



International Journal of Public Health Practice and Promotion (IJPHP)

VOLUME 1 ISSUE 1 (2026)



PUBLISHED BY
E-PALLI PUBLISHERS, DELAWARE, USA

Advanced Strategy: An Integrated Approach to Maternal, Newborn and Child Health and Family Planning (MNCH/FP) in Ivory Coast: Experiences from the Daloa and Vavoua Health Districts

Kouamé Stanislas Kafflouman^{1*}, Wilfried Tiam Kamkuigni¹, Bakary Cisse¹, Yeo Nagneniga¹

Article Information

Received: July 12, 2026

Accepted: September 20, 2026

Published: October 12, 2026

Keywords

Advanced Strategy, Family Planning, Integrated Health Services, Ivory Coast, Maternal Health

ABSTRACT

In Ivory Coast, the use of modern contraceptive methods remains suboptimal, while maternal and child health indicators and unmet needs for family planning (FP) continue to present important public health challenges. To address these challenges, an innovative approach was implemented in the Daloa Health District and subsequently extended to the Vavoua Health District. The intervention aimed to improve access to comprehensive, free, and geographically accessible FP and maternal, newborn, and child health services. Services provided included antenatal and postnatal consultations, all modern contraceptive methods, vaccination, malaria management for children and pregnant women, and nutritional screening. The results indicate improved access to integrated services. In Daloa, the number of Special Days increased from 9 to 60, resulting in 890 antenatal and postnatal consultations, 2,211 family planning clients, 60 vaccination services, and 54 malaria cases treated. In Vavoua, 90 Special Days were organized, during which 1,571 family planning clients were reached, together with 246 antenatal care consultations, 178 vaccination services, 114 nutritional screenings, and 111 malaria cases treated. Key indicators also showed a reduction in the dropout rate between the first and fourth antenatal care visits, from 59.7% to 47.9%, an increase in third-dose sulfadoxine-pyrimethamine (SP3) coverage from 57% to 61%, and an increase in new users of modern family planning methods from 26 to 3,681, corresponding to 102% of the 2025 target. Overall, the Integrated Special Days approach appears to be a flexible strategy for improving access to bundled maternal, newborn, and child health and family planning services.

INTRODUCTION

Maternal and child health and family planning are major priorities for human development and health-system strengthening.

In sub-Saharan Africa, 69% of pregnant women receive at least one antenatal care (ANC) visit, a higher proportion than that reported in South Asia, where coverage is 54%. However, the increase in ANC coverage in sub-Saharan Africa has slowed, with coverage increasing by only 4% over the past decade. Furthermore, the proportion of women receiving four or more ANC visits, as recommended by the WHO, remains substantially lower, averaging 44% across the region. These challenges are compounded by the fact that the first ANC visit is rarely initiated during the first trimester of pregnancy, with only 15%–25% of women initiating ANC during this period, depending on the country, despite WHO recommendations (Dugas, 2011).

The need for integrated service delivery is also central to the INSPIRE initiative in West Africa, which seeks to systematically link family planning with maternal, newborn, infant, and nutritional health services (Ndour *et al.*, 2023).

The 2021 Demographic and Health Survey (DHS)

in Côte d'Ivoire reported substantial improvements in several maternal and child health indicators. Infant mortality decreased from 112 deaths per 1,000 live births in 2012 to 52 deaths per 1,000 live births in 2021, while maternal mortality decreased from 614 deaths per 100,000 live births in 2012 to 385 deaths per 100,000 live births. Maternal and newborn care also improved considerably, with ANC4 coverage increasing from 44% in 2012 to 57% in 2021 and the proportion of births attended by skilled health personnel increasing from 58% to 84% over the same period (National Institute of Statistics & ICF, 2023).

In Côte d'Ivoire, population growth and reproductive health issues have been incorporated into the country's various economic and social development policies. Nevertheless, the practice of family planning remains relatively limited (Meite, 2023).

