



ENGAGING **MEN**

A QUALITATIVE INQUIRY
INTO THE PERSPECTIVES
OF **MEN** ON **MATERNAL** &
NEWBORN CHILD HEALTH
IN TIMOR-LESTE

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EXECUTIVE SUMMARY

This paper provides the results of qualitative research into the perspectives of men on their role in supporting maternal and newborn child health (MNCH) in Timor-Leste, and closely follows a review of the literature on international and national evidence on men's role and engagement in this area.

These pieces of research were undertaken for Catalpa International in support of its Liga Inan maternal and child health program, with this inquiry focused on establishing how men perceive their role in MNCH, what actions they currently undertake to support childbearing, what motivates and inspires men to provide this support, and who the key role models are in the lives of Timorese men.

Data was captured across three research sites in Manatuto municipality: Ma'abat, Manelima and Orlalan. Research sites were chosen to capture sufficient variation in levels of remoteness, employment characteristics, access to health facilities, ethno-linguistic composition and marriage practices. Purposeful sampling was used to collect responses from men and women who were pregnant or whose partners had been pregnant in the last two years and stakeholders working in MNCH using semi-structured in-depth interviews, focus-group discussions and key-informant interviews. In total, 13 female in-depth interviews, 16 male in-depth interviews, one female group discussion and



23 key-informant interviews were completed. This sample size means this research is exploratory in nature and not generalisable.

Participant responses indicated that women and men perceive the role of the father primarily in terms of men's responsibility for, and control over, family wellbeing. And whilst men did express emotional attachment to their partners and their children, their practical actions tended to be embedded within these masculine notions of provision and protection. Whilst fathers did note assisting with housework, childcare, and their partner's nutrition and emotional wellbeing, in the main, men focused on increased workload and purchasing of clothing and food as their principal role.

Men were rarely present during antenatal consultations, endeavoured to be present at birth but failed to attend postnatal consultations.

After birth, the gender demarcation of household roles often returned once women were physically able. This study identified

three components to men's motivations to support their partners, the first being necessity due to pregnancy complications or the physical impairment of their partner, the second being comprehension that support would favour improved outcomes for their partner and the third being care for their partner's wellbeing.

Men's attitude and knowledge of childbearing, economic responsibilities, family and community attitudes, and health system structures were all found to be barriers to greater paternal involvement.

Role models and influencers in the lives of men in the context of maternal health were close family, elder peers, community leaders and health professionals.

There were many identified actions that men could take to support pregnancy, and in seeking to improve upon current practices, informants favoured community education efforts and communication media leveraging men's concern for their own health and sense of responsibility as head of the family.

The results contained with this paper closely reflect established literature on men's limited contributions during pregnancy from contexts such as Ghana, Myanmar and Nigeria, and align with research on men's and women's health behaviours, family planning and gender-based violence in Timor-Leste. Of

significance for future MNCH programming is that men are already conducting some limited support activities, wish to be present during birth and often care deeply about their partner and children. This, and the fact women often want their partners to be involved, are strengths on which an approach to male engagement can be built, and tangible shifts in maternal and newborn child health outcomes can be generated.

But engaging men must be approached with caution. Interventions should be highly localised, channelled through trusted individuals, work within the context of couple and family relationships and address the gendered environment in which men exist through ecological approaches to behaviour change. Whilst this study was limited in its geographical coverage and in the research questions it could address, it represents a crucial step in a more nuanced understanding of the role of men in maternal health in Timor-Leste, and in gender-relations more broadly.

RECOMMENDATIONS

This paper recommends the following courses of action, with the specificities of each to be negotiated within the contexts of each community & reflexive in their implementation. **This list is purposefully concise, & should be read in conjunction with the gaps in knowledge identified in the literature review.**

PURPOSE

This paper provides the results of a qualitative study into the perceptions of men on their role in supporting maternal and newborn child health (MNCH) in Timor-Leste. Conducted over a three-month period between July and September 2016, it captured the views of both women and men using a mixture of focus group discussions, in-depth interviews and key-informant interviews across three sites in Manatuto municipality. The results will form the base of behaviour change interventions to be conducted by Catalpa International in support of the mHealth Liga Inan program.

1

Improve knowledge and understanding of reproductive health amongst women and men, boys and girls in Timor-Leste.

2

Conduct outreach work with men (particularly first-time fathers) to encourage their active participation in antenatal care and postnatal care consultations, and get them to ask questions to, and the advice of health professionals.

3

Identify simple actions in each community where men may be more open to change, and then leverage these in programming. For example, preparing food for children, making birth plans, asking questions to health professionals and being present at birth.

4

Reframe fatherhood in Timor-Leste in terms of care and concern, using a strengths-based approach to increase the value of men's participation in family and maternal health, and caring for young children.

5

Use an ecological approach to address gender norms in support of changes in men's actions and behaviours. Use mixed, highly localised media delivered through trusted individuals in the community.

6

Conduct interventions not only with male partners, but with mothers in particular, and the community in general. Work with couples individually, and as a unit

7

Address practical barriers to healthcare seeking. This may include improved road systems, reliable ambulances, couple consultation days, men-only health clinics, and men-friendly opening hours or waiting rooms.

8

Use multi-sector approaches to address negative behaviours during pregnancy and post-partum, including smoking, excessive alcohol use, controlling behaviours and violence.

9

Improve the sensitivity of the health system to male engagement in maternal health. This may include training of health providers, tighter implementation of existing policies, improved health infrastructure, and staff attitudes towards all clients.

10

Integrate positive messaging on men's involvement in family health into existing public health campaigns, such as smoking, and review public health materials to ensure they depict men and boys engaging in maternal health.

11

Ensure all gender work with men and boys is carefully monitored and evaluated to gain greater understanding of how behaviour change works in Timor-Leste.

12

Build gender-transformative interventions with men and boys in alliance with the women's movement, and ensure their participation is always framed within women's rights, and with the aim of women's empowerment.

INTRODUCTION

The most recent statistics available place the maternal mortality ratio in Timor-Leste at 557 deaths per 100,000 live births—one of the highest in the world (1). This number is relatively dated, however, with estimates from the national hospital approximating 800 deaths per 100,000 live births in 2016 (2). With 78% of births taking place at home, the vast majority of those who pass-away during childbirth, though, are absent from any health statistic (1).

Relatively little is known about the specific complications that lead to maternal mortality for Timorese women (3). But high fertility rates, large numbers of underweight women and a significant prevalence of anaemia, combined with poor access and use of the health system and low rates of delivery by a skilled birth attendant are all thought to contribute (4). These factors are underpinned by a physical environment which frequently bars access to health services through poor transport infrastructure and an adverse geography, and a highly gender inequitable environment in which women's knowledge & agency is restricted (3,5,6).

Birth practices in Timor-Leste exist within complex historical and socio-cultural orders in which cultural meaning, history, legacy and family intersect (7). Indeed, health seeking behaviours are decisions rarely made in isolation by women, with households, extended families and communities exerting

influence on reproductive health choices, preventative health measures and care-seeking (5). Despite this, both government and non-government MNCH interventions, with some significant exceptions¹, have tended to focus on the knowledge of mothers, neglecting the wider social fabric in which women's health decisions are made.

Gender is a social determinant of health that has a definitive impact upon maternal and newborn child health outcomes (8,9).



Inequitable distributions of power, agency and resources mark how partners interact on a variety of health decisions, including family planning, antenatal clinic attendance, location of birth, allocation of domestic work and childcare, and intimate partner violence (8,10). In the main, the greater women's decision-making ability and status the greater the extent of resources channelled into prenatal care, birthing, nutrition, care-seeking for childhood illness and immunisation (11,12). Yet men often dictate maternal health decisions within the home (13,14).

Data from program interventions in Ghana, India, Myanmar and South Africa, for instance, shows that working with the male partner of a pregnant woman can substantially affect indicators of maternal health (15–18).

Ex-post evaluations of program interventions indicate improved antenatal clinic attendance, family planning, couple communication, perinatal mental health and rates of delivery with a skilled birth attendant when men are actively engaged in their partner's wellbeing (13). In Timor-Leste, there is limited data on the role men play in maternal health pre-, intra- and post-partum, and a paucity of evidence on gender-transformative work with men.

This qualitative inquiry sought the views of Timorese women and men on men's role in maternal health. Data was collected across three sites in Manatuto municipality using in-depth interviews, key-informant interviews and focus-group discussions. This paper provides an analysis of the results, forming the basis for maternal health work by Catalpa International and a framework for studies of greater depth and breadth on men and masculinities in Timor-Leste. Beginning with a concise review of the literature, this paper then describes the research questions, analytical framework and methodology employed. The results show that whilst there are signs men are taking steps to assist their partners, their involvement is limited at this point in time, with a number of gendered, structural barriers to greater male involvement.

LITERATURE

Before this study commenced, a comprehensive review of the literature was undertaken to assess the international and national literature on engaging men in MNCH in response to the following questions:

1. What is the rationale for engaging men in MNCH?
2. What does the international literature indicate is the role of men in supporting MNCH?
3. What does international evidence indicate are the associated benefits, risks and challenges?
4. What is currently known with respect to the role of men in MNCH in the context of Timor-Leste?

A methodical search of databases was conducted using terms drawn from the research questions. Also drawn upon were literature reviews on engaging men in health and snowball sampling of grey literature through key stakeholders working on MNCH in Timor-Leste. The results in their entirety can be found in a separate paper (19). This section does not purport to replicate that content, but provides a concise summary as a basis for this qualitative inquiry.

RATIONALE

There is a substantial evidence base providing a clear rationale for engaging men in MNCH. Decision-making within households on maternal health issues, for one, is frequently determined by men (13). The oftentimes lower social status of women combined with structural and cultural dependence on men, means that without their partner's consent women can have difficulty gaining information or requisite services (20–22).

If men do not have sufficient information they may hinder timely access to pregnancy, childbirth and newborn health services, or fail to recognise signs of complications or an emergency (20).

Conversely, when men are involved they can play an important role in their partner's health and wellbeing. They can encourage women to seek antenatal care, eat nutritious food, deliver with a skilled birth attendant, breastfeed and immunise their children (22). Men can also provide much needed emotional support, lowering parenting stress and depression (23). Evidence suggests that men can be as good at taking care of infants as women. If men are engaged early on in the pregnancy this can lead to greater involvement in infant-care, and indeed, childcare across the lifecycle (23).

The benefits of father involvement are great. Fathers themselves gain improved physical and mental health, their children benefit from improved development, and male care-giving has been associated with reductions in domestic violence, reductions in female domestic work, and improved support for women's empowerment (24). Engaging with men as potential agents of change thus offers an opportunity to challenge prevailing gender norms, not only within families, but within communities more broadly (25).

If men are more involved in care-giving their children are also more likely to develop and display more equitable behaviours, carrying shifts in gender norms across generations (26).

It is important to acknowledge men and boys are reproductive beings with their own health concerns. Norms surrounding reproduction and fertility, however, frequently place responsibility for these areas on women and discourage men's care seeking in general (22). Engaging men provides an opportunity to connect them with health services and support joint, informed decisions on familial health (23,27). Research from cross-cultural contexts also shows that both women and men would like to see greater male involvement (28–30), with fathers often concerned about their partner's health, perceiving clear benefits to their involvement and responding positively to attempts to engage them (31).

MEN'S ROLES IN MATERNAL HEALTH

There is no established definition of what constitutes male involvement, with the literature tending to divide into two approaches: instrumentalist or social determinist (15,17,32,33). Instrumentalist approaches emphasise men's practical actions as the end in itself, are neutral in their approach to addressing gender norms, and are seen as more feasible in short-term implementation settings or where gender norms are strongly enforced (15). In contrast, social determinist or gender-equality approaches focus on the subjective experiences of men and see the adoption of more equitable roles and behaviours as laying the foundation for more sustainable change through addressing inequitable gender norms (17).

Systematic reviews of interventions with men have shown that projects that seek to transform gender-relations are more effective than those that are gender-neutral (10). And whilst instrumentalist approaches may indirectly challenge prevailing norms they may risk reinforcing existing gendered power structures, such as men's control over women's bodies (8,34). It is difficult to capture male involvement in ways that combine these two approaches, with the measurement of men's individual actions not encompassing male involvement in its entirety and indices of multiple action-based measures failing to capture the underlying motivation behind changes in men's behaviours (8,17,25)

The literature review identified several factors associated with male involvement in MNCH, including male partner age and education levels, knowledge of MNCH and ANC services, societal expectations around male involvement, employment status,

women's status and decision-making ability, presence of couple communication and intention behind the pregnancy (19). Whilst this list is not comprehensive, these factors align with previously established factors associated with male involvement in childcare (34). The relationship between each factor and male involvement, however, is highly contextual. In Nigeria, for instance, husbands of educated women were more likely to assist in the household but less likely to attend ANC (35), whilst in Nepal, women's autonomy was associated with lower male involvement (36).

There is great potential for the involvement of men in maternal health. And as MNCH programming moves towards addressing care provision through a 'continuum of care' model that stresses the need for continuous and linked care across a woman's lifecycle, there may be no better way to support the health of mothers and infants. There are many important practical ways in which men can contribute to childbearing, with actions easily mapped across the stages of the continuum of care. These are a small sample taken from the international literature.

MAKE JOINT DECISIONS ON FAMILY PLANNING

Men can plan their families together with their intimate partners: discussing timing, spacing and numbers of children. Men should not insist on having more children than their partner wants, and respect that their partner makes the ultimate decision on their own body and its health.

MAKE JOINT, SUPPORTIVE DECISIONS ON CONTRACEPTION

Men should discuss contraceptives options, see family planning counsellors, and attend health centres with their partners. They should also ensure important family members are included in these discussions, if necessary. In the case of an unwanted

pregnancy, men can support their partner's decision on whether to continue with the pregnancy or not, and assist them with access to safe health services.

HELP PREGNANT WOMEN STAY HEALTHY

Men can encourage their partners to obtain proper antenatal care (ANC), accompany them to clinic visits, provide transportation and funds for health expenses, and learn to recognise symptoms of pregnancy complications. They can ensure their partner eats nutritious food, especially those high in iron and fortified with Vitamin A and folate, and remind them of information provided by health professionals.

BE A RESPECTFUL SEXUAL PARTNER

Couples need accurate information about sex. It is generally safe for a woman to have sex during pregnancy if the pregnancy is normal or low-risk. Men should respect whether or not their partner wants to engage in sex. When it is believed women can't have sex during pregnancy, men may use this to justify extra-marital relations. Sexually transmitted infections can cause pregnancy complications, so if there is a chance they are infected men should seek treatment at a health centre and use a condom.

ARRANGE FOR SKILLED CARE DURING BIRTH

Men can help ensure a skilled birth attendant is present during birth by making birth and emergency plans with their partner, saving money and arranging for transportation to a health facility, identifying a blood donor and arranging care for children or elderly members of the household. For home-births, men can help purchase necessary supplies, call the midwife well in advance and arrange for transportation in case of emergency. And in the case of an emergency, men can ensure that the blood donor accompanies the mother to the health facility.

AVOID DELAYS IN SEEKING CARE

Men can ensure women receive timely care by learning the signs of labour and childbirth, and the danger signs for potential complications and emergency care. They can also ensure the household has enough resources to support care-seeking.

PROVIDE SUPPORT DURING BIRTH

Through their presence during birth, men can ensure their partners have food and drink, are distracted between contractions, and can provide emotional support. They can learn techniques that help to alleviate the pain of birth and advocate to healthcare providers on behalf of their partner.

PROVIDE SUPPORT AFTER THE BABY IS BORN

Men can take responsibility for housework and childcare, and learn signs of complications in both mother and child. They can also ensure their partner is well nourished, encourage breastfeeding, start using contraception to space births or undergo permanent sterilisation if no more children are desired. Men can also provide important emotional support to their partners.

