86.2)		242 (69.7)	105 (30.3)	
Number of children			.853			.910			.119
1	82 (56.6)	63 (43.4)		28 (19.3)	117 (80.7)		107 (73.8)	38 (26.2)	
2	61 (56.5)	47 (43.5)		14 (13.0)	94 (87.0)		79 (73.2)	29 (26.8)	
3 and more	85 (59.4)	58 (40.6)		15 (10.5)	128 (89.5)		91 (63.6)	52 (36.4)	
Occupation			.348			.537			.333
Employed	120 (55.6)	96 (44.4)		7 (19.4)	29 (80.6)		28 (77.8)	8 (22.2)	
Not employed/Housewife	108 (60.0)	72 (40.0)							

Abbreviation key: ANC, antenatal care; PNC, postnatal care.

TABLE 4: Factors Associated with the Utilisation of Reproductive and Child Health Services Among Women (N=396)

Variables	PR (95% CI)	Early initiation of ANC aPR (95% CI)	PNC within 7 days PR (95% CI)	aPR (95% CI)	Use of modern Family Planning PR (95% CI)	aPR (95% CI)
Accompanied by a partner						
No	1	1	1	1	1	1
Yes	1.33 (1.01, 1.73)*	1.36 (1.04, 1.77)*	0.96 (0.89, 1.04)	0.96 (0.86, 1.08)	0.82 (0.61, 1.12)	0.85 (0.02, 1.15)
Age group						
18 - 24	1	1	1	1	1	1
25 - 34	1.04 (0.81, 1.35)	1.02 (0.96, 1.37)	1.04 (0.95, 1.15)	1.10 (0.92, 1.33)	1.14 (0.80, 1.82)	0.97 (0.62, 1.50)
35 - 49	0.79 (0.52, 1.19)	0.78 (0.48, 1.25)	1.10 (0.98, 1.23)	1.21 (1.03, 1.42)	1.05 (0.64, 1.70)	0.85 (0.47, 1.53)
Number of children						
1	1	1	1	1	1	1
2	1 (0.75, 1.33)	0.99 (0.73, 1.3)	1.08 (0.97, 1.20)	1.02 (0.68, 1.55)	1.04 (0.65, 1.65)	
3 and above	0.93 (0.71, 1.23)	1.02 (0.74, 1.41)	1.11 (1.01, 1.22)*	1.39 (0.98, 1.97)	1.57 (1.00, 2.47)	
Education level						
No formal education	1	1	1	1	1	1
Primary education	1.1 (0.43, 2.83)	1.12 (0.79, 1.59)	1.12 (0.79, 1.59)	0.98 (0.87, 1.11)	1.27 (0.92, 1.76)	1.27 (0.42, 3.90)
Secondary education	1.39 (0.54, 3.55)	1.07 (0.75, 1.59)	1.07 (0.75, 1.59)	0.89 (0.80, 0.99)*	1.22 (0.66, 2.26)	1.59 (0.52, 4.88)
Higher education	1.93 (0.73, 5.06)	1.14 (0.79, 1.67)	1.14 (0.79, 1.67)	0.73 (0.46, 1.16)	0.82 (0.42, 1.57)	1.23 (0.35, 4.33)

* Statistical significance at $P < 0.05$ and ** Statistical significance at $P < 0.001$

Key to abbreviations: ANC, antenatal care; PNC, postnatal care; PR, prevalence ratio; aPR, adjusted prevalence ratio.

DISCUSSION

This study examined associations between male involvement during antenatal care (ANC) and women's utilisation of key reproductive and child health (RCH) services, including early ANC initiation, postnatal care (PNC) attendance within seven days, and uptake of modern family planning (FP) methods. Male partner accompaniment, defined as attending ANC at least once, was associated with a 36% higher prevalence of early ANC initiation. However, no association was observed with PNC attendance or postpartum FP uptake.

The positive association between male involvement and early ANC initiation aligns with findings from Afghanistan,¹² and Tanzania,¹⁵ suggesting that partner accompaniment may encourage timely care-seeking through emotional support, shared decision-making, or logistical facilitation.