The country has also committed to increasing the resources allocated to contraceptive procurement by at least 10% annually, based on a reference allocation of 400 million CFA francs. In 2018, the government allocated 500 million CFA francs, representing a 25% increase compared with the previous year. The allocation remained at 500 million CFA francs in 2019. According to FP2030 (2020) and the Ministry of

¹ School of Public Health, Department of Public Health, Central University and Social Work of Nicaragua & Department of Public Health, Texila American University, Zambia

* Corresponding author's e-mail: kkafflouman@gmail.com

Health (2021), in 2019, more than 460,000 unintended pregnancies were prevented, more than 160,000 unsafe abortions were averted, and nearly 2,000 maternal deaths were prevented. Over time, these programs and policies have evolved both in terms of the populations targeted and the interventions implemented in the field. The focus has progressively expanded from reproductive issues to encompass maternal and child health, family planning, sexual health, and sexually transmitted infections. Despite this progress, gaps remain between national policies and their implementation at the operational level, particularly with regard to the effective integration of services (Tougri *et al.*, 2024).

Family planning is based on a fundamental human rights principle: enabling couples and individuals to freely determine the number and spacing of their children. To uphold this right, family planning programs provide the information and technical resources required for birth spacing and the prevention of unintended pregnancies. Over time, the strategic approach to family planning has evolved. Initially conceived as a targeted and compartmentalized intervention, family planning has progressively become integrated into maternal and child health services and, subsequently, into reproductive health more broadly. It therefore goes beyond limiting or spacing births and also contributes to protecting the health and lives of mothers and children (ENSEA, 2002).

However, geographical barriers, shortages of qualified health personnel, and financial constraints continue to limit equitable access to healthcare services (Coulibaly *et al.*, 2020). Particular attention is also required for adolescent girls, whose access to reproductive health services remains a major challenge in the sub-region (Dahourou *et al.*, 2025).

In this context, the advanced strategy represents an innovative approach to bringing health services closer to vulnerable populations and reducing barriers to access. It also seeks to strengthen community motivation, improve understanding of contraception, and promote the appropriate use of health facilities by women of reproductive age and pregnant women.

Objective

To evaluate the contribution of an integrated advanced-strategy approach to improving maternal, newborn, and child health indicators and the use of modern contraceptive methods in the Daloa and Vavoua health districts.

MATERIALS AND METHODS

Study design

This study used an action-research approach with a before-and-after design.

Intervention

The intervention consisted of the organization of integrated mobile consultations covering maternal,

newborn, and child health and family planning (MNCH/FP) services. These activities were conducted over three consecutive days in health facilities and remote areas as part of the advanced outreach strategy.

Services provided

The services offered during the Integrated Special Days included:

- antenatal consultations;
- postnatal consultations;
- modern family planning methods;
- vaccination;
- malaria management;
- nutritional screening.

Partners and resource mobilization

The intervention involved several partners. The New Public Health Pharmacy supported the supply of contraceptive commodities, while the National Mother-Child Health Program contributed to the implementation of maternal and child health activities. Municipal authorities supported logistics and the procurement of essential medicines. Community health workers and religious leaders contributed to community mobilization and awareness-raising activities.

Indicators analyzed

Data were obtained from the DHIS2 platform. The indicators analyzed included:

- ANC1;
- ANC4;
- SP3 coverage;
- PoNC (postnatal care) at 6–8 weeks;
- new users of modern family planning methods.

RESULTS AND DISCUSSION

Daloa Health District

In Daloa, the implementation of the advanced strategy was associated with an increase in the number of Special Days, from 9 to 60 across 20 health facilities.

Antenatal and postnatal consultations

A total of 1,136 antenatal and postnatal consultations were recorded across the two districts. Daloa accounted for 890 consultations, while Vavoua accounted for 246.