BE RESPONSIBLE FATHERS

Men can ensure their children are immunised, clean, nourished and have clean drinking water. They must be able to recognise danger signs and seek immediate medical care if their child falls ill. Men can also challenge gender norms by supporting their daughters' education and employment, and teaching their sons to treat women as equals (12).

BENEFITS, RISKS AND CHALLENGES

There are tangible benefits to household health by engaging men. Research from Malawi, Nigeria, Ethiopia, Vietnam and El Salvador shows improved family planning when men are purposefully targeted, including fewer refusals to use contraception, higher reported condom use at last sex, increased use of intrauterine devices and increased partner knowledge on family planning and use of any contraceptive method (37–41). Whilst it is unclear whether engaging men leads to increased contraceptive use post-partum, evidence shows fathers play an important role in HIV prevention, testing and adherence to drug prophylactic regimes (13,42–45).

Permission from husbands is often critical to a woman's ability to access maternal health services (46–48). Whilst some studies claim increased antenatal clinic attendance as a potential outcome of interventions with men, the data is unclear (13). Evidence does, however, show improved birth preparedness, emergency response, knowledge, and assistance shown to partners (16). In India and Pakistan, awareness of the health needs of women led to greater father assistance with housework (49,50).

Male engagement and greater male partner knowledge has been shown to lead to improved couple communication, joint decision-making and emotional support (18,51).

But there are risks to male involvement. If interventions fail to address gender norms they can inadvertently reinforce notions of male control over reproductive health. And interventions prioritising couples risk marginalising non-partnered women, those who fear their partner's involvement, or those do not believe it to be in their best interest (27,52,53). There are also entrenched structural barriers to involving men.

Established gender norms mean men are often not expected to play a significant role in maternal health,

and when they break this norm they can be shamed by their community or discouraged by their partner out of embarrassment (15,31). These norms often extend to healthcare systems, with poor infrastructure, health policy and staff attitudes adversely affecting male support (15,22).

There are also important practical barriers to male presence. Despite women's numerous contributions to household income, gender roles often place men as the primary income recipient within household economies. Distance to health facilities, opening hours and transportation costs may be prohibitive, or men may be working in environments of poor job security and high unemployment (18). Faced with these barriers, men will often prioritise remunerated activities, only becoming involved when there are complications or an emergency (15,54). Other factors mediating paternal involvement, include a couple's ability to communicate on reproductive health issues, men's knowledge and understanding of pregnancy and the influence of other family members, in particular, the mother-in-law (13,40,51,55).

MEN AND MNCH IN TIMOR-LESTE

The attitudes, perceptions, behaviours and roles of men in Timor-Leste are in many ways unknown, with this is especially so in the context of MNCH. Much of the available data comes from studies of family planning, gender-based violence and evaluations of men's health programming, and as such, our understanding of men's behaviours during pregnancy and childbirth remains quite narrow (19).

Timor-Leste is characterised by rigid gender norms (6). And whilst in reality there may be an inherent fluidity to men's and women's actions (56), defined patterns of male dominance and female submission mean that in communication, negotiation and decision-making on maternal health, women are often not able to make considered, independent choices (14). Some research participants claim joint decisions are made by couples on family health (6). But in practice, men are often in control over decisions regarding birth-spacing, contraceptive use, care-seeking, antenatal clinic attendance and location for birth (14,57).

These decisions are reinforced through pervasiveness of intimate partner violence (IPV).

Representative data suggests 59% of women have ever experienced IPV and 14% of women have experienced violence during pregnancy in Timor-Leste (6).

Family planning research shows that should women disagree with their partner's decision, male partners may leave, threaten polygamy or seek extra-marital sex (14,58). And according to national health data, just 53% of ever-married women say their partners display no controlling behaviours (1).

Reproductive health decisions thus remain bound by notions of male control over the female body and constraints on women's agency (6,14,59,60).

These inequitable norms extend to domestic labour. Women contribute to household income in a myriad of ways, but this is not often met by equal contributions by male partners to housework and care-giving (59,61). This can be to the extent that women have little time to breastfeed, pay sufficient attention to their children, or may even neglect to eat or sleep (56). Evidence from Baucau, Ermera and Covalima suggests this may shift somewhat during pregnancy, with women not allowed to work during the first six months. But from six-months until birth women are encouraged to work hard as this is thought to ease labour (58). The evidence pattern on sharing of domestic work is thus uncertain.

There is also little knowledge about the role men play in providing emotional support to their partners during pregnancy. This is even more salient in the context of Timor-Leste with its post-

conflict status and widespread prevalence of IPV. Some literature mentions partner support as an important factor in decisions to have home-births and to immunise children (7,62), but when men have been asked about their contributions to antenatal health, emotional support has not been reported (14). Emotional support is important for childhood development, but research on care-giving education indicates fathers often have little to do with young children (63).

Financial need is a critical barrier to health facility access in Timor-Leste. Whilst health services are free, transportation, food and medication costs can be prohibitive (7).

Gender norms mean men are often responsible for ensuring the family has sufficient income to meet their healthcare needs (14). There is limited exploration in the literature of men's financial support during pregnancy, but evidence indicates it is an important factor in decisions on birth-spacing, birth-location and child immunisation (14,62).

Other important factors in men's involvement in Timor-Leste include significant gaps in knowledge about reproductive health and available health services, high rates of smoking, and a construction of masculinity associated with physical toughness and risk-taking, male power and privilege, fertility and sexual insatiability, male sexual entitlement, violence, and substance use and abuse (1,6,14,57,64–66).

GAPS IN KNOWLEDGE

There are still critical gaps in knowledge on men's involvement in maternal health in Timor-Leste. Areas identified for future study are outlined below:

1. Building a fuller, culturally specific depiction of the suite of actions men take during pregnancy and childbirth
2. Identifying ways in which men can be engaged in domestic work and childcare outside of childbirth
3. Investigating methods for increasing male attendance at antenatal clinic visits
4. Exploring the presence and role of social stigma when men support MNCH
5. Investigating couple communication and emotional support during MNCH
6. Identifying ways in which men can advocate for better healthcare for their wives, in particular, to healthcare providers
7. Exploring extra-marital sex behaviours during pregnancy and post-partum, and the risk of sexually transmitted infection transmission
8. Identifying potential risks of engaging Timorese men and boys in MNCH
9. Measuring prevalence, and the effects, of paternal smoking and substance use during pregnancy
10. Exploring opportunities for men to advocate for MNCH at an institutional level through government and civil society.

RESEARCH QUESTIONS

The purpose of this study was to understand men's perception of their role in supporting maternal and newborn child health in Timor-Leste. Research questions were determined by ascertaining gaps in current understanding through the aforementioned review of the literature, combined with defined criteria set out in an initial concept paper prepared by Catalpa International. Each question was designed to not just build a descriptive base, but to provide supporting evidence for behaviour change interventions to be conducted by Catalpa through its mHealth Liga Inan program.

THE FINAL RESEARCH QUESTIONS

1. How do men in Timor-Leste perceive & frame their role with regards to maternal and newborn child health?
2. What actions do men currently undertake to assist mothers during pregnancy, childbirth & post-partum?
3. What specific actions can Timorese men take during pregnancy, childbirth & post-partum to improve maternal & newborn child health outcomes?
4. What motivates & inspires Timorese men to display supportive attitudes & behaviours towards their partners & children during pregnancy & after birth?
5. Who are key role models in the lives of Timorese men who may motivate change in attitudes and behaviours?

ANALYTICAL FRAMEWORK

This paper applies a social constructionist men and masculinities framework to theorising male involvement in MNCH. This framework understands men's behaviours and actions as a consequence of socially constructed roles, expectations and definitions of manhood assigned to men and boys based on biological sex at birth (67). Whilst there is some indication that biological factors may contribute to men's aggression, sex drive or sexual behaviour, evidence predominantly suggests social factors best explain variations in men's violence and health behaviours (10).

A men and masculinities framework understands that men's health behaviours are based on culturally specific patterns of behaviours—masculinities—that differ across social groups and communities (67). It recognises there are multiple masculinities, that these are continuously learnt across the lifecycle, and that there are distinct hierarchies between methods of performing manhood (10,20).

One's masculine identity intersects, and is intimately intertwined with other vectors of personal identity such as sexuality, race and class (10,20,67,68).

It is also important to note that masculinity is not necessarily coupled to boys and men, with women, girls, trans and inter-sex persons displaying masculine behaviours (69).

Conventional masculine norms frequently define men and manhood in terms of risk-taking, decision-making, stoicism and promiscuity. This aligns with health data associating men with higher rates of accidental death, homicide and suicide, misuse of alcohol and narcotics, unsafe sex, reluctance to seek help, and death and injury during violent conflict (70). Men adhering to rigid masculine norms are more likely to desire more children, have multiple sexual partners, have worse mental health outcomes, avoid health clinics and are less likely to use contraception (8,22,71).

Applying this framework means recognising the historical, social and cultural legacies which shape men's perceptions of their role in maternal health and that the actions men take to support their partners exist within complex socio-cultural orders.

We must recognise that shifts in patterns of behaviour may come with consequences for transgressing gender roles, and that any changes in behaviour may need to be supported by changes in norms around masculinity to sustainably improve maternal and child health.

METHODOLOGY

DESIGN

This study chose to employ a qualitative design due to its basis in the complex and dynamic nature of social life, its adeptness at ascertaining sensitive information on behaviour determinants within their cultural context, and its focus on the perspectives and experiences of participants (48,72,73). In line with the theoretical framework, this study assumes there are multiple interpretations of the world through which individuals create subjective meaning, and that these perspectives are negotiated socially, historically and in interaction with others (74)

DEFINITION

Reflecting definitions in contemporary qualitative studies on male involvement in maternal health (31), this study defines male involvement in MNCH as:

“Men's active and positive participation in the health and wellbeing of women and their children from pregnancy through to age two.”

This definition has four important components. First, participation is not passive and does not encompass negative behaviours, second, it is relatively abstract, allowing men to define their involvement, third, it is limited to a period attached to childbearing, and fourth, participation is broader than male partners, including, for example, uncles, community leaders and policy-makers. This definition initially included children up to age five, but the scope was narrowed to generate more focused data around experiences during pregnancy and the short period after birth.

COMPONENTS

Three complementary methods of data capture were employed: focus group discussions (FGDs), in-depth interviews (IDIs) and key-informant interviews (KIIs). FGDs were chosen for their adeptness at exploring social and cultural norms through dynamic interpersonal exchange. But their tendency to produce more 'socially correct' answers meant it was crucial to supplement them with IDIs which elicit rich and sensitive data using a confidential, open dialogue format (72,75). IDIs, however, can be subject to interviewer bias, and consequently, key-informant interviews were used to frame participant interviews, triangulate data, check validity of responses and interrogate leads identified in the field.

FOCUS-GROUP DISCUSSIONS

FGDs were broken down into two sections: a maternal health timeline activity and discussion questions. The activity comprised placing a simplified, visual timeline of maternal health on a wall, with participants writing or drawing supportive actions that men took at each stage of pregnancy and pinning them underneath. It was envisioned this would ease participants into discussion

and provide a visual product on which to reflect. The FGD then continued with discussion based on the following topics:

- Male involvement during pregnancy
- Community perceptions
- Norms around manhood & fatherhood

IN-DEPTH INTERVIEWS

IDIs were confidential discussions held with research participants using a semi-structured interview format in a form of guided conversation. Interviews were concise and designed to ascertain complementary information with greater nuance and depth than that derived through FGDs. Topics covered included:

- Becoming a father
- Mother-father relationships
- Male involvement & masculine norms

KEY-INFORMANT INTERVIEWS

Key-informant interviews were conducted with stakeholders critical to maternal health programming, community decision-making, community health systems, and gender norms.

Interviews aimed to capture a broad range of perspectives, insight into the local health system, and strategies for framing future program interventions. Topics addressed included:

- Men & MNCH in Timor-Leste
- Engaging men in pregnancy & childbearing
- Behaviour change programming with men

The research instruments used for each of these components can be found in an annex separate to this report.

SETTING

The research setting was purposefully selected in consultation with Catalpa International. It was determined that sites would be located in a municipality in which Catalpa is operating, where there was no other ongoing research and where there was believed to be adequate variation for the sample population. The sample was limited to one municipality due to project constraints, and suku¹ level sites were selected based on the following variables.

- Remoteness
- Regional employment characteristics
- Proximity to the municipal capital
- Location of health services
- Ethno-linguistic group
- Marriage practices
- Proximity to other municipalities

Based on these criteria, the municipality of Manatuto was selected, with Ma'abat, Manelima and Orlalan chosen at the suku level. Full justifications for the selected sites can be found in Table 1.

SITE CHARACTERISTICS

Located east of Dili and west of Baucau, Manatuto municipality stretches from the north shore of the Wetar strait to the south shore of the Timor Sea. Manatuto is the smallest municipality by population at only 45,541 persons, and has a male/female sex

under the national average of 5.8 persons. Manatuto has the lowest population density of any municipality in Timor, at just 26 persons per square kilometre. The vast majority of the population (92%) live in rural areas. Manatuto's geography is broken into six administrative posts (AP), 29 suku and 99 aldeia (78).