The null association of male involvement with PNC attendance likely reflects a ceiling effect, as 85.6% of women attended PNC within seven days, leaving limited variability to detect differences. High PNC attendance at the study facility may be attributed to ANC sensitisation efforts on the importance of postnatal follow-ups, as well as other local interventions and the integration of maternal health services. Similarly, male involvement showed no association with postpartum FP uptake. This contrasts with evidence from sub-Saharan Africa demonstrating that broader male engagement, including communication, financial support, and shared decision-making, is linked to improved contraceptive use.^{4,19} The narrow definition of male involvement used in this study (physical presence only) may have limited its ability to detect these broader influences on FP use. Studies in Tanzania indicate that even when men accompany partners to ANC, they are often excluded from consultations due to space constraints or provider practices,¹³ reducing opportunities for meaningful participation in various ANC services.

An unexpected finding was that women with secondary or higher education had a slightly lower prevalence of early ANC initiation. This contrasts with typical patterns observed in Tanzania and elsewhere.^{20,21} Possible explanations include competing work responsibilities, perceived lower pregnancy-related risk, or unmeasured socio-economic and occupational factors. These findings highlight the complex and context-specific nature of maternal health-seeking behaviours, which should be carefully considered when exploring and designing interventions to improve reproductive and child health outcomes.

The study observed a medium rate of partner accompaniment at least once, similar to findings from Dodoma,¹⁵ and Mozambique (50%).²² Differences across studies may reflect methodological variation, facility characteristics, or contextual factors such as urban versus rural settings. Consistent with findings from Ghana,²³ women living with partners were more likely to be accompanied, suggesting that household structure and relationship dynamics shape male involvement in reproductive and child health services.

Overall, this study underscores that male involvement is multidimensional. While physical presence at ANC may

facilitate early ANC initiation, it appears insufficient to influence postpartum behaviours such as PNC attendance or FP uptake. Interventions aiming to strengthen male engagement should therefore focus on the quality, scope, and continuity of involvement of men across the maternal health continuum, not merely on attendance.

Strengths and Limitations

A major strength of this study is the use of interviewer-administered questionnaires, which minimised misinterpretation and improved data completeness. The simultaneous measurement of male involvement and multiple RCH outcomes offered a comprehensive assessment of partner engagement within an urban Tanzanian setting.

However, several limitations should be considered. The cross-sectional design does not allow for causal inference, and the temporal sequence between exposure and outcomes remains uncertain. Women who are more proactive about health may both initiate ANC earlier and invite their partners to participate, contributing to potential reverse causation. Conducting the study at a single urban facility limits generalisability, particularly to rural settings. Male involvement was narrowly operationalised as physical accompaniment, potentially underestimating the multidimensional nature of male engagement in reproductive and child health. Self-reported measures may also be subject to recall and social desirability bias. The very high PNC attendance likely created a ceiling effect, limiting the ability to detect associations. Additionally, residual confounding may persist due to unmeasured variables such as household economic status, parity-specific care preferences, distance to the facility, or relationship quality.

To mitigate some of these limitations, the study employed interviewer-administered questionnaires to enhance clarity and reduce misinterpretation, used consecutive sampling to minimise selection bias within the facility, and applied a modified Poisson regression model to adjust for measured confounders. Nonetheless, caution should be applied when interpreting the findings. Despite these limitations, the findings contribute valuable evidence on patterns of male involvement in reproductive and child health services and their association with early ANC initiation.

CONCLUSION AND RECOMMENDATIONS

Male involvement in ANC, measured as partner accompaniment, was significantly associated with early ANC initiation but not with PNC attendance or postpartum family planning uptake. These findings indicate that physical presence at ANC, while beneficial for promoting early care, may be insufficient to improve the broader spectrum of maternal and child health services. Programmatic efforts should prioritise the quality, scope, and continuity of male engagement across the continuum of reproductive and child health services. Future research should employ longitudinal, multi-site, and qualitative approaches to better understand the mechanisms and contextual factors influencing both reproductive and child health service utilisation and male partner involvement.

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