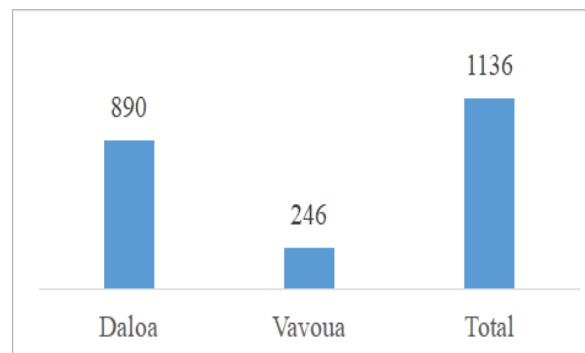


Figure 1: Distribution of antenatal and postnatal consultations by health district

The Figure 1 presents the distribution of antenatal and postnatal consultations during the study period. Of the 1,136 consultations recorded across the two districts, 890 were conducted in Daloa and 246 in Vavoua.

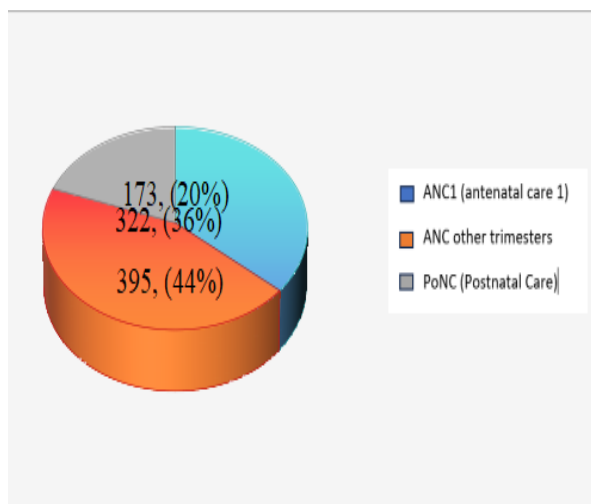


Figure 2: Distribution of antenatal and postnatal consultations in Daloa

Among the 890 consultations recorded in the 20 health facilities in Daloa, ANC1 accounted for 36%, ANC visits initiated during subsequent trimesters accounted for 44%, and postnatal consultations accounted for In

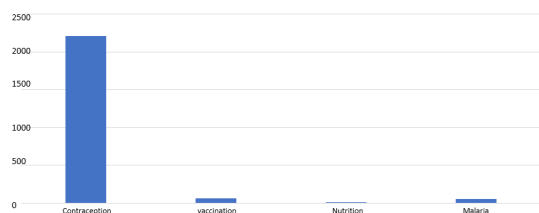


Figure 3: Distribution of other services provided in Daloa

Daloa, 2,211 family planning services were recorded. In addition, 60 vaccination services, 5 nutritional screenings, and 54 malaria cases were recorded.

Vavoua Health District

In Vavoua, the implementation of the advanced strategy increased the number of Special Days from 0 to 90 across 30 health facilities. Among the 246

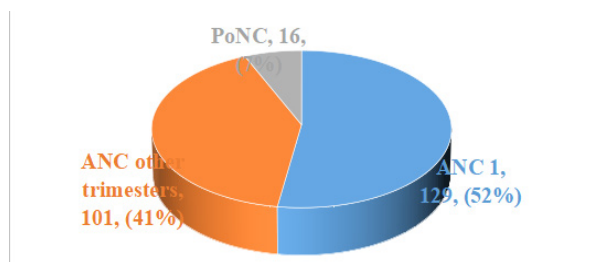


Figure 4: Distribution of antenatal and postnatal consultations in Vavoua

antenatal and postnatal consultations recorded in Vavoua, ANC1 accounted for 52%, ANC visits initiated during subsequent trimesters accounted for 41%, and postnatal consultations accounted for 7%. During the

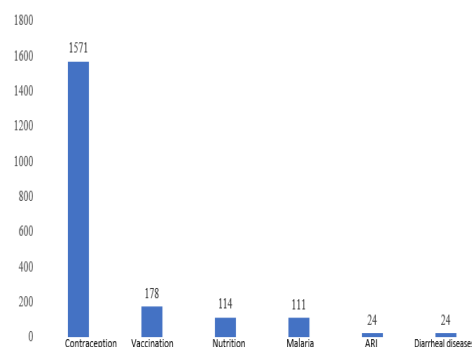


Figure 5: Distribution of services provided in Vavoua

Special Days in Vavoua, 1,571 family planning services were recorded, together with 178 vaccination services, 114 nutritional screenings, 111 malaria cases treated, and 24 cases of acute respiratory infections and diarrheal diseases.