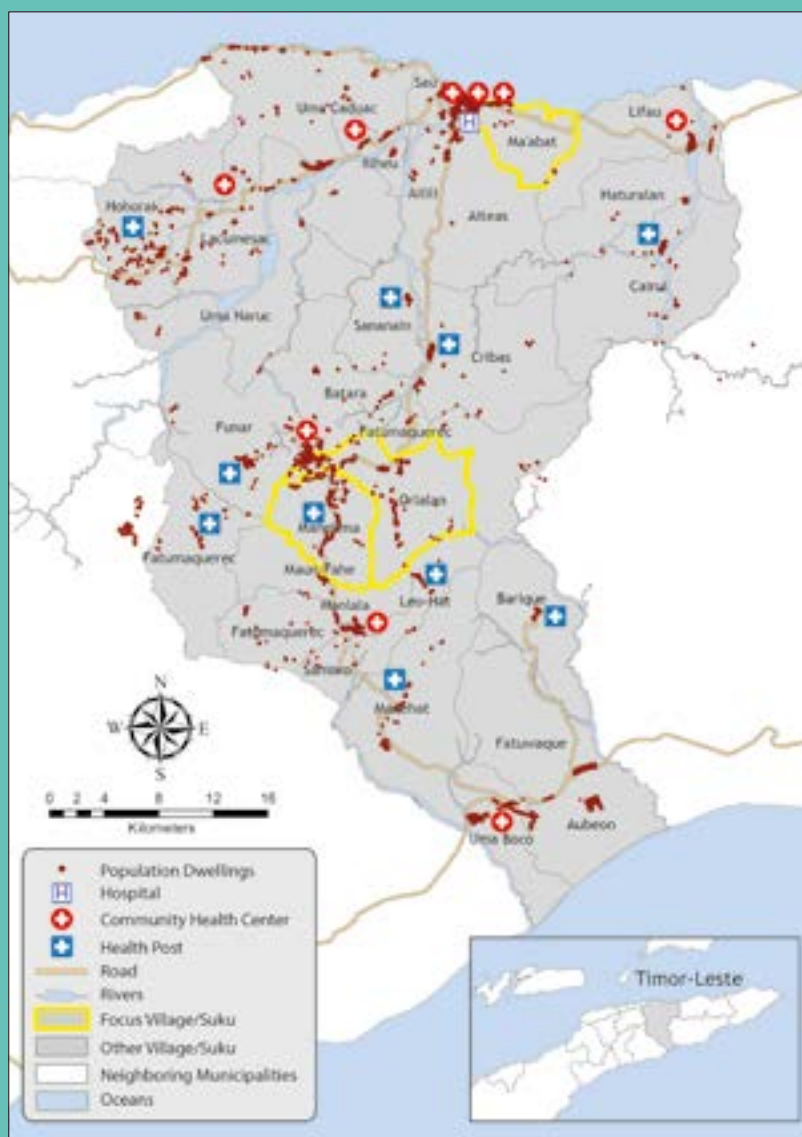


Figure 1: Health Facilities in Manatuto Municipality

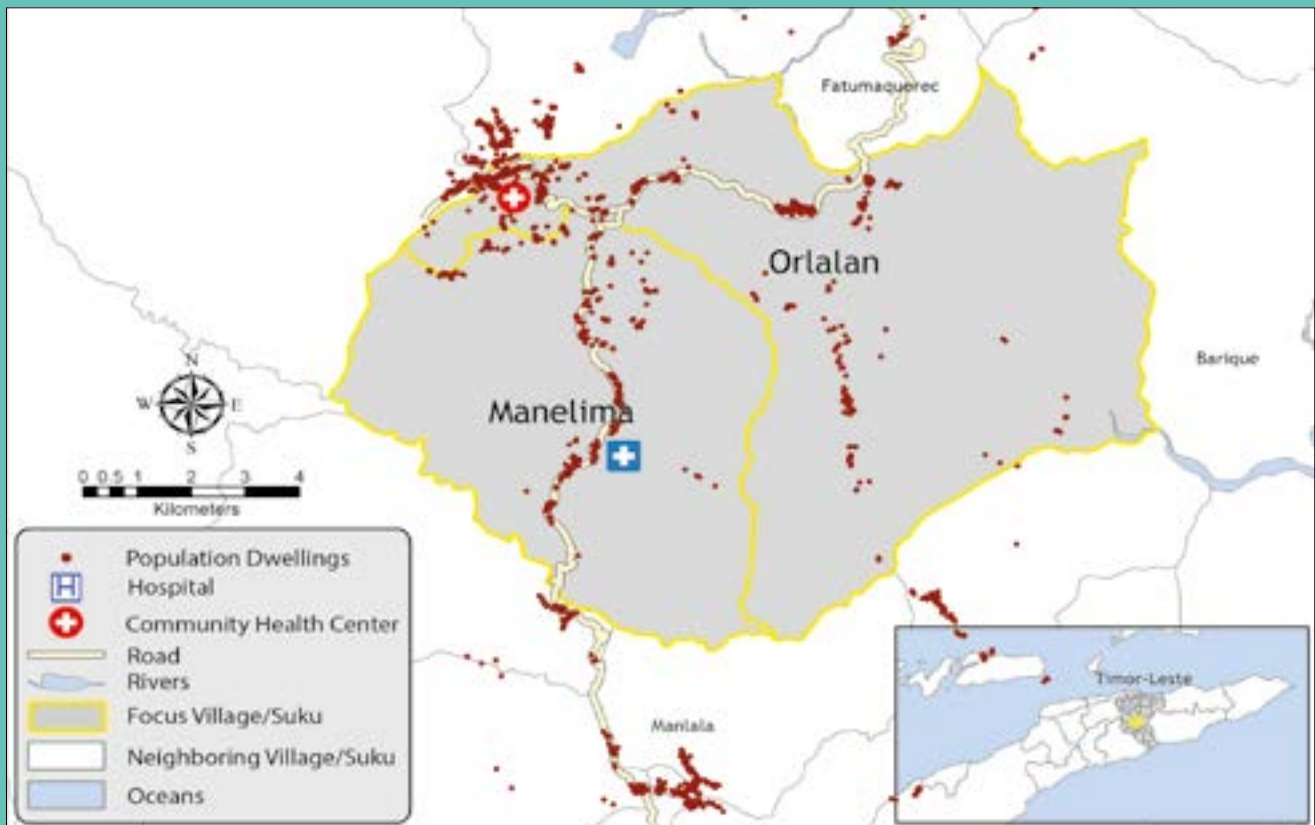


Figure 2: Health Facilities in Suku Orlalan & Manelima

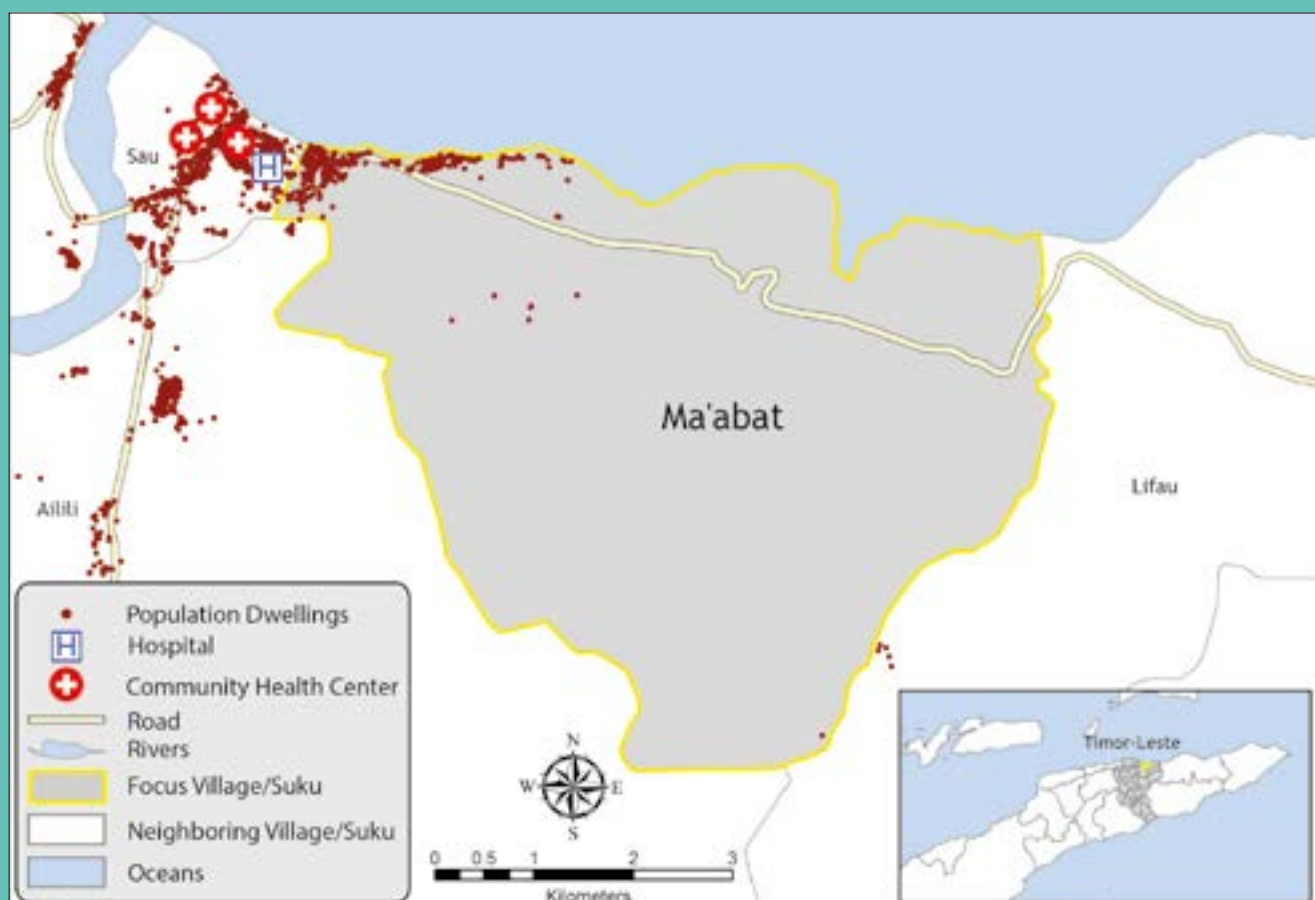


Figure 3: Health Facilities in Suku Ma'abat

Table 1: Justification of proposed research sites

MUNICIPALITY	JUSTIFICATION
Manatuto	Catalpa operational municipality; no currently operating research on MNCH; close proximity to Dili; sparsely populated; geographically large and diverse; poor maternal health indicators; claimed maternal death rate of zero; ethno-linguistically varied; matrilineal and patrilineal communities; long travel times to health facilities.
ADMINISTRATIVE POST	JUSTIFICATION
Manatuto	Urban; health centre; transport available; linked to Dili; access to education; coastal; Galoli speaking; patriarchal; private businesses; agriculture; fishing.
Laclubar	Rural; health centre and health posts; health access inhibited by poor roads and transport; mountainous; Idate speaking; mixed matriarchal and patriarchal marriage practices; coffee plantations; subsistence agriculture; trading.
SUKU	JUSTIFICATION
Ma'abat	Manatuto AP; urban; not remote; coastal; no health post; close proximity to health centre; population of less than 2000; patriarchal; Galoli speaking; good transport infrastructure; access to education; relatively close to Dili.
Manelima	Laclubar HP; rural; extremely remote; mountainous; health post; poor roads; poor transport availability; population between 2000-4500; Idate speaking; mixed matriarchal and patriarchal marriage practices; coffee plantations; close proximity to Manufahi municipality.
Orlalan	Laclubar AP; rural; very remote; mountainous; no health post but adjacent to Laclubar health centre; long travel times to the health centre; Idate speaking; rural; mixed matriarchal and patriarchal marriage practices; partially within Laclubar town.

Manatuto is relatively impoverished. An estimated 47% of the population are living on less than US \$1 a day,

37% have never attended school, and only 40% are formally employed² (80,81). The most recent health statistics suggest 74.6% of births occur at home, just 36.9% of births are delivered with a skilled birth attendant, 79.4% of women do not receive a postnatal check, 90.6% of women find it difficult to access healthcare, and only 53.6% of children have had all their vaccinations (1). In somewhat of an anomaly, 92.1% of women from Manatuto claim to have received antenatal care from a midwife or nurse (1).

MA'ABAT

Ma'abat is a geographically small, urban suku located in Manatuto AP. With a population of only 771 persons (387 women and 384 men) it makes up just 5% of the total population of its administrative post (81). Whilst there are no health facilities located in Ma'abat itself, the population has convenient access to the one health centre and three health posts³ located in Manatuto AP. The main languages spoken in Ma'abat include Galoli and Tetun.

The most recent statistics suggest that 19% of Ma'abat's population have no schooling and slightly more women than men have never been to school. Just 38% of the population are employed, with more men employed than women and more women classed as economically 'inactive' (inactive is a poor choice of words as evidence suggests the workloads of women

are greater (56)). Taking item ownership as a proxy for wealth, 46% of households own televisions, 77% mobile phones and 19% own a motorcycle. Households mainly produce rice, coconut and vegetables. Approximately half own chickens, two-thirds own pigs, and just over two-thirds of homes are made of concrete or brick (79).

MANELIMA

Manelima is an extremely remote, mountainous suku located in Laclubar AP. With a population of 2,173 persons (1083 women and 1090 men) it makes up 19% of the total population of its administrative post (81). One health post serves Manelima's six aldeia and one additional aldeia from Orlalan. The main languages spoken are Idate and Tetun.

More than half of Manelima's population have never been to school and just 33% are employed.

But almost three times the number of men are employed as women and significantly more women have never been to school. Just 3% of households in Manelima own a television, 10% a mobile phone and 1% a motorcycle. The main crops cultivated in Manelima are maize, cassava, vegetables, fruit and coffee. The majority of households also have some form of livestock and 94% of homes are made from bamboo (79)

ORLALAN

Orlalan is a very remote, mountainous suku located in Laclubar AP. Its total population is 4,783 persons (2373 women and 2410

men), making up 41% of the population of its administrative post (81). There are no health facilities in Orlalan but the population has access to Laclubar health centre. Those living at the furthest ends of Orlalan, however, must walk hours to do so. The main languages spoken in Orlalan are Idate and Tetun.

Almost half the population has never attended school and significantly more women than men have never done so. Similarly, 48% of the population are employed, most of whom are men, with 63% of women classed as inactive. Just 12% of households own a television, 34% a telephone and 5% a motorcycle. Almost all households are producing a variety of crops, including maize, cassava, vegetables, fruit and coffee. Most households have chickens and pigs, and three-quarters of all houses in Orlalan are made from bamboo (79).

PARTICIPANTS

Participants were purposefully selected based on fixed, pre-defined inclusion criteria: that they or their partner were currently pregnant or had been pregnant in the last two years and that they had been residing in the sample site for the

RESEARCH SITE	NUMBER OF PARTICIPANTS		
	Women	Men	Total
Dili			
KII	5	7	12
Manatuto Villa			
KII	3	1	4
Ma'abat			
FGD	0	0	0
IDI	4	4	8
KII	1	2	3
Manelima			
FGD	8	0	8
FGD & IDI	4	0	4
IDI	1	5	6
KII	1	1	2
Orlalan			
FGD	0	0	0
IDI	4	7	11
KII	1	2	3
TOTAL			
Total (FGD, IDI)	21	16	37
Total (FGD, IDI, KII)	32	29	61

Table 2: Number of participants by sex, research type & location

previous 12 months. These criteria were chosen to identify those who had rich information and recent memory of pregnancy and the post-partum period. Additional criteria were that participants were available, willing, and able to consent to be interviewed.

The research team also endeavoured to recruit men who indicated that they were relatively more involved in pregnancy to ascertain information on their personal motivations and inspiration for change.

In doing so, the following criteria were used:

- Conducted housework and/or childcare
- Accompanied their partner on ANC visit
- Discussed pregnancy with a health provider
- Was present at the birth of their child
- Provided perinatal emotional support
- Made joint decisions with their partner on family planning, ANC or location for birth

These criteria were based on common composite indices used to measure male involvement in antenatal care and maternal health (13,17). There is no health system data which allows for the identification of men who are relatively more involved in pregnancy and thus identification had to be made based on participant responses and observations in the field. With most men being relatively less involved in pregnancy, this selection

process then meant a variety of involvement levels were captured.

Recruitment took place through several channels. In Ma'abat, the team recruited house-to-house in coordination with the head of MNCH for Manatuto municipality and the head of the suku. In Manelima, a combination of house-to-house recruitment and snowball sampling was used, and in Orlalan, the team conducted house-to-house recruitment, coordinated with the head of Laclubar health centre, and recruited at the health centre itself. The inclusion criteria meant that responses were not geographically clustered, and the team purposefully travelled to distant areas to ensure this did not occur. A list of stakeholders working the area of MNCH and gender-transformative programming was compiled for identification of participants for key-informant interviews. This list was based on the prior knowledge of the principal investigator and cross-referenced with Catalpa. From this initial list, a short-list was created that met the necessary breadth of information the team wished to capture. In the field, the research team purposefully sought out health service providers and community leaders to provide insight into the local health systems and community norms.

The team conducted 13 female in-depth interviews, 16 male in-depth interviews, one focus group of 12 women, and 23 Key-informant interviews (with 24 participants). Despite prior organisation, group discussions did not take place for reasons explored later in this section. Qualitative sample sizes are designed to meet information requirements not representativeness, and as such, the sample was tailored to maximise variation across age, education, rural residency, occupation, distance from health posts and income levels. The team was also mindful to capture the perspectives of people with

disabilities. The final list of informants and demographic data can be found in the annex to this report.

RESEARCH TEAM

The research team consisted of an international male gender specialist and principal investigator, two national female co-investigators, one national male co-investigator, one national male research assistant, and one national female primary supervisor. Before data collection, the team participated in a research workshop facilitated by the principal investigator. The workshop focused on discussion and shared learning amongst the team on men and maternal health, the research instruments and research procedures, data management and research ethics. External speakers also delivered training on gender theory (Plan International), conducting focus-group discussions on sensitive issues (National University of Timor-Leste), and in-depth interviews with vulnerable persons and referral procedures (The Asia Foundation).

RESEARCH TOOLS

Research tools were developed in English by the principal investigator against the research questions, literature review and research concept paper. A description of the tools can be found in Table 3, with the tools themselves located in the annex. All materials were translated by the research team prior to their use in the field, with the principal investigator reviewing translations to ensure their alignment with the original intended meaning.

The sensitive nature of the interview questions meant translations were conducted with much consideration for cultural appropriateness. To confirm this, research instruments were piloted with a convenience sample drawn from the research team's network, ensuring that participants still met the inclusion criteria. The pilot took place immediately after the research workshop, and research tools were adjusted during a team debriefing. The data gathered from the pilot is not used in this report. The limited nature of the Tetun vocabulary meant that research instruments needed continuous refinement over the course of the research against participant understanding.

RESEARCH TOOL	DESCRIPTION	TIME
Questionnaire	Short structured survey form	5 mins
Consent Form	Short structured survey form	3 mins
Interview Guide FGD	Semi-structured. Five questions and 1 activity	1.5 hrs
Activity Guide FGD	Guide to maternal health timeline activity	45 mins
Maternal Health Timeline	Visual timeline of maternal health	N/A
Interview Guide IDI	Semi-structured interview guide with 12 questions	Up to 1 hour
Interview Guide KII	Semi-structured interview guide with 12 questions	Up to 1 hour

Table 3: Description of research tools

DATA COLLECTION

Data collection took place between August 22 and September 19, 2016. This was a three-step process comprised of KIIs in Dili, field work in Manatuto, and remaining KIIs in Dili. Formal notification letters were sent to the administration of each research site, the police, and Manatuto health centre two weeks before field work, and meetings were held with government administrators in Manatuto prior to data collection.

Participant recruitment used the aforementioned methods, with discussions and interviews scheduled for a time and place determined by the participant as most suitable, accessible and convenient. Interviews were conducted in Tetun by trained Timorese researcher and note-taker of the same sex as the participant. Participants were informed about the study, their rights, confidentiality of their responses, and their ability to withdraw from the interview or decline audio recording. Consent was obtained from participants before any data was collected, with consent obtained through the signing of an informed consent form. If participants did not wish to sign or were illiterate they could provide verbal consent, witnessed by a community member.

Before the interview commenced a questionnaire was also administered to collect demographic data. Interviewers took great care to explain the consent form, questionnaire and provide participants time to consider their response. Data was collected using digital audio recorders, supplemented with physical notes. After data was collected, due to condensed project timelines and

the research team's fluency in English, a consensus decision was made to transcribe and translate audio-recordings directly into English. All transcripts were thoroughly reviewed to check translation accuracy and all physical notes were checked against audio-recordings.

DATA MANAGEMENT

Questionnaires and physical notes were stored in a combination-lock container only accessible to the research team. Signed consent forms were stored in a separate locked container separate from questionnaires and notes: preventing respondent's names from being linked with collected data.

No personal identifiers were recorded on the questionnaire or the notes, with all data collected devoid of information that could link responses to individuals.

All digital audio files and digital transcripts were stored securely in a password protected digital folder, with co-investigators deleting their copies immediately after they had completed translation and files had been transferred to the secure master folder. All records are to be destroyed after five years.

ANALYSIS

Obtained data was analysed using qualitative data analysis software Dedoose (formerly EthnoNotes), with an inductive coding process applied to an initial sub-set of transcripts. The resulting code structure was then iteratively refined and applied to sub-sets of remaining transcripts, with refinements made as new codes emerged from each set. This integrated approach combined initial inductive analysis, with deductive analysis as coding progressed.

ETHICAL CONSIDERATIONS

Ethics approval was obtained from the Timor-Leste National Institute of Health's Human Research Ethics Committee, with data collection not beginning until ethics approval was granted.

Strict ethical procedures were adhered to at all times, with this deemed particularly important due to Timor's collective memory of questioning and interrogation by Indonesian occupation forces. The data collection and management sections of this paper set out the steps taken to ensure participants rights and confidentiality. The results of this paper will be socialised back to the communities in which the research took place through service providers in Manatuto.

Over the course of data collection there was the possibility that the team could be made aware that a participant had been subject to violence or abuse. The Asia Foundation advised that if so, a member of the team should approach the participant in private to ascertain if they needed assistance or contact information for support services. The team would contact local social services and inform them that the community had a need

for support but not provide any identifying information. Each member of the research team was given a reference sheet of contact information for local support services and sheets were kept in the researchers' vehicles.

LIMITATIONS

There are limitations to any form of research. Due to project timelines and budgetary requirements this project was constrained in the sites that could be covered, the sample that could be taken, and the extent of the research questions able to be addressed. This piece of research is thus exploratory and not representative, with there the possibility that there may be actions men may be taking in other settings in Timor-Leste that were not able to be captured from the sample population.

Whilst this study was conducted in Tetun, interviews were not able to be conducted in Idate or Galoli. Participants sometimes required questions to be rephrased multiple times, some did not understand Tetun very well and some were visibly nervous. Two men expressed doubt as to whether they could sign their names, six participants declined audio recording and some expressed hesitation over the consent form. These factors may have inhibited participants from fully expressing themselves, in particular, those with less education or those living in remote areas.

This study also attained less group discussion data than was anticipated. Despite having organised group discussions with target communities prior, the fact it was harvest time across all research sites meant that, except in Manelima, men and women

failed to show up. Further barriers to corralling participants were that women were often caring for and managing young children, and public holidays, political rallies, church activities, market day and an unexpected municipal event drew people away from their homes. Informants also noted that it is extremely difficult to recruit men for activities regarding health concerns.

The research team believes that some participant responses may be skewed by an element of interviewer bias, with respondents providing answers in alignment with the perceived position of the interviewer, and out of respect for their partner.

Furthermore, as male interviews were conducted by male researchers, there is a risk that responses may have skewed towards socially acceptable notions of manhood (82). Given that language and expression is a problematic indicator of what people actually do or have done (83), there is value in further studies which seek data confirmation with direct participant observation or mixed methods research.

Lastly, the recruitment methods employed meant participants may have been missed in the extremely remote areas of each suku, and snowball sampling methods may mean participants recruited through Key-informants may have had a pre-existing attachment to the health system. But despite this, the data shows great variation in attachment and use of health systems. Unfortunately, the research team was not able to capture responses from single mothers and fathers: it is thus important that future studies endeavour to address this deficit.

R E S U L T S

All participants interviewed for the study were married, and had an average of four children. The majority of those who participated had a high school education, with almost all of the women working in the home and the men spread over a variety of occupations, including agriculture, private and public sector work. Most couples were pregnant or had given birth in the last six months. Women were on average 30 years old and men were on average 39 years old. Summary statistics can be found in table 4.

Inductive coding clustered participant responses into five distinct components or themes: framing, presence, motivators, barriers and approaches. These themes closely parallel the research questions and provide insight into the ways in which men and women view the role of the male partner during and after pregnancy, the nuances to their presence and absence, and convey evidence for future program planning and implementation. This section will address each of these themes in turn.

FRAMING

The way men frame and perceive their role in maternal health is critical to understanding how they are to be engaged. Across participant responses, three main patterns emerged. Men and women alike tended to express fatherhood as comprised of immense personal responsibility and coupled this with a distinct

CATEGORY	FACTOR	WOMEN	MEN
Averages			
Age	Mean	30	39
	Median	30	40
# Children	Mean	4	4
	Median	4	3
Number of Persons			
Schooling	No School	4	4
	Primary	1	0
	Middle	1	0
	High	14	10
	University	1	2
Occupation	Agriculture	0	6
	Carpenter	0	1
	Fisher-person	0	1
	Health Worker	0	1
	Home-maker	19	0
	Private Sector	0	2
	Public Servant	0	1
	Teacher	2	2
	Unemployed	0	1
	Veteran	0	1
Relationship	Married	21	16
Status	Other	0	0
Pregnancy Status	Pregnant	9	4
	Gave birth in the last 6 months	9	10
	Gave birth in the last 2 years	3	2

Table 4: Summary statistics of participant data

emotional component. These were factors reinforced by the framing of pregnancy and birth of the first child as a liminal period: an in-between state between youth and adulthood.

RESPONSIBILITY

Participant responses overwhelmingly placed fatherhood within a sphere of responsibility closely linked to their productive contributions. Despite the myriad of ways in which women contribute to household income (59), male participants consistently described how being a father meant sole responsibility for the wellbeing of the family through provision of monetary and food requirements.

The coming of a child was displayed not only in terms of happiness, but also as a source of additional economic pressure.

And whilst several participants noted the importance of being able to provide for their children's futures, only one participant linked the birth of their child with their family's legacy.

"To be a good father signifies being like an umbrella for the family, to support and take care of the family" (Male public servant and father of 2, Ma'abat)

"Being a father means responsibility. He is responsible for fulfilling the family's needs such as food, housing, health, children's education and money. The other important thing is he has to love the family. A father is responsible for the family's wellbeing" (37)

year-old female teacher and mother of 7, Manelima)

"After he knew I was pregnant, he started to work even harder to prepare for the baby's birth and we started save for the baby's future". (20 year-old female home-maker and mother of 1, Orlalan)

"A father has to have responsibility for his wife and children. He has to provide money for the family for buying food and other needs. This is the role of the father." (35 year-old female home-maker and mother of 2, Ma'abat)

This framework aligns with studies suggesting that women and men in Timor-Leste hold relatively rigid views on masculinity, with defined allocations of reproductive and productive labour (6,56,64). With fatherhood and household distributions of power and agency framed in this manner, men are often in control of decision-making on reproductive health. Indeed, women have to purposefully opt-in to choices about their bodily integrity. This is particularly important in emergency situations, where men play a gate-keeping role to accessing medical attention.

"In most places in this country the woman does not give consent for anything, the man does. And if the husband is not there, then her [or his] mother does. That includes interventions during pregnancy, labour and birth. It includes caesarean sections, tubal ligation, any operation. They don't consent for a specific operation they just consent to have an operation...The husband has to sign that form and the woman is excluded from that decision-making." (Maternal Health Service Provider)

"And this is also one of challenges our team has found in outreach, especially when women come for family planning

services. So whenever they come for antenatal care or postnatal care our teams try to deliver the information and try to explain to the woman to change their short-term methods to long-term methods: for implants or intra-uterine devices. Sometimes the women say no, I need to go home to ask permission from my husband. Whenever they go, the husband says no, and they continue with the method they use now." (Family Planning Service Provider)

"We asked him as we decided to refer his wife [to the clinic], but he said no we have to wait, we have to wait because we have to do [custom] and then what happened? His wife passed away on the way to the clinic. We were very late to refer because we had to wait for his decision. So that's the situation." (Health Programming)

A consequence of this perception of control and responsibility is that some male participants claimed that should something happen to their partner they would be held accountable by health professionals for failing to care for their partner sufficiently.

EMOTION

Childbirth often marks a critical point in the lifecycle of men. But participants found it difficult to express their feelings in relation to the birth of their child in a nuanced manner. It was clear,

however, that childbirth is an important stage, with women and men describing it as a time of happiness and excitement in their relationship, in particular, for the birth of a couple's first child.

"The presence of my baby brought happiness. We never had any problems concerning our baby. We always give each other a hand to help our little baby whenever possible." (Unemployed father of 3, Ma'abat)

"We were really happy when I was pregnant for my first pregnancy and child and also were very happy with the presence of our three other children even though two of them died. Of course we always have arguments over small things, yet the presence of our children does not affect our relationship so much. Happiness is the one dominates our family." (30 year-old female home-maker and mother of 4, Orlalan)

Male participants and key-informants also referred to anxiety, nervousness and fear on the part of the father during birth, with great relief coming at the news that the birth had gone as planned with no complications.

"I felt afraid when my wife was about to deliver the baby for the first time. Fortunately, it went well, according to plan." (Male public servant and father of 2, Ma'abat)

"We observed that [fathers] are very preoccupied and scared. We always encourage them so that they don't impede any situation, and to give them courage. We tell them not to be scared." (Health Service Provider)

Participants were also careful to note that, in addition to his productive responsibilities, a father should love and care for the

family. This manifests in visible pride in the birth of their child and love for their partner.

"A father has all the responsibilities to take care of the family and their needs. Working hard, bring in food, and money and to love his wife and children forever." (29 year-old female home-maker and mother of 4, Orlalan)

"They [fathers at the hospital] are all very happy to share their stories about their family and their baby. So I think they are present, not just physically, but in the moment as well." (Maternal Health Service Provider)

LIMINALITY

A number of men described how pregnancy marked a key transition in their lives: a liminal⁴ period as they moved into a position of responsibility at the head of their household. Informants also described how masculinity and adulthood may be affirmed through becoming a father.

This aligns with evidence suggesting critical points in men's lifecycles, such as the beginning of a relationship and the birth of their first child, are times where men may be more receptive to information and more open to being engaged in gender work (34).

"For most of them...it makes them really become a new person, a different person, and make them really like, 'oh I'm really a man, I'm really a man', so that's the thing, it makes them really proud to become a man." (Health Programming)

"Getting married is not something easy, for instance we would have been naughty when we were still single, but we have to change because we have a wife. If you were always partying, it is better to stop doing this and do not be shy or afraid to find a job. Also, do not be involved with those who are still unmarried, because we are married and old." (25 year-old male agricultural worker and father of 1, Ma'abat)

"I have been going through different life experiences, especially when my wife was pregnant." (Unemployed father of 3, Ma'abat)

Informant responses supported this, recounting how men's participation is heightened with the first child, but then declines as birth comes to be a normal process.

"Mostly when their wives are pregnant for the first time, the husband will assist her and accompany her, the husband will really focus on her, he will save money for the baby's needs. Then if the first and second pregnancy are normal he will think that for the third one it is the same, so he will not focus on her anymore." (Maternal Health Programming)

"For the first time the wife is pregnant then [male partners] will accompany the wife to the health centre, but if it is the second or third child then the father is not really concerned about it. They think that the mother already knows about it since she has already given birth." (Maternal Health Service Provider)

PRESENCE

To describe the current contributions of men during pregnancy, it was important to determine the extent of their presence at different stages of childbearing. Participant responses tended to divide into three time periods: antenatal, birth and post-partum. Male involvement differed across the three, with men tending to be less involved antenatally, but becoming more involved during and immediately after birth.

ANTENATAL

Informants indicated low rates of male presence in antenatal care services, with this shifting little with younger couples.

Women mostly attend consultations alone or with other pregnant women from their community, relaying acquired information to their male partners once home.

One informant suggested that in some areas this may be changing, with some men accompanying their partners to health facilities. Even so, participant responses and observations by the research team suggest that even when men do attend, they tend to wait outside for their spouse and rarely ask questions to health professionals.

"Antenatally, if we take it across the length, longitudinal...I have never seen a man at the consultation with the doctor or the

midwife with his wife. I have seen them sitting outside, because obviously, they've got the wheels to get them there. But I've never seen, not once in two and half years, a man actively participating sitting with his wife when they've had consultation with the doctor." (Maternal Health Service Provider)

"Let's say in one day, from 20 women, maybe only 10 husbands will come [for ANC]. But the other 10 women don't come with their husbands...But in outreach...let's say from 10 women who come for ANC, only 2 husbands come from 10 women. So in the field it is very low...involvement of men.... It is also the same for young couples, only the women are coming." (Family Planning Service Provider)

"When we went to the health post together he will just wait outside, and I never force him to go in with me. It is enough to have him spare the time and accompany me to the health post." (37 year-old female teacher and mother of 7, Manelima)

"With this pregnancy, I feel okay. There is no pain, no headache and no fever. Yet, I feel it is very important to come to the health centre every month for a check-up to make sure that my baby and I are fine. After returning home, I inform my husband about the results of the check-up." (40 year-old female home-maker and mother of 9, Orlalan)

Male and female respondents, however, frequently noted that it was important that men go to with their partners for ANC consultations. This may suggest a level of interviewer bias, with participants anticipating what the research team wanted to hear, or it may suggest that women and men were cognisant that men

should be attending ANC consultations. If the latter, lack of male attendance may suggest that there are barriers that inhibit this from occurring, with these to be examined in a later section of this paper.