Overall impact on key indicators

Antenatal care: ANC1 to ANC4

The dropout rate between ANC1 and ANC4 decreased from 59.7% to 47.9%. This reduction indicates an improvement in continuity of antenatal care, although a substantial proportion of women still did not complete the recommended antenatal care pathway.

SP3 coverage

Coverage of the third dose of sulfadoxine-pyrimethamine increased from 57% to 61%. This positive trend suggests an improvement in the uptake of malaria preventive treatment during pregnancy. However, coverage remained below the level targeted internationally.

Modern family planning

The number of additional users of modern family planning methods increased from -26 to 3,681, corresponding to 102% of the 2025 target. This increase indicates substantial growth in the number of women using modern family planning services during the intervention period and suggests that community mobilization and improved access may have contributed to increased service utilization.

Postnatal care at 6–8 weeks

Postnatal care coverage decreased slightly from 63% to 61%. Although the decrease was limited, it highlights the need to strengthen follow-up after childbirth, given the importance of postnatal care for maternal and newborn health.

Discussion

The findings indicate that the Integrated Special Days

approach was associated with increased access to a range of maternal, newborn, child health, and family planning services. The combination of outreach activities, community mobilization, free bundled services, provider support, commodity availability, and local financing provided an operational mechanism for bringing services closer to populations experiencing geographical and financial barriers.

The implementation of the strategy differed between Daloa and Vavoua, reflecting differences in the timing and scale of implementation.

In Daloa, the number of Special Days increased from 9 to 60 across 20 health facilities. This expansion was accompanied by substantial utilization of maternal health and family planning services, including approximately 890 antenatal and postnatal consultations and 2,211 family planning clients. However, the relatively low number of vaccination and nutritional services suggests that the different components of the integrated package were not utilized to the same extent.

In Vavoua, implementation of the Special Days began later but reached 90 activities across 30 health facilities. The district recorded 246 antenatal and postnatal consultations and 1,571 family planning clients. Preventive and curative services were more diversified, including immunization, nutritional screening, malaria management, and management of acute respiratory and diarrheal diseases, although the overall service volumes remained relatively modest.

The maternal and child health indicators also showed both progress and areas requiring further attention. The dropout rate between ANC1 and ANC4 decreased from 59.7% to 47.9%. This reduction suggests improved continuity along the antenatal care pathway. Nevertheless, the remaining dropout rate indicates that important barriers to continuity of care persist.

Coverage of the third dose of sulfadoxine-pyrimethamine increased from 57% to 61%. Although this change was modest, it represents an improvement in the uptake of malaria prevention during pregnancy and may reflect increased availability of preventive services through the outreach approach.

The most substantial change was observed in modern family planning. The number of additional users increased from 26 to 3,681, corresponding to 102% of the 2025 target. This finding is consistent with evidence highlighting the importance of communication, awareness, and access to reproductive health services in improving maternal health service utilization (Aboagye *et al.*, 2022). However, the specific contribution of the Integrated Special Days to this increase cannot be established definitively from a before-and-after design alone.

In contrast, postnatal care coverage at 6–8 weeks decreased slightly, from 63% to 61%. This decline highlights a potential weakness in the continuum of care after childbirth. Postpartum care remains an important component of maternal and newborn health, and integrating postpartum family planning into maternal

and child health services may help address unmet needs during the period immediately following childbirth (Kpebo *et al.*, 2022).