"As a father, when our wife is pregnant, we should make preparations because of our responsibility. Bring our wife to the hospital for consultations every month, and after that, wait to hear from the nurses." (41 year-old male agricultural worker and father of 5, Manelima)

One informant noted that in discussion sessions conducted with communities, when men were confronted about their lack of attendance at antenatal consultations they blamed their female partners for not wanting to attend. This does suggest that men are aware that their attendance is expected.

"In group discussions, men would defend themselves, saying 'yes we really do want to bring or accompany them to the health centre, but the women are the ones who refuse to go there.' (Maternal Health Programming)

BIRTH

Informants and participants alike claimed that men were relatively more present during childbirth. This came out in participant responses, with...

...men indicating a need and desire to be present during birth out of concern for their partner's wellbeing.

"The men are just involved when their wife starts delivering. So this is when the husband comes." (Health Programming)

"We have seen the fathers involved a lot when the wife is about to deliver, the father will call us for an ambulance, they accompany their wives during childbirth, and they also take care of the newly born baby." (Maternal Health Service Provider)

"The important thing is that I have to accompany my wife when she is delivering the child." (Unemployed father of 3, Ma'abat)

"For me, it is important for the fathers to go into the delivery room, to be part of it, because it is also a big responsibility for fathers. Even if other family members are there, for the father it is important to be there as well." (Male public servant and father of 2, Ma'abat)

In contrast, one informant noted that the clear majority of men are not present even during childbirth, and several female participants noted that they had given birth in the absence of their partners. A mixture of observational and quantitative data is needed to confirm this, particularly in a context where deliveries at home remain high.

"Maybe around 80 or 90% [of men] are not there when their wife delivers."
(Health Programming)

POST-PARTUM

In participant responses, there was little discussion of the post-partum period, with most choosing to focus on the duration of the pregnancy. This was partly due to the embedded focus of

the interview questions, but also is reflective of the responses of key-informants. Whilst one informant suggested that in a hospital context men can be very present after-birth, most men appear not to attend postnatal consultations or take children to health clinics when they are ill.

"When it comes to newborn care in the hospital the men are actually very participative. Every morning in the hospital they have run an immunisation clinic, and every newborn baby goes off to be immunised, and there is always a family member who takes them while the woman is seen back in the ward area, and that's always, if a man is present, they are always the one that takes the baby, sometimes with a woman family member, to give the baby its immunisations.

Babies that stay in for a bit longer, mums and [babies] that stay in for three or four days, the men are quite participative in their care, they wouldn't for example be helping with breastfeeding, but they will be helping to bath the baby, to change the baby's nappy, to walk around with the baby, and from a maternal perspective they would be the ones who would be sent off to the shop to get salt, water or lollies... so they are quite participative and quite present. My time in Oecusse was the same as what I saw here. I never saw [men] in the antenatal clinic, saw them in the labour ward and saw them post-partum. Post-partum they're quite involved, I don't think there are many challenges to getting them involved while the woman is in hospital, I think when they go home, again it's the [grandmother's] business." (Maternal Health Service Provider)

"ANC, and PNC also, they don't really come. For PNC, only women come with their babies for services...Usually men just come with

the bike, they will drop their wife at the clinic." (Family Planning Service Provider)

"When the children are sick, men never bring the children to the health facility. It is always the mother, and if not the mother then it is family members. There are some fathers who are involved but it is very small."

(Government Representative)

The former, extensive commentary is observationally based on men present at a health facility and reflects those who are relatively more conscious of their partner's health. Also of note was that family planning was always mentioned as a component of post-partum birth-spacing, particularly after complications or a difficult pregnancy. Whilst family planning decisions were presented as a joint discussion between couples, responsibility for accessing services fell upon the female partner.

"After the birth of our child, my husband and I discussed using family planning." (20 year-old female home-maker and mother of 1, Orlalan)

"After our third baby, we discussed and decided to do family planning. It was after the death of our third child. I was not healthy to be pregnant again right after the third child." (29 year-old female home-maker and mother of 4, Orlalan)

"In outreach it's different, they don't participate while their wife receives [family planning services]. They just stand outside, out of the clinic and they don't go inside...They don't really fully participate in the process." (Family Planning Service Provider)

SUPPORT

Little is known about the ways in which men already contribute to supporting maternal and newborn child health in Timor.

Understanding these details and the ways in which they relate to local custom is important if one is to take a strengths-based approach to gender-transformative work with men. Participant responses on actions men took during pregnancy to support their partners were intimately tied with the way in which fatherhood was framed, focusing first and foremost on financial provision, supplemented by practical actions and emotional support.

FINANCIAL

Overwhelmingly, male and female participants referred to their partner's contribution in terms intrinsically linked to responsibility and productivity, with father support defined as working hard, saving money and purchasing food and baby clothes.

"A good father should support the pregnant wife and work hard in the garden for the need of the family."

(45 year-old male agricultural worker and father of 5, Manelima)

"He bought the baby's clothes before our children were born." (30 year-old female home-maker and mother of 4, Orlalan)

"He started to save some money for the baby's needs...He also prepared some money for my needs, for instance, to buy fruits or certain foods that I like and wanted to eat." (25 year-old female home-maker and mother of 2, Manelima)

"Intrapartum, they are very important because they've got the money. So they come with all the things that you need to have when you're having a baby. So the [grandmother] will bring them, but the men have to buy and make sure everything is prepared. That includes your nappies, soap, pads, sarongs, and all of those things." (Maternal Health Service Provider)

These financial aspects were only framed by two participants as measures taken in case of emergency or pregnancy complications. This may be due to participants' view of pregnancy as a normal part of life with little inherent risk. A number of participants, however, referred to income generation during pregnancy as important in anticipation of supporting their child's future. This also showed up in the form of preliminary conversations between partners on their ability to provide for their children.

"I also prepared a little bit money in case of any problems during pregnancy." (25 year-old male private sector worker and father of 2, Ma'abat)

"We always discussed that when we have children, plates will be added to our dining table, we have to provide them food, bathe them and be responsible for their education as well". (30 year-old female home-maker and mother of 4, Orlalan)

"For this child, the son, in the future I will send him to school and give him whatever he needs to support him, like money." (23 year-old male agricultural worker and father of 1, Manelima)

PRACTICAL

Despite their absence at antenatal consultations, men claimed that they supported their partner's pregnancy in other practical ways. Principal of these was a combination of both reminding their partner to conduct certain activities and barring them from others. Men noted reminding their wives to go to the health centre, of antenatal clinic appointments, to follow what the healthcare practitioner had said, to have lots of rest, to get sufficient sleep and if something is wrong, to go to the health centre.

"My husband always reminds of the monthly consultation dates at the health post. Whenever the check-up time gets closer, he looks at the check-up book and reminds me to go to the health centre." (25 year old female home-maker and mother of 2, Manelima)

Likewise, men often advised or barred their partners from riding on motorcycles, jumping, running, carrying heavy things, going to distant places, to not eat lots of chilli, spicy food, or other food that they assume is bad for the health of the pregnant mother, and may they try to limit their partner's activities and engagement in heavy work. Heavy work was defined by one participant as carrying heavy things, doing laundry and collecting water.

"I encourage her not to engage in heavy work, like carrying heavy things...I also informed my wife not to jump and also not to travel by motorbike." (Unemployed father of 3, Ma'abat)

Most participants claimed that men assisted with housework during pregnancy, including washing clothes, collecting firewood, cooking porridge and preparing food, cleaning the house, and preparing clean water for cooking, showering and drinking. Men also mentioned taking their partners for walks in the morning, with one participant believing this would help make his wife stronger for giving birth.

"Even though our field is far away, and my husband has to work far away, he always cares about my health, mostly during pregnancy. He helps me take care of some household work that I categorise as heavy work, such as doing laundry and collecting water." (37 year-old female teacher and mother of 7, Manelima)

"He was so supportive when I could not do my household tasks, he would take care of it before he goes to the farm and will come back early to help with the cooking and cleaning as well as to do the laundry in the afternoon." (25 year-old female home-maker and mother of 2, Manelima)

"I must bring my wife out for a walk for exercise, in order for my wife to be stronger for delivering." (25 year-old male private sector worker and father of 2, Ma'abat)

There are important cultural components to men's assistance. As has been noted in other papers, heat is a central aspect to the culture and tradition around birthing in Timor-Leste (7). Men are responsible for collecting the firewood, constructing the fire and

boiling water to keep their partner warm during and after birth.

A number of participants in Manelima mentioned the parallel operation of traditional medicine with modern medicine, in which case men were responsible for organising these components.

"After giving birth to my third child I had to use the heat from the fire a lot in order to prevent me from getting cold. The weather is cold here so it is a tradition for us to use the heat from the fire after giving birth. We have to be inside the house, especially in the kitchen and use the fire heat for forty days or after the time to vaccinate the baby has arrived. Then we can come out from the house to go to the health centre. Usually, my husband or our family members like my sister or my husband's mother, brother, and father would help gather the firewood." (33 year-old female home-maker and mother of 5, Manelima)

Encouragingly, one participant noted that their husband quit smoking, and others that their partner took care of other children: preparing their food and their clothes for school. A few participants also drew attention to communication between the couple regarding the pregnancy.

"One thing that I noticed from my husband when I informed him that I was pregnant for the first time, was that he stopped smoking. He did not smoke until my first child was born and he

would never smoke around the baby or when he was carrying the baby. He did the same thing when I was pregnant for my other three children." (30 year-old female home-maker and mother of 4, Orlalan)

"He takes care of the older children, by preparing their food and clothes for school, and the eldest child will also help him with some other tasks." (37 year-old female teacher and mother of 7, Manelima)

"We discuss about my current pregnancy a lot, we usually discuss about the preparation for the birth of this child, we also discuss about my health during pregnancy." (25 year-old female home-maker and mother of 2, Manelima)

Despite the observations of informants that men are rarely present at antenatal clinics, some participants mentioned accompanying their wives. Very few mentioned asking questions to service providers, and with a high number of births still taking place at home, one respondent mentioned preparing a place for the home-birth of his child.

"My husband always assisted me to the health post during my pregnancy. Every month we will go to the check-up. However, he would only stay outside. He will meet with the nurse only when he wants to, just to ask if my pregnancy is fine. He understands the explanation from the nurse that a pregnant woman needs a lot of rest and must not work too hard, for the safety of the mother and child." (25 year-old female home-maker and mother of 2, Manelima)

*"For me, I must be prepared in case of emergency, whether in the hospital or at home, so I must prepare a special place for my wife to use during her delivery, in case we cannot go to the hospital."
(41 year-old male agricultural worker and father of 5, Manelima)*

And one father even linked supporting his wife's breastfeeding to supporting her nutrition.

"After childbirth the mother needs to have good milk to breastfeed the baby. To do this, we prepared chicken and eggs for the mother." (42 year-old male agricultural worker and father of 5, Manelima)

So, while it appears there are strengths on which to build, it is a limited suite of actions that men are already undertaking. Whilst these may be somewhat confined, there were respondents that demonstrated they were going beyond the typical support measures of simply purchasing clothes and food.

EMOTION

The literature identified emotional support as an important component of father involvement, but there is little understanding of this aspect in Timor-Leste. Emotional support involves the provision of empathy, love, trust and caring. But for this to exert a positive influence, it must be perceived as helpful by the female partner (55).

A number of male participants conveyed concern for the wellbeing of their partner and demonstrated emotional supportive actions. Actions taken by male partners include minimising anger, being concerned and asking after their partner's health and wellbeing, sitting beside their partner and ensuring they were calm, checking on the condition of the baby and asking questions of its welfare,

making sure there is no conflict at home and ensuring their partner is happy, going for walks together and holding their partner's hand during labour.

"When my wife is pregnant I help her by making her happy, so that she will feel happy when she is giving birth to the baby, so she will feel my love and affection, that I am pregnant but my husband is always there for me." (25 year-old male private sector worker and father of 2, Ma'abat)

"As a father, I always sit beside her to support, and to ensure there is no negative emotional and stress. She has to be also calm at all time." (Male public servant and father of 2, Ma'abat)

Whilst this aspect was rarely explored by participants, it demonstrates that men often have deep emotional attachments to their wives and children, with this a potential prompt for action and support. One female participant mentioned the importance of her partner's presence during birth as a source of emotional strength. And another male participant brought up the mental health issues of his partner after child-birth, marking this as a time in which his presence was critical.

"During childbirth the husband must be there...Because for some women, especially for me, during the effort of childbirth I need to see my husband's face to give me strength. When my husband is not by my side, I will feel weak." (27 year-old female home-maker and mother of 3, Ma'abat)

"Before going [to the health facility], I did some traditional activities to make sure that my wife's delivery would go well. And I have to take care of her because she had mental problems after the last birth." (60 year-old male veteran and father of 8, Orlalan)

NEGATIVE

Despite widespread evidence proving the contrary (6), the research team came across little mention of violence, alcohol use and conflict within the families. Nevertheless, violence and control was present in some participant's responses. Indeed, despite having demonstrated relatively high levels of involvement during pregnancy, one participant stated that he had hit his wife during this time. This serves to justify that even if we are to take an instrumental approach to addressing men's actions, this cannot take place without subsequent reform of gender norms.

"When your wife is pregnant we cannot fight. But...I sometimes slapped her when I was angry, but it does not mean it is a problem."

(60 year-old male veteran and father of 8, Orlalan)

"There are some cases... [where] it is very sad, she gets violated by her husband because as you know when we get pregnant we have a lot of unstable psychologic things and also physical things, sometimes [the] husband comes and then he wants that everything is ready on the table or something." (Health Programming)

"Nurses say that we have to explain well to [men], because men will not come if there are any activities at the health centre, only mothers come. When women try to ask their husbands to come, but the [husbands] do not want to, sometimes they hit their wife because husbands do not really understand the progress of the child." (Health Service Provider)

Underpinning these elements is an opaque layer of control and distrust. Due to the study's focus on the positive elements of male involvement and the sensitive nature of violence and substance use in communities, references to these aspects were rare.

But given recent statistics indicating 14% of women have experienced intimate partner violence during pregnancy this warrants closer inspection (6).

"We don't do a survey especially for smoking and alcohol [use]. But based on our observation, it's high, and it has a lot of impact [on] the family. For example, when the husband [is] drunk and then you know, if his wife or his kids [are] sick or something then they have no attention." (Health Programming)

"Another thing I would also want to share is that as a wife, we have to understand our husband's habits. For my husband, he really likes to drink coffee. Whenever I do not prepare any coffee for him, he would get angry at me." (33 year-old female home-maker and mother of 5, Manelima)

"The [men] need to go with the wife to health centre so that they know directly from the nurse what is her condition and what she could do and she could not, otherwise they will think the wife just lied to them." (20 year-old female home-maker and mother of 1, Orlalan)

MOTIVATORS

To capitalise on men's actions during pregnancy, one of the key questions the research endeavoured to address was what motivated men to change their health behaviours or to support their partner through their actions? Given women's typically heavy workloads within the home, what was it about pregnancy and childbirth which motivated men to engage in housework and childcare ? The codes that emerged from the dialogue suggest that there are three principle reasons: necessity, comprehension and care.

NECESSITY

The principal reason behind men's involvement in reproductive work was necessity. During pregnancy, when men's partners were physically unable to complete heavy household chores they would fill this role, often with the support of older children. Once women were physically able again after birth, these functions would then transition back, with the household resuming its normal delineation of gender roles.

"When he noticed that I was really weak then he would cook, clean our house, and do other activities before he went to work." (30 year-old female home-maker and mother of 4, Orlalan)

"A good husband will help his wife doing the household works during pregnancy. For example; helping with cleaning, do the laundry, cooking and do the heavy things like collecting water and looking for firewood. The good husband also will help his wife after the birth until his wife is fully recovered and could be on her own again. because these period are the hardest for women." (25 year-old female home-maker and mother of 2, Manelima)

Similarly, participants reported that men became more involved once there were complications. Taken together, this seems to indicate that men's involvement is highly reactionary and context dependent, with men's presence known only when deemed crucial. Female participant expressed a desire for their partners to assist with household work during pregnancy, but it wasn't clear whether this was also desired after birth.