The findings also emphasize the importance of community-based approaches. Home visits by community health workers have been reported to contribute to increased use of modern contraceptive methods among rural women (White & Speizer, 2007). In addition, couple communication and engagement may contribute to improved family planning outcomes (Kwena *et al.*, 2021). The experience of Daloa and Vavoua suggests that Integrated Special Days can serve as a platform for combining several services within a single outreach intervention. Such integration may reduce the need for repeated visits and facilitate access to services for populations living far from health facilities. Evidence from other settings has similarly highlighted the potential value of integrating family planning into primary healthcare services (Roro *et al.*, 2024).

However, several challenges remain. The sustainability of Special Days will depend on the ability to institutionalize the approach within routine health planning and financing mechanisms. Family planning services, although strongly utilized, should be consolidated through continued availability of a broad range of contraceptive methods and quality counselling. Similarly, antenatal care has improved, but postnatal care requires stronger integration into community-based strategies (Samba *et al.*, 2020).

The balance between the different components of the integrated package also requires attention. In Daloa, vaccination and nutrition services should be strengthened, while in Vavoua, the overall volume of maternal health consultations could be increased.

For the 2026–2027 period, continued monitoring of these indicators will be important. In particular, attention should be given to the sustainability of gains in family planning, the continuity of antenatal and postnatal care, and the integration of nutrition, immunization, and other child health services. Further monitoring will help determine whether the improvements observed during the implementation period are maintained over time.

CONCLUSION

The Integrated Special Days approach provides a flexible platform for bringing maternal, newborn, child health, and family planning services closer to populations. The approach combines free bundled services, provider coaching, contraceptive and medical commodity procurement, community mobilization, and local financing.

The experience in Daloa and Vavoua was characterized by increased availability and utilization of several integrated services, particularly family planning and antenatal care. The reduction in ANC1-to-ANC4 dropout and the increase in SP3 coverage also indicate improvements in selected maternal health indicators.

However, the slight decline in postnatal care coverage demonstrates the need to strengthen the continuum of

care after childbirth. Greater attention should also be given to vaccination and nutrition services in areas where their utilization remains limited.

The experience provides useful operational lessons for strengthening integrated outreach services. Further implementation and evaluation in other health districts could help determine the sustainability and broader applicability of this approach.

Recommendations

Institutionalize Integrated Special Days within national and district health plans.

Establish a dedicated municipal budget line for MNCH/FP activities, with progressive annual increases where feasible.

Strengthen postnatal follow-up within advanced outreach strategies.

Develop sustainable multisectoral partnerships involving local authorities, NGOs, the private sector, and communities.

Extend the integrated approach to priority rural areas to reduce geographical inequalities in access to healthcare.

Conduct further analysis of ANC dropout to identify specific barriers, including distance, cost, and perceived quality of care.

Strengthen the continuum of care by establishing stronger links between antenatal and postnatal services and ensuring systematic follow-up after childbirth.