"I've had some difficult situations, very high risk, where there have been maternal death or near death experiences, and the men in those situations are definitely very present. Often they do not leave the bedside for days. They'll sleep on the floor. They might change their shirt, but they are very present. And I've had them just praying for days...but definitely present, not just physically but emotionally and also for decision-making." (Maternal Health Service Provider)

"There are some who do not accompany their wife because of the reasons I informed you, but they will when there are complications."

(Maternal Health Service Provider)

"Last month in Oecusse, the husbands came and stopped us: 'please can you give services to my wife, she needs to use a long-term method, it's good for her health...since the last delivery was not normal, she needs to use family planning methods.'" (Family Planning Service Provider)

"When other people ask me to go to somewhere to work I tell them that I can't make it because my wife is pregnant. If I go, who will help her? If she needs help, she still needs to call me, not the neighbours" (60 year-old male veteran and father of 8 children, Orlalan)

"If the wife's pregnancy is fine, they just do not focus on the wife, but if there is an emergency or complication they will react, as the husband has all the responsibility for bringing the wife to the health post or to get health assistance." (Maternal Health Programming)

COMPREHENSION

In general, male participants had little understanding of pregnancy and risks of complications. Male respondents who reported accompanying their wife to the health centre and putting in place risk mitigation measures were those who framed their responses with an awareness of the risks to their partner's health from pregnancy.

"When we have a training for our peer educators, I have a film that's really clinical, but I just try to show them the process of delivery. People [are] just shock[ed] and then one of them just faint! Faint!....At the end they said thank you...now we know delivery is like that." (Health Programming)

"Because most of the time, only the wife goes to the hospital so the husband does not understand what the wife has gone through."

(Health Service Provider)

"As a father, when our wife is pregnant, we should...bring our wife to the hospital for consultations every month, and after that wait to hear from the nurses... The important thing is to have the nurses' phone numbers, and transportation. The reason for having the phone numbers of nurses is just in case something happens, then they will help us." (41 year-old male agricultural worker and father of 5, Manelima).

"My husband is a nurse so he prioritises my health and the baby and always accompanies me to the health centre for check-ups. (29 year-old female home-maker and mother of 4, Orlalan)

It is important, however, to bear in mind that when we talk about comprehension this is not necessarily education levels. As can be seen in Table 4, most participants had high school education, yet still demonstrated low levels of accompaniment and knowledge about pregnancy. It is thus crucial that any form of community education or outreach to men (and women) contains basic information about reproductive health so the population is aware of the risks and understand the importance of health services.

CARE

Despite their low levels of involvement, men do care deeply about their wives and their families. One female participant noted that after her child was born, her partner would ride his motorbike the 3-hour roundtrip to work each day from Dili to Ma'abat, returning every evening so he could spend time with her and his child. Motivating men to provide greater support may come from leveraging the nexus between care and love for the family, potential for complications, and comprehension that by providing support they can improve their family's welfare.

"He always calls and asks about the baby, after my caesarean my husband always look after me and my baby." (20 year-old female home-maker and mother of 1, Orlalan)

BARRIERS

If men have intrinsic motivation and care for their family's health and a sense of responsibility for their welfare, what is it that prevents them from acting upon this? Responses showed there are both individual and structural reasons that inhibit male involvement, including father attitude, economic responsibility, practicalities, knowledge, family, community norms and the health system.

FATHER ATTITUDE

Key-informants frequently referred to the character and beliefs of individual men as a barrier to involvement. In the main, informants believed that men tended to view health in general, and reproductive health in particular, as a women's issue. Whilst this view did not arise in participant responses, that is not to say it is not there. Informants conveyed there to be great difficulty

in recruiting men for community education efforts and services targeting health, with men uninterested or apathetic.

"They're not there...they think 'oh that's women's things, I don't want to know about it'." (Health Programming)

"Family planning & sexual reproductive health, if we're talking about this issue, the men always think this is for women, this is not for men... They think...health is only for the women and kids not for the men as head of the family. Even the young men, young boys also say 'this is not important for me, this is important for women and mothers with children'." (Family Planning Service Provider)

"Some of the men when they find out about their wife's pregnancy they just don't really care because they think it is the woman's problem. They just focus on their daily work or their job and the pregnancy becomes the wife's responsibility until the birth, only at that time the father will sometimes take care of the baby and the mother." (Maternal Health Programming)

This construal of reproductive health as a women's issue reportedly leads to men feeling shy and scared in the face of reproductive health problems.

"The other reason is because they feel shy...to come with the wife...to the health facility, and this is the problem, so sometimes it is very hard to [find] them, but we just start with their wife." (Family Planning Service Provider)

This is particularly so during the birth process.

With the aforementioned lack of comprehension of pregnancy and childbirth, men are anxious, nervous and scared.

A number of informants also reported men as being highly passive.

"Based on my experience and my observation, [men not being present during birth] also happens in health facilities... Even sometime[s] we try to call them, 'common brother come', 'oh no I'm afraid'...they don't want to, that's the situation. It's also at home... They don't want to they really don't want to do it." (Health Service Provider)

"[Fathers participate in childbirth] only when the midwives are telling them to. It wouldn't be something that came from within, as a help, in order to help their wife, it would be because they were told." (Maternal Health Service Provider)

"Men are often afraid to go in, to see their wife during childbirth." (Health Service Provider)

Interestingly, some men indicated they had questions about their partner's health that they did not ask service providers. Both participants and informants suggested men tend to unquestioningly follow the advice of health professionals when directly told to do so, and when some female participants asked their partners to be present at the health clinic men attended.

This suggests that if men are to be engaged, efforts need to be extremely pro-active and tailored towards them. Obliging women to invite their partners needs to be treated with caution, as this shifts responsibility for a man's attendance onto women.

ECONOMIC RESPONSIBILITY

The predominant barrier to men's inclusion is their economic role within the household. With men viewing their contribution in terms of providing food and shelter for the family, in areas with low household income, it seems that the opportunity cost of ANC attendance is deemed too high relative to the perceived value in their attendance.

"In East-Timor it's really hard to ask the father to be focused, even for a few months or few weeks, only on the wife, because they have other tasks...to work." (Health Programming)

"It is because they are preoccupied with their farming activities. They have to work in order to support their family financially. Even though they do not accompany their wives to the health centre, still they encourage their wives to go." (Health Service Provider)

"The difficulty is when they work on a farm or when they have a job. They want to support their wives, but economic needs force them to work and they cannot be fully present to support their

wives during pregnancy and childbirth. Also, lack of food that they can grow in their farm becomes a challenge for them." (Local Government Representative)

Economic responsibility for the family also gives rise to spatial barriers, with men moving from their home towns in search of additional income, leaving their pregnant partners behind. The economic mobility of men is not limited to areas within Timor-Leste, with the research team interviewing participants with partners in Portugal and the United Kingdom. If men continue to look abroad for employment opportunities, this may be an increasing issue.

"I feel like alone because my husband is working in Dili, there was nothing much he could do during my pregnancy period." (27 year-old female home-maker and mother of 3, Ma'abat)

"In Timor, for some of the pregnant women, their husband is working in Oecusse or somewhere and the wife is in Dili. The men do not come back until the baby has been born." (Maternal Health Programming)

"When I was in my third month of pregnancy my husband went to England to find a job. My second child was born premature. I think it was because I was thinking too much about my husband since he is away from us...Before he went to England he already knew that I was pregnant...My husband has to be away from us since he has no job here." (35 year-old female home-maker and mother of 2, Ma'abat)

"[In case permission needs to be gained for surgery] normally they have to call up her husband, even if [they are] in Ireland or Portugal." (Health Service Provider)

Distance and physical separation is also a barrier within communities. Participants often reported that their fields were hours walking distance from their homes, with men (and women) leaving early in the morning and returning later in the evening.

With poor roads, poor transport infrastructure and long distances to health facilities men tend to see their attendance at health facilities as unnecessary and with a significant time cost.

"Sometimes, it is because the fathers are working. They have to go to work in Dili or in another place. Some will go to the farm and stay there since the farm is far away from the home. As a result, they cannot accompany the wife to the monthly check-up at the health centre." (Maternal Health Service Provider)

"If you are working in Ermera and you have to go to the next suku, and you have to walk two hours, and your wife needs to get to an antenatal clinic visit, she's going to walk to the health post. He's not going to go with her. Time is money, distance is money, work is money." (Maternal Health Service Provider)

"I just feel sad because my husband has to work so far from home, and sometimes he was late to attend the birth of our baby. Our farm is in Laklubar, which is hours away by walking. But that is fine. I don't expect my husband to always be here with me because he needs to work for our household needs and for my children's future as well." (37 year-old female teacher and mother of 7, Manelima)

PRACTICALITIES

Distance was a crucial factor inhibiting household access to health services. And this was compounded by poor transport options, giving birth at night or having to walk during the rainy season. Those that can walk are often doing so on uneven roads under intense sun for up to two hours. Other practicalities inhibiting men's presence were having to care for other children whilst their partner was visiting the health facility, or if they had a physical disability.

*"If they live in a very rural area and the distance [is not] accessible by the ambulance, then it is also a factor that discourage[s] them [from] coming to the health centre that is far away from them."
(Health Service Provider)*

Of note was that even when this distance barrier was removed, men were still not attending consultations. Participants who lived next to health centres reported that they did not think it was necessary in the face of their partner's economic responsibilities to the family.

"As the health post is close by in our suku it is easier for me to go without my husband. I don't have to wait for him, he has jobs to do, I can go by myself."

(37 year-old female teacher and mother of 7, Manelima)

"Since we live close to the health centre, my husband does not accompany me every month to the monthly consultation with the nurse." (33 year-old female home-maker and mother of 5, Manelima)

KNOWLEDGE

As stated previously, men tend to have poor knowledge of childbearing, and having seen their mothers give birth to large numbers of children, may view pregnancy as a process with little inherent risk. This is concerning as it conveys a lack of recognition of danger signs, and in the event of an emergency, it may be the male partner who will be determining when to seek medical assistance. This information deficiency is not limited to fathers, with research indicating that women and men alike have limited understanding of basic reproductive health (14).

"They will have a mindset like that's women's things. So you're pregnant. They normally compare with few years, even 100 years ago, they say 'my mother's ok, my grandmother's ok, they even have more than 10, 15, 20 [children] but they're still alive'. That's normal, that's natural, so pregnancy is natural." (Health Programming)

"[Men's knowledge of complication signs is] really limited...So even when his wife already bleeding everywhere, as long as the wife is still talking, and he says 'oh that's fine'. They will think, oh that's fine, no problem." (Health Programming)

"They know how to love their family, but they do not know how to care for their family's health." (Health Services Provider)

Being unaware of the risk of complications and the necessity of a skilled birth attendant results in women birthing at home. Whilst this is not the only factor in this decision, it is an important one to address. This is particularly so because participants indicated that when birth took place in a health centre with no complications, the location of the birth was seen as having no benefit, with it then more convenient to give birth at home for the same outcome.

"When my child was born...when she was in pain during labour, I did not call the nurses, I helped her for childbirth myself. I have many children, I do not need help from the nurses. For me, it is like we are now living based on medicine, but in ancient times, they did not have medicine but still had no problems. When our wife delivered our baby at the health centre it was for nothing, it is better to give birth at home, because childbirth at home would also have no problems." (45 year-old male agricultural worker and father of 10, Orlalan)

Men often receive their information on reproductive health from their parents, in particular, from their mother.

Informants took care to explain that even when health professionals delivered information to clients, whether the client internalised and accepted that information was highly individual. This lack of awareness extends to other key health behaviours. And in the case of smoking, men are often unaware of the impact they can have on their family's health.

"Fathers smoke while they hold their kids, or even when close to their wife, so they smoke, they see it as something normal but they don't know the impact of the passive smoking. So they think it's nothing, it's fine for the family." (Health Programming)

FAMILY

Just as women don't make health decisions in isolation from their partners, couples do not make decisions in isolation from their families. Participant responses indicated that family plays a crucial role in decisions about birth-location, use of family planning and health behaviours post-partum, aligning with the literature on sexual and reproductive health and family planning (14,57).

"If it is at home, when we are still young, mothers do not allow us even close to the birth." (41 year-old male carpenter and father of 3, Manelima)

"We have two groups in Orlalan and also two groups in Manelima involving mothers who are pregnant, but from my current observation it is the mother-in-law that is still playing a big role in decision-making. Mother-in-laws often pressure the pregnant women and the husbands." (Health Services Provider)

Participants also indicated the health knowledge they received often came from their parents, with elder women the primary holders of knowledge on the birthing process. This means that family hold great sway in defining acceptable birthing practices, and that even if men are educated and engaged, if the family unit places importance on traditional medicine and construes birth as a risk-free process there may be little that individual men can do.

"When the wife has a problem or is in pain, they discuss it with the mother-in-law rather than the husband. The husband will tell his wife to go to talk to his mother, so all the knowledge about the status of the pregnancy is in the mother-in-law's hands."

(Maternal Health Programming)

"If I have time, I will accompany her to the hospital or call nurses for help, but if there is no time, I will tell my mother-in-law or other members of the family to bring my wife to the health centre for the check-up." (Health Services Provider)

"A colleague of mine, a Timorese colleague...his wife had a baby, so I went through the whole pregnancy with him. Everything about pregnancy, labour, birth, parenting...and then post-delivery she had a fairly minor complication, so I went and saw them... the baby was being fed carnation milk, because aunty and grandmother said no milk...for the next three days, and he's going 'well no....', so powerless. Totally powerless to be involved in that decision-making, or to overpower a decision that is not even safe." (Maternal Health Service Provider)

"I think [the involvement of the mother-in-law is] a barrier to men being involved in care at every phase. And particularly postnatally. Because if grandmother has got the baby, he's not going to take the baby." (Maternal Health Service Provider)

COMMUNITY NORMS

Participant responses showed less in the way of community stigma or shame attached to men's presence or support than was expected. Many participants were supportive of men's presence in the delivery room and welcomed advice from fictional neighbours

or relatives that said they should attend ANC consultations. Whilst men often resorted to notions of productivity and responsibility for the contributions to the household, both women and men counted housework as a desired and unconditional component of men's assistance.

"As a husband he should always be there when his wife needs him, most of all in the pregnancy period. This period, a wife needs more than a financial support. Not only doing the housework but also after the birth he will be needed because at that time the wife has to rest, to recover after giving birth. A husband is a father so they need to be responsible for the needs of their household by providing food, clothes, shelter and take care of their health. He also needs to work hard to prepare for the future of the children."
(25 year-old female home-maker and mother of 2, Manelima)

Yet key-informants suggested that should men participate too greatly in housework there may be stigma attached, and similarly, with childcare.

"If the family really demands this man to become a man, really a man, they will say 'oh, why should you do all these things...you become the slave for your wife', or something like that, 'oh you know you're the slave for your wife, not the head of the family?'...If he just reminds [her] to eat more, to go to the clinic...that's fine, but if he comes to help, for example, cooking or washing, and that's regular, it's going to be bad." (Health Programming)

"I think for pregnant women now it is a little bit flexible, but for the kids, it's still very strict. For example, my staff [member] he's program manager of men's health, he's trying to take his own kids to the health facility, and it was getting a lot of attention. People say 'what happened to [you], where is your wife, why are you taking your children by yourself...Is your wife sick or [do] you have [a] problem with your wife? Why [are you] taking your kids here?'"
(Health Programming)

Stigma was addressed in the female group discussion, with participants providing contrasting views on its existence. Whilst one participant claimed communities would speak well of men who assisted their wives, two other participants suggested there would be shame attached.

"The communities will brag about him and say that he is a good man. The community will say 'he is a good man, before going to the farm or work he always does the housework first. He really cares about his wife'." (23 year-old female home-maker and mother of 4, Manelima)

"It is true that some communities will brag about them. But for some, they will stigmatize the woman when they see the husband is doing or helping with the housework. They will say things like 'look at that woman she making her husband do all of the work that she has to do'." (25 year-old female home-maker and mother of 2, Manelima)

"Sometimes the husband does help the wife. When the neighbor sees this, then they will say that that woman is very lazy she is letting her husband do the housework. Others of course will brag about him." (Female Manelima)

These norms around housework and childcare extend to the birth process. With most births still taking place at home, it means that in a number of suku, medical issues are managed through customary means, with skilled assistance sought when problems are too far advanced.

"This village or aldeia does not cooperate well with us until the last month of the pregnancy, and then they will not call doctor but call first the witch doctor. After one or two days of complications, they will call nurse."
(Health Service Provider)

"For the community, the majority of people believe in traditional ways...I am from [Manelima], so I know that many families from this area do not often go to the health centre. They still rely on traditional or herbal medicines to help deliver the baby." (Health Service Provider)

Despite other studies suggesting that women are encouraged to work little in the first six months and then work harder closer to the date of birth as this is thought to ease labour, only one participant mentioned this. But family remedies and traditional medicines arose as common, parallel processes to the formal medical system.

"For my first trimester I just rested, and in the second trimester I will start working a little bit, but then for the last semester I will

start doing a few heavy jobs to help with stimulating the baby's movement as this will help when you give birth." (25 year-old female home-maker and mother of 2, Manelima)

"In traditional ways in rural areas, I closely observed that there is no hygiene during the delivery process. We know that in our community they do not even use gloves to cover their hands when they are helping to deliver the baby...some of the elders also have traditional herbal medicines to help pregnant women to deliver the baby easily. But not all of these herbal medicines are safe. Some families always rely on traditional methods for delivering the baby in the family." (Health Service Provider)

"We used traditional medicine, a kind of herb to stop fertility, like family planning, however, it did not work. The medicine was recommended by an elderly man who we consider to be a traditional nurse." (37 year-old female teacher and mother of 7, Manelima)

HEALTH SYSTEM

Structural barriers within the health system were mentioned by male and female respondents, and acknowledged by health professionals as an inhibitor of male involvement and engagement.

Infrastructure for one, means that there are often multiple women in a single delivery room, with men prohibited from entering for privacy reasons.

Female participants were divided on whether they would allow the presence of another woman's husband in the same room as them, with some claiming it as inconsequential as men were there for their partners, whilst others were concerned for their personal privacy.

"In that unit there is always two women in the one room giving birth, so there is no privacy. So some of the midwives are reluctant to have a strange man in a labour room with a strange woman, so they often will make them stay outside. Which is absolutely awesome really, and entirely appropriate if we are doing intimate examinations to not have a male stranger observing that."
(Maternal Health Service Provider)

"I will feel very shy if there are other men present in the delivery room. Even though they accompany their wife during the delivery process, I would still feel ashamed since they are men." (40 year-old female home-maker and mother of 9, Orlalan)

"When I was in the delivery room with the other three women, their husbands were not there with them. It was only them, my husband, the nurses and I. If their husbands were also present, it would be alright with me since they are there for their wife." (30 year-old female home-maker and mother of 4, Orlalan)

Further infrastructure barriers included a lack of kitchens, private toilets and showers, and food for those accompanying their partners. And in rural areas distance to health facilities and transportation costs inhibit health facility based births and the mobility of men. Concerns were also raised about the availability of health staff. In Manelima, for instance, there was one doctor,

one nurse and one community health volunteer for the entire population. One informant also reported men may not allow their partners to give birth in health facilities because of a lack of female staff.

"The difficulty for us is transportation. We only have one ambulance and it is not working, it is still being fixed." (Maternal Health Service Provider)

"In some parts of Timor-Leste, some men do not allow their wives to give birth at the health centre because of shame...In some health posts there is no female nurse, only a male nurse, as a result men cannot allow their wives to give birth at the health post because the nurse is male...Not only the fathers feel ashamed about this, but also the mothers or the women." (Maternal Health Programming)

These structural barriers are reinforced by health policies that inadvertently exclude men.

When in labour, women are only allowed one additional person in the room, with this more often than not the grandmother, male partners are forced to wait outside.

Male participants frequently mentioned how they wished to be in the delivery room with their partner and were saddened by their inability to be present.

"I feel quite unhappy because I am her husband, if she needs something, who does she get help from? If they allow me to go in, I will just go and hold my wife's hand but what can I do, because the nurses do not allow us go in." (23 year-old male agricultural worker and father of 1, Manelima)

"It is good to allow men to be part of the delivery process. The reason I say this is because I never know what happens to my wife during childbirth. I felt so uncomfortable because I did not know what was going on with my wife while I was waiting." (Unemployed father of 3, Ma'abat)

Whilst informants flagged that there was a policy to include men in childbirth and ask women to bring their husbands to ANC visits, they believed it was weakly implemented and dependent on individual health staff.

With health providers often not perceiving the value of men's presence, when men are not being barred from access, health providers are often not pro-actively including them. Of concern were reports of poor staff attitudes and even regular physical violence committed against female patients.

"Especially in the delivery process there is a policy to involve the husband to be beside his wife, but the problem is...it depends on the health professional's character. So it's there, but it's very weak in implementation." (Health Programming)

"When I first arrived 2 and a half years ago, there was a sign saying 'mane labele tama', men you are not allowed to come in. So even two and a half years ago they had to get special permission to come into the [MNCH] unit, let alone into the labour ward." (Maternal Health Service Provider)

"I've seen patients be hit, where I work. I've seen patients be hit by doctors, not hard, a gentle slap, by midwives and by family members. So violence in obstetrics is a very real problem. And it's a huge barrier to encouraging participation where people are vulnerable." (Maternal Health Service Provider)

"For my second and third child they did not allow him to come in because they said that when my husband is there I'm too spoiled. I told the nurses that when I see my husband's face it gives me more energy. But then the nurses said no because they think I'm too spoiled when my husband is there." (27 year-old female home-maker and mother of 3, Ma'abat)

"I do not see any problems in the services of the doctors and nurses. I think that the biggest obstacle would be the health facilities. Every time a woman is in the delivery room, the facilities do not support them and their husbands." (Maternal Health Programming)

Participants and informants alike were unaware of any government programs targeting fathers. Whilst general programs, such as those on HIV and smoking, were raised, the main fatherhood orientated program was a community education effort conducted using a film, 'Bondia Antonio'. Informants suggested that by focusing health programming on women and children this was reinforcing the popular misconception that health was

a women's issue, making it harder to engage men in outreach efforts. Indeed, by focusing on women as care-givers maternal health programming may be inadvertently reinforcing gendered divisions of reproductive labour.

"Not only for reproductive health, but for all general health issues. If the ministry of health or even other NGOs come to deliver the health [programs], they do not give importance, usually they just ask only the women and children to come to this event. This is why it is not [men's] business, they feel it's not their business, only women and children business for the health things." (Family Planning Service Provider)

"The problem is that we don't really involve them, we don't consider them. Previously we only targeted mothers if we talk about pregnancy."

(Health Programming)

APPROACHES

To apply the information ascertained through this research process, research questions and interviews were tailored towards identifying entrance-points and points of leverage for engaging men. Informants were particularly important in this regard, providing feedback and suggestions on what may work and what doesn't work in the cultural context. Coding broke responses down into two core components, the influencers within men's lives and strategic approaches to working with men.

INFLUENCERS

All available data suggests that those with primary influence within men's lives are highly localised and closely related to the individual. Participants and informants drew attention to the importance of men's immediate family, elder peers, community leaders and health providers, with mothers deemed to play a decisive role in family health behaviours, access to knowledge and services, and engagement in positive health practices.

"The mother-in-law will tell the daughter, they will also share with the son all the [reproductive health] information, and the son will follow what he has been told because he knows his mother had more experience than him and his wife." (Maternal Health Programming)

"In the community the wife will trust their mother-in-law...and those who are close to their mother-in-law do not want to go to the health post to give birth, they will give birth at home assisted by the mother-in-law and with the help of a traditional nurse." (Maternal Health Programming)

"I think the community also should be targeting grandmothers. I've done some women's clinics in a church, and had lots of young women, lots of middle age women and a couple of grandmothers. So I brought the grandmothers into it, and the young women are saying 'what do we do about this?', and the grandmothers say 'no, in my day we do this', but after the hour the grandmothers say 'now I understand'." (Maternal Health Service Provider)

When men are at work, family and neighbours will assist pregnant women to health facilities, and with birthing in remote areas frequently taking place at home and assisted by parents and

aunts, family exert direct influence over reproductive health behaviours. This also means that examples set by family members and immediate peers are extremely influential in people's choices.

"After the birth of our child, me and my husband discuss to have a family planning. We were new to the process however because one of our family member is in family planning already she encouraged us to go for it." (20 year-old female home-maker and mother of 1, Orlalan)

"We believe in ourselves because in ancient times, we believed in our parents and grand-parents, and prior to that, people did not go to the hospital to have medicine because we did not believe in the medicine before, but we believe in ourselves." (45 year-old male agricultural worker and father of 10, Orlalan)

This receptivity to information and advice from neighbours and peers was reflected in male participants' responses to a hypothetical suggestion from a neighbour or acquaintance advising men to accompany their wife to the health facility. Respondents overwhelmingly reacted positively to this input, with nobody claiming this was a women's role. Informants explained that there have already been shifts in some communities, with it now expected that men accompany their wives to ANC.

"I will respond happily because it is great information, as we are far from the health centre, so it is good that someone would inform me, and I will bring my wife to the hospital for her safety." (29 year-old male teacher and father of 3, Orlalan)

Community leadership were also brought forth as conduits for health information, with one informant mentioning how a local priest was providing health advice and telling men they should accompany their wives during his sermon.

Informants drew attention to the need to work with the local leaders, including the head of the village, head of the sub-village, youth representatives and mature adults.

These persons carry weight in their communities and the distinct ability to localise macro-level changes.

"I think you can't just talk young men, I think you have to target the community because the community relies on the elders promoting behaviour change, and the community relies on elders and administrators changing systems. So the systems about antenatal care, about where they're delivering, how they transport." (Maternal Health Service Provider)

"It is difficult to mobilise the community, even to share very important information...only through the local leaders can we gather people in the community" (Maternal Health Programming)

Respondents, however, unequivocally claimed that they listened to and trusted doctors and nurses for health information. This aligns with informants' suggestions that men tend to follow the advice of doctors when making surgery-related decisions, and data showing women and men prefer to obtain health information from a health provider (5).

"The people in the village really believe in the government midwife because this midwife stays with them, living with them, so they will usually get the government midwife or the nurses to ask their husband because she is very influential." (Family Planning Service Provider)

"In the first month, when we met the nurses, they prepared many things for us and gave us much information, and then we have to follow it." (41 year-old male agricultural worker and father of 5, Manelima)

"I often get information from nurses, we should follow the schedule set by them." (23 year-old male agricultural worker and father of 1, Manelima)

This does contrast, though, with the experiences of key-informants, who suggest that in the face of customary birth practices new parents may neglect the advice of health professionals when this clashes with the advice of their elders. Informants in Manelima, for instance, suggested that delivering information and encouraging health facility births was extremely difficult, with efforts often ignored.

"I assisted a pregnant woman who was already 5 months pregnant, but never came for a consultation...After that I got a call for help...When I arrived I tested the baby in the womb, but the baby had already died. I called the ambulance and the ambulance arrived, but the family asked us to wait as they wanted to call the elders. The elders repeatedly said that the baby is still okay in the womb. Therefore, I couldn't resist much. So, I told the ambulance to go back and they used traditional medicine and they managed to deliver the baby but the baby was dead." (Health Service Provider)

Potential reasons for these contrasting claims include interviewer bias, with participants knowing that the research team were from a health provider, or as reflected in a number of quotes already presented, the influence and pressure of the elders outweighs the advice and recommendations of health professionals. Informants working in health programming were ebullient about the use of peer educators and peer examples as demonstrators for desired behaviours.

"Take a couple, people who already use contraception, to explain to [the community] how they feel about family planning...cause sometimes [the men] say 'IUD, use it and its very hard to have sex'....but no it's just rumours. The husband can explain to the other men...'no my wife uses this'... This we [can] use to change the behaviour of the men, [to get] the other men to think, no it's good, because we have testimonial from the same village, this family from the same village living together." (Family Planning Service Provider)

And informants emphasised that when delivering behaviour change materials, these should be delivered through localised sources, with communities able to identify with those delivering the message and viewing these messages as coming from internal rather than external influences.

That said, even if community leaders and nurses are delivering targeted information to families, and men are on-board with health-facility based birth, practical barriers frequently prevent this from occurring.

"The nurses and the local leaders have always emphasized that all pregnant women must be brought to the health centre or health post to give birth. Yet, the case for my first three children, they were all born at home because the ambulance came late to take me to the health centre. Just when they arrived, my baby was born." (33 year-old female home-maker and mother of 5, Manelima)

"In Manelima Lama it is far and difficult for pregnant women to give birth [in a health facility] because of the distance, road conditions and rain. Because it is hard to go to the hospital, we just go there to help them." (Health Service Provider)

"The worst thing in Manelima is that there are no signals for phone calls. We can call other people but others can't call [the health facility] because of unavailable signals." (Health Service Provider)

APPROACHES

Male and female participants consistently expressed desire for men to have more information on pregnancy and childbirth, with men receptive to advice they should accompany their partners to antenatal clinics. This, and the supportive actions men do take, indicate that there are strengths on which an approach to engaging men in MNCH can be built.

It is difficult to reach men. Men are often not available during clinic hours and it is difficult to recruit them for group education and outreach efforts.

Informants emphasised that there is a need to reach men where they are, in places they already congregate. This may also be more successful when conducted in locations that suggest men may be more receptive to health messaging.

One informant, for example, spoke of a successful program in Turkey which targeted men who were waiting in hospital for their female partners who were undergoing a health procedure with information on vasectomies.

Informants suggested men's personal health as an entrance point to addressing gendered norms in maternal health. It seems that as elsewhere, men have relatively less contact with the health system in Timor-Leste with them tending to view health programs as focused on women and children and not relevant to their lives. Suggested messaging was also linked to men's status as head of the family and productive role, working within their sense of responsibility and the cultural context.

"I always give some examples to the community, that in Timor we spend more money on funerals rather than birth, and to avoid spending more money we can take care of our wife during pregnancy." (Maternal Health Programming)

Examples of public health messages given by informants included:

- Strong men use their heart and their hands to protect and hold their wife and children.
- Be a smart and responsible man, look after your family's health.

Working within masculine roles must be approached with care. Whilst it does offer an entrance-point for the beginnings of a dialogue on gender equality and support for women's health, these messages do not reshape masculinity, rather, they reaffirm masculine tropes and risk solidifying male control over reproductive health. This may also occur if approaches use financial or practical incentives for behaviour change, for example, promoting contraceptive implants for the fact the health facility needs to be visited less often. Identified motivations for men's behaviour change—necessity, comprehension and care—may offer more suitable points of leverage.

Informants suggested a range of media for delivering behaviour change messaging. Even though television can be an effective medium for conveying information television ownership in Timor-Leste is limited. Radio ownership is much greater and may be a good method for information dissemination. Several informants suggested film works particularly well, especially when the content is localised and emotional, with issues communities can relate to. It was noted, however, that viewers must be carefully guided though the film otherwise the desired messaging may be lost.

There was consistent support for community education efforts, with poor health facility use and non-healthy behaviours often construed as the result of lack of knowledge and information.