REFERENCES

- Aboagye, R. G., Seidu, A.-A., Ahinkorah, B. O., Cadri, A., Frimpong, J. B., Hagan, J. E., Kassaw, N. A., & Yaya, S. (2022). Association between frequency of mass media exposure and maternal health care service utilization among women in sub-Saharan Africa: Implications for tailored health communication and education. *PLOS ONE*, 17(9), e0275202. <https://doi.org/10.1371/journal.pone.0275202>
- Coulibaly, M., Doukouré, D., Kouamé, J., Ayékoé, I. A., Méléde-Koumi, M.-D., Malik, S., Sackou-Kouakou, J., Aké, O., Tiembré, I., & Kouadio, L. (2020). Sociocultural barriers to the use of modern contraception in Côte d'Ivoire. *Santé Publique*, 32(4), 389–397. <https://doi.org/10.3917/spub.204.0389>
- Dahourou, D. L., (2025). Adolescent pregnancy and access to reproductive health services in West Africa: A mixed-methods study. *BMC Public Health*, 25, 145. <https://doi.org/10.1186/s12889-025-21595-w>
- Dugas, M. (2011). Giving vulnerable populations in sub-Saharan Africa access to obstetric care: An advanced strategy for prenatal consultations. *International Journal of Gynecology & Obstetrics*, 71(6), 526–528.
- ENSEA. (2002). *Reproductive health in Africa*.
- FP2030. (2020). *Côte d'Ivoire. Family Planning 2030*.
- Kpebo, D., Coulibaly, A., Yameogo, W. M. E., Bijou, S., Hamidou Lazoumar, R., Tougri, H., N'dour, M., & Kouanda, S. (2022). Effect of integrating maternal and child health services, nutrition and family planning services on postpartum family planning uptake at 6 months post-partum in Burkina Faso, Cote d'Ivoire and Niger: A quasi-experimental study protocol. *Reproductive Health*, 19, 181. <https://doi.org/10.1186/s12978-022-01467-x>
- Kwena, Z., Kimbo, L., Darbes, L. A., Hatcher, A. M., Helova, A., Owino, G., Thirumurthy, H., Bukusi, E. A., Braun, T., Kilgore, M., Pisu, M., Tamhane, A., Nghiem, V. T., Agot, K., Neilands, T. B., & Turan, J. M. (2021). Testing strategies for couple engagement in prevention of mother-to-child transmission of HIV and family health in Kenya: Study protocol for a randomized controlled trial. *Trials*, 22, 19. <https://doi.org/10.1186/s13063-020-04956-1>
- Matungulu, C. M., Kandolo, S. I., Mukengeshayi, A. N., Nkola, A. M., Mpoyi, D. I., Mumba, S. K., Kabamba, J. N., Cowgill, K., & Kaj, F. M. (2015). Determinants of the use of contraceptive methods in the Mumbunda health zone in Lubumbashi, Democratic Republic of Congo. *The Pan African Medical Journal*, 22, 329. <https://doi.org/10.11604/pamj.2015.22.329.6262>
- Meite, Z. (2023). Social influences and acceptability of family planning practices among women in Port-Bouët II, Yopougon, Côte d'Ivoire. *African Journal of Social Sciences and Public Health*, 5(2), 62–73.
- Ministry of Health. (2021). *National Budgeted Action Plan for Family Planning 2021–2025 of Côte d'Ivoire*.
- National Institute of Statistics, & ICF. (2023). *Côte d'Ivoire Demographic and Health Survey, 2021*.
- Ndour, M., (2023). INSPiRE Initiative: Integrating family planning into maternal, newborn and child health and nutrition services in West Africa. *Global Health: Science and Practice*, 11(2), e2200456. <https://doi.org/10.9745/GHSP-D-22-00456>
- Roro, M. A., Adinew, Y. M., Yimer, S. S., Gizaw, N. F., Estifanos, A. S., Mohammed, J. K., Kebede, A. T., O'Connell, K. A., & Endris, B. S. (2024). Integration of family planning into the primary health care in Ethiopia: Results from national assessment. *Reproductive Health*, 21, 174. <https://doi.org/10.1186/s12978-024-01907-w>
- Samba, M., Attia-Konan, A. R., Sangaré, A. D., Youan, G. J., Kouadio, L. P., & Bakayoko-Ly, R. (2020). Factors associated with the use of maternal health services by mothers in a post-conflict area of western Côte d'Ivoire in 2016. *BMC Health Services Research*, 20(1), 136. <https://doi.org/10.1186/s12913-020-4976-2>
- Tougri, G., et al. (2024). Policy and implementation gaps in integrating maternal, newborn, child health and family planning services in West Africa. *International Journal of Gynecology & Obstetrics*, 166(Suppl. 1), 45–52.
- White, J. S., & Speizer, I. S. (2007). Can family planning outreach bridge the urban-rural divide in Zambia? *BMC Health Services Research*, 7, 143. <https://doi.org/10.1186/1472-6963-7-143>