It is critical that education efforts include information about normal and abnormal signs during pregnancy, delivered with peer educators, men's groups and influencers. These messages must also be supported by clear and understandable reasoning: one informant commented that whilst government programming encourages health-facility based births because it is 'better', there is no clear explanation given to consumers as to why this is.

Informants emphasised that messages be delivered through trusted people in the community. And it seems that whilst it is valuable to provide men's only spaces, a couple or relationship orientated approach may prove best.

This would allow power relations within the home to be adjusted, information asymmetries between partners addressed, and risk of distrust mitigated, through equality of access.

"I would probably start with partnerships, because I think if you've got a partnership or a relationship the information is going to be respected. If you just give the information without a relationship or a partnership, it's just information, it's meaningless. So I think you've got to build relationships. Who that's with, whether that's the local midwife or family, whether it's with the senior administrators of the community, whether it's with the [head of the suku] or with the men, I think you've got to build a relationship before the information is respected." (Maternal Health Service Provider)

Men's preoccupation with productive activities and lack of value attached to health means any form of approach needs to be a highly driven and motivated form of outreach. Highly localised and delivered through people men trust, programs should target the couple as a unit, inform and recruit parents, and have express support from the community leadership. Interventions may specifically target fathers who are having their first child. Men have expressed care for their partners, worry and anxiety over their partner's health and wellbeing, and excitement at being a new father: childbirth thus offers an opportunity for gendered change.

DISCUSSION

This qualitative inquiry set out to understand men's perceptions of their role in supporting maternal and newborn child health in Timor-Leste. In doing so, the research found that both men and women tend to perceive and frame the role of the father during pregnancy in terms of responsibility and control over family welfare, and in terms of their productive income earning capacities. Fathers also spoke of emotional attachment to their children and described pregnancy as a transition point between an amorphous 'irresponsible' single life into adulthood and defined responsibility.

Men's contributions during pregnancy tended to be embedded within these masculine notions of provision and protection, with fathers increasing their workload and purchasing food and clothing for their partner and future child. Practical actions men took were reminding their partner to not conduct certain activities, to attend ANC consultation appointments and to follow the advice provided by health professionals. They also engaged in housework, assisted with childcare, supported their partner's nutrition, and took action to support their partner's emotional wellbeing by checking on their condition, going for walks together and ensuring their partner was calm.

Despite these contributions, the research showed that men are less present during pregnancy, more supportive during birth and

in a short-term period post-partum. This manifested in low rates of attendance by men at health consultations and a lack of inquiry to midwives, doctors or nurses regarding their partner's health. It was evident that there were many specific actions that could be taken by men to improve maternal health outcomes, these include attending consultations with their partners, asking questions to health professional, learning about reproductive health, conducting housework and childcare, stopping smoking and drinking, saving money, and planning for emergency situations.

Men were motivated to display supportive attitudes and behaviours when it was truly necessary or when they had greater comprehension of the risks to the health of their partner or the importance of their support. The necessity component meant men were assisting when their partner was physically unable, or displaying supportive behaviours once their partner had developed complications. The counter-point to this is the numerous barriers that inhibit men's involvement, with men's individual attitude and knowledge about childbearing, family and community attitudes towards male involvement, and practical and health system barriers preventing men's greater presence during this time.

Key role models in the lives of Timorese men were difficult to define in the context of maternal health, but in the main, men tend to listen to and seek the advice of their family, elder peers, community leaders and health professionals. Strategies to motivate change in attitude and behaviours should leverage these influencers, use diverse media platforms such as film, television and radio, and work with couples within the context of their relationship rather than mirroring women-only approaches. The lack of value attached by men to reproductive health means

strategies should be pro-active, tailored to men's concerns, highly localised, and delivered through partnerships and trusted individuals in the community.

RELATIVE TO THE LITERATURE

The results contained within this paper confirm those from other contexts. Common across studies of male involvement are men's emphasis on their productive capacities and economic responsibilities, low rates of attendance at clinic visits, poor contributions to childbearing, engagement once pregnancy becomes life threatening and low attachment to young children (15,55,85,86). But also as in other studies of male involvement, there are some men who are going against entrenched norms and engage in healthy and supportive practices (87).

The practical ways in which Timorese men contribute to childbearing align with studies from contexts such as Nigeria, Uganda and Bangladesh, where men are also failing to attend ANC consultations but are encouraging their wife to attend, are paying medical bills, arranging for transportation to the clinic and reminding them of their clinic visits (35,55,86). Whilst in other studies women have expressed disappointment at the quantity of their partner's support (86), participants did not make significant value judgements on their partner's contributions.

Barriers to men's participation were identical to those identified in other countries, in particular, the influence of the mother-in-law, focus on economic responsibility, and the discouragement men face when encountering the health system (13,31,88). Where this

study differed, though, is in the relative importance of community stigma. Whilst informants and female FGD participants signalled this may be present, it appeared to be less so than in other contexts (15), and indeed, some women claimed that communities may 'brag' about men playing a more supportive role. Male respondents never outrightly claimed support was women's work, but that's not to say this attitude does not exist.

As elsewhere in the literature, men are expressing a desire to become more involved in pregnancy, a wish for greater knowledge about their family's health, and concern for their partners and children (13). Similarly, approaches for influencing men's participation were comparative to those in the systematic evaluations of gender-transformative work with men, but fall short of those seen as best-practice (10,34,89). This may be reflective of the limited state of gender-transformative work with men conducted in Timor-Leste. Informants did not know with great certainty what works in changing Timorese men's attitudes and behaviours.

This limited understanding of men and their gendered roles in Timor-Leste means that comparisons against local literature are difficult. That said, qualitative and quantitative research confirms men's role in reproductive health decision making (5,14,57), their productive role within the household (56), gendered divisions of household responsibilities (6), men's role in cultural ceremonies and customary birthing practices (7), male and female transgression of gendered divisions of work when deemed necessary (56,90,91), men's minor role in care-taking activities (56,63), and men's and women's often limited knowledge of reproductive health, emergency signs and ways to support women during pregnancy (65,92).

PATTERNS AND RELATIONSHIPS

From the outset of this inquiry it was expected that men would frame their contributions in productive terms. The consequence of this arises in two crucial ways of interpreting the data: opportunity cost and perceived value. Opportunity cost is a common economic term denoting the cost of the next best option foregone (93). Where this arises in maternal health is in the perceived opportunity cost to men's participation. Levels of household poverty combined with practical barriers, such as distance to health facilities, impose significant time requirements on care-seeking and consequently a large economic cost to the household from men's participation.

Proxies for household wealth indicate that many households in Manatuto are relatively impoverished and that the perceived consequences of a half-a-day of missed productivity are significant (79,80). This high opportunity cost interfaces with poor knowledge of reproductive health, limited awareness of signs of complications, and a perception of maternal health as the domain of women, such that it would appear men are unable to conceptualise the value in their presence. It is a natural corollary of this internal cost-benefit analysis that men only become involved when the situation is life-threatening. This seems to suggest that addressing men's involvement would encompass raising the perceived value until the perceived benefit outweighs the economic cost.

Economic realities are also closely tied to men's mobility. The volume of international labour migration appears to be relatively limited in Timor-Leste as compared other developing nations. But

with youth recognising the opportunities that labour migration can bring, a domestic labour market which can't absorb the estimated 15,000 new entrants per year and labour out-flows dominated by men (94,95), there may be a growing number of couples conducting distance relationships whilst pregnant. Moreover, significant travel times within Timor, rural-urban wealth disparities and the centralisation of private sector growth in urban centres means there may be a growing spatial barrier to men's support as they migrate internally in search of economic opportunity (95). Migration also has significant effects on gender and cultural norms (96).

The potential for engaging men also depends upon the renegotiation or displacement of established community-based systems for birthing. Community birthing systems co-exist with the formal health system, with birthing assistance provided by mothers or aunts and the sourcing of traditional medicine, traditional healers, and construction of a place for childbirth conducted by the male partner.

Whilst anecdotal evidence suggests there is a shift towards health-facility based birth, the persistent view that pregnancy is of little risk, combined with practical barriers to access, means that when addressing individual behaviours this must be coupled with broader alterations to the health system.

Implicit in this paper has been an assumption that health-facility based birth is preferential to birth at home. Yet the numerous barriers to facility based birth seem to suggest that home birth with a skilled birth attendant may be more practical. According to key-informants, home-births are associated with greater risk of adverse outcomes for mothers and infants. A midwife will often be called when birth is imminent, with them arriving post-birth or not at all. When they do attend, they carry only one medicine which is a preventative, not therapeutic treatment, and in an emergency, patients face identical barriers to accessing health treatment. With adequate care often not available in remote clinics, this may even mean patients are referred to Dili, meaning even greater delay and risk.

Delay is an important concept in obstetric complications and maternal health outcomes.

Three-quarters of maternal deaths result from direct obstetric causes, with the majority of these preventable with timely medical treatment (97).

The three-delay model breaks these into three phases: **DELAY** in deciding to seek care, **DELAY** in reaching adequate healthcare facilities, and **DELAY** in receiving adequate care at the facility (97).

From the common presence of complications and mortality in the narratives of research participants, pregnancy is clearly a time of

risk for Timorese women. The reactionary and temporal nature of men's involvement heightens potential delays. Shifting men into pro-activity, getting them to demand information and services, and most importantly, to plan ahead, could help mitigate potential delays at each phase.

IMPLICATIONS

Gendered divisions of power, resources and agency emanating from, and reinforced by, constructions of masculinity underpin household health behaviours in Timor-Leste. Addressing this means developing a more nuanced understanding of masculinity in Timor-Leste and ongoing transitions and shifts in local definitions of manhood. Gender-transformative interventions must use a systematic and sustained approach to programming that engenders change in the social-ecology at individual, interpersonal, community and societal levels (98). These ecological models have been highly important to primary-prevention work on violence against women and girls and are useful for interpreting the multiple tiers at which gender-transformative work needs to take place (98).

At present, men are involved in decision-making on women's health but have little information or knowledge. Women and men in Timor-Leste need information on reproductive health, and most importantly, they need to be able to understand it. The perceived value in male attendance needs to be raised, whilst simultaneously reducing the economic costs associated with this by improving road and transportation systems. Family members need to be involved throughout this process, and the health

system needs to evolve. Health staff need to value the presence of men (where they are not doing so already) and policies, procedures and infrastructure should facilitate their inclusion.

This study is a crucial step towards greater knowledge and understanding of gender and maternal health in Timor-Leste. Commonly, only the actions of women and girls are perceived to be gendered, with the gendered structures in which men and boys exist little explored by the literature or addressed in development programming. These results represent the beginnings of a research literature and development practice which focuses on gender as a relation and as power, whilst being firmly grounded in women's rights and empowerment. It is envisioned this paper will provide the theoretical basis on which further research or program interventions can pivot.

RECOMMENDATIONS

The following recommendations are intended to give broad guidance for a way forward. Specificities will need to be negotiated within the context of each community & reflexive in implementation. Whilst the contents of the paper contain many recommendations, the list below has been kept concise & should be read in conjunction with the gaps in knowledge identified in the literature review.

The identification of pregnancy as a liminal time in the lives of men indicates this may be a potential transition point in gender norms, particularly for young men & women pregnant with their first child. By addressing men prior to birth, we can set men up

to be more involved fathers not only during this time-period, but across their lifecycle. Consequently, this paper recommends the following:

1. Improve knowledge & understanding of reproductive health amongst women & men, boys & girls in Timor-Leste.
2. Conduct outreach work with men (particularly first-time fathers) to encourage their active participation in antenatal care & postnatal care consultations, & get them to ask questions to, & the advice of health professionals.
3. Identify simple actions in each community where men may be more open to change, & then leverage these in programming. For example, preparing food for children, making birth plans, asking questions to health professionals & being present at birth.
4. Reframe fatherhood in Timor-Leste in terms of care & concern, using a strengths-based approach to increase the value of men's participation in family & maternal health, & caring for young children.
5. Use an ecological approach to address gender norms in support of changes in men's actions & behaviours. Use mixed, highly localised media delivered through trusted individuals in the community.
6. Conduct interventions not only with male partners, but with mothers in particular, & the community in general. Work with couples individually, & as a unit.
7. Address practical barriers to healthcare seeking. This may include improved road systems, reliable ambulances, couple consultation days, men-only health clinics, & men-friendly opening hours or waiting rooms.

8. Use multi-sector approaches to address negative behaviours during pregnancy & post-partum, including smoking, excessive alcohol use, controlling behaviours & violence.
9. Improve the sensitivity of the health system to male engagement in maternal health. This may include training of health providers, tighter implementation of existing policies, & improved health infrastructure & staff attitudes towards all clients.
10. Integrate positive messaging on men's involvement in family health into existing public health campaigns, such as smoking, & review public health materials to ensure they depict men & boys engaging in maternal health.
11. Ensure all gender work with men & boys is carefully monitored & evaluated to gain greater understanding of how behaviour change works in Timor-Leste.
12. Build gender transformative interventions with men & boys in alliance with the women's movement, & ensure their participation is always framed within women's rights & with the aim of women's empowerment.

CONCLUSION

This inquiry has shown that there is great potential to increase the involvement of men in maternal health, and address the delays in health seeking behaviours that underpin Timor-Leste's maternal mortality ratio. But when doing so, approaches must be careful not to focus simply on men's actions as an end in themselves. They should address the socio-cultural and gendered environment in which these behaviours exist using ecological approaches.

Strategies must be designed in dialogue and alliance with the women's movement, be mindful of the established risks in engaging men and put appropriate risk treatment measures in place. Given gender-transformative work with men is a nascent area in Timor-Leste, implementation efforts need to be effectively monitored and evaluated so the development community can learn from practice.

The rationale is quite clear: improving men's involvement in maternal health could improve delivery of preventative healthcare, reduce delays in care-seeking during pregnancy, reduce the number of maternal deaths and cause an inter-generational shift in gender relations in Timor-Leste.

NOTES

1. Cooperativo Café Timor delivers a men's health program in Ermera municipality, focusing not only on men's personal health but engaging them in MNCH using peer-education and self-selected men's groups. UNFPA has conducted community-outreach work using film and group discussions on the role of men in maternal and family health, and USAID's Health Improvement Project (HADIAK) has incorporated men's perspectives and experiences into their work through an initial mixed-methods research project—The Three Delays Study—and action planning with the Ministry of Health across the study sites of Ermera, Manatuto and Oecusse. There are many other stakeholders working at the intersections of men, masculinities and MNCH in Timor-Leste, and their contributions to building this field have been acknowledged, recognised and valued through inclusion as informants and reviewers for this project.
2. There are four levels of administrative division in Timor-Leste. At its highest level Timor-Leste is divided into 13 municipalities. These 13 municipalities are then divided into 67 administrative posts (AP), with one designated as the capital. APs can vary between 2 & 18 per municipality & are divided into villages, or suku. There are a total of 498 villages with these comprised of one or many aldeia (hamlets) (76,77).

3. These employment statistics do not refer to the working age population, but rather the population aged 10 years & over (79).
4. A health post is the first level of contact at the community. It is staffed with a nurse & a midwife & is designed to deliver a minimum package of curative, preventive & promotive care. It is generally outpatient only, & can provide simple first aid, immunisations & check-ups. A community health centre (CHC) provides inpatient & outpatient services, has facilities for short-term admissions, 4-6 beds, maternal & newborn care facilities, pharmacy & a laboratory (for simple blood work). Selected CHCs also offer dental & laboratory services. CHC staffing includes a physician (the district medical officer) & CHCs organise mobile clinics for remote areas where health posts are not established.
5. Liminality is an anthropological term used to denote a period or situation of transition, typically used to mark the period in rituals when individuals are moving between two states of being (84).

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FOOTNOTES

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ENGAGING MEN

A QUALITATIVE INQUIRY
INTO THE PERSPECTIVES
OF **MEN** ON **MATERNAL** &
NEWBORN CHILD HEALTH
IN TIMOR-LESTE