POLICY BRIEF

Supporting safe and equitable sanitation for infants and young children in Solomon Islands

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KEY MESSAGES FOR POLICYMAKERS

1. High rates of open defecation exist amongst young children and infants in the Solomon Islands. Sometimes this is direct open defecation, in which young children defecate in the ground, in bushes, mangroves or the sea. But it can also occur when children’s faeces are not safely disposed of, for example unsafe disposal of faeces from nappies, diapers or other methods used to capture the faeces of infants and young children. The results are the same – children’s faeces remain in the environment, presenting risks to human health of children and all in the community.

2. Attention to and addressing of child faeces management is often a gap in sanitation programming, and it is important to address it to reduce pathogen transmission pathways in communities. The CLTS approach in many countries, including Solomon Islands, typically does not specifically address the sanitation needs of young children and infants.

3. Safe child faeces management (CFM) faeces is defined as “disposal of child faeces in a toilet connected to safe sanitation chain...” (especially where solid waste management systems for nappy disposal are not safe) (World Health Organization [WHO], 2018). The burying of children’s faeces can be done safely in some situations, but it is difficult to know when it is safe and when it is not, and so widespread promotion of burial is not recommended as a method of safe CFM. In the context of rural Solomon Islands villages, safe CFM involves ensuring children’s faeces are disposed into a latrine or toilet. This can be achieved by emptying nappies and diapers into the latrine, or transport faeces from the ground to a latrine using a tool such as a spade.

4. Safe CFM is the responsibility of parents – both mothers and fathers. Both women and men have noted that gender norms are changing, and it is acceptable – in fact encouraged – for fathers and men to play a more hands-on role in child care. This includes playing an active role in disposing of children’s faeces to latrines at any time – not only when mothers are not available.

5. Mainstreaming approaches to address gender inequalities within sanitation programs is important and can be effective. CFM interventions are a good vehicle for addressing issues around gender imbalances because both mothers and fathers are motivated to care for their children. Nonetheless, there remains a critical need for strategies and activities to specifically address foundational gender inequalities in society, as mainstreamed gender approaches such as this – on their own - may not address all manifestations of gender inequalities.

6. A behaviour-change approach to improving safe CFM that targets parents with positive messaging, to influence the psycho-social drivers of their behaviour, can be effective in changing attitudes. Affirmative messages, positive motivations and the use of humour are more likely to be effective that negative (shame-based) behavioural interventions, and in the interests of “doing no harm” these should be pursued for CFM where possible.

7. Additional barriers may influence the uptake of safe CFM, such as a lack of convenient access to a latrine. In communities with low coverage of safe sanitation, as is common in Solomon Islands, it will be especially difficult to achieve safe CFM.

In rural Solomon Islands villages, safe CFM can be achieved by emptying nappies and diapers into the latrine, or transport faeces from the ground using a tool such as a spade, cardboard or other local materials.
8. As well as understanding which local factors influence behaviour, it is also important to consider the most appropriate communication channels. The use of tok stori in community engagement in rural Solomon Islands is a culturally appropriate and participatory way of addressing issues such as CFM. This can be supported by engaging and fun activities such as video stories and role playing.

9. Behavioural CFM approaches such as that described here, should be embedded within, or follow on from, a broader sanitation program which seeks to improve sanitation practices. As well as addressing the critical barrier of inadequate access to latrines, embedding CFM promotion within a broader sanitation program has added benefits:

- **Reenforcing common messages**, and providing additional motivations, across different sanitation activities. For example, a CFM approach that focuses on disposal to latrines also reinforces the importance of, and motivates, actions towards households owning a latrine.

- **Providing structure to follow-up visits**, by being able to conduct specific activities. For example, for CLTS follow-up visits are important to maintain the motivation and sustainability of the sanitation demand approach. In the Solomon Islands these follow-up activities don’t include specific activities to be conducted during the visit, and in some cases, implementers find it challenging to engage the broader community, of parts of it, in their follow-ups. Where possible, follow-up visits should include at least one structured activity, allowing implementers to have a clear purpose and method to engage with the community.

**SAFE & EQUITABLE CFM RESEARCH**

The objective of the safe & equitable Child Faeces Management (CFM) research project was to research and develop a communication-based intervention, based on psycho-social and technological factors, that could improve safe IFM by Solomon Islanders, and that could change inequitable CFM gender norms.

This research provides evidence appropriate to Solomon Islands about CFM and how this might be influenced. Although many findings will be specific to the Solomon Islands context, there are lessons and insights that will be useful to the broader Pacific Island region, and given the paucity of such information globally, also to other places outside this region.

The research involved two phases. PHASE 1 research sought to understand existing CFM practices and associate attitudes and knowledge. This included exploring not only safe and unsafe CFM behaviours, but also the gender norms associated with CFM. The purpose was to identify key determinants – factors that are key to influencing CFM – that could be used to design a behaviour change intervention. PHASE 2 activities focussed on designing such an intervention, suited to the Solomon Islands context, and piloting this.

Based on this 3-year research program, several key lessons have emerged for practitioners. This Practitioner Brief outlines some of the most important.

More information about the research program can be found here:

[www.watercentre.org/research/cfm](http://www.watercentre.org/research/cfm)
Why is CHILD FAECES MANAGEMENT (CFM) important?

Unsafe or inadequate sanitation of human waste can expose people to the pathogens that are often in human faeces. These faecally-spread pathogens are linked to a high disease and ill-health burdens, including nutritional deficits, trachoma, schistosomiasis, diarrheal disease, and infections from soil-transmitted helminths (Freeman et al., 2017). One of the potential sources of faecal contamination is poor child faeces management.

In Solomon Islands, access to sanitation in rural areas is stubbornly low and open defecation is common, whilst young children (less than 5 years old) are disproportionately affected by diarrhoeal disease and other enteric infections. One of the identified risk factors for child ill-health is unsafe and unhygienic management of children’s faeces, which can contribute to the risk of diarrhoeal disease, soil-transmitted infections, and stunting in children (Brown et al., 2013; Bukenya et al., 1990).

The safe CFM is particularly relevant in the Solomon Islands because:

- Diarrhoea is a leading cause of childhood mortality, causing ~25% of childhood deaths.
- Child malnutrition and stunting affect 33% of children, and
- 80% of the population live in rural areas, where there is 80% open-defecation, and only 16% have a handwashing facility with soap (Government of Solomon Islands, 2015).

Unsafe CFM, or the failure to separate and contain the faeces of young children, poses major health concerns to Solomon Islanders due to combination of situational variables. These include overall insufficient water, sanitation, and hygiene (WASH) - low rates of access to safe sanitation facilities, varying knowledge and beliefs about the safety of children’s faeces, and a higher potential for pathogen transmission from faeces to children due to their playing behaviours in their environment, which brings them into contact with contaminated surfaces and objects.

The management of infant and young children’s faeces remains a gap in many sanitations service chains, interventions and policies throughout the world, however it is a necessary issue to address in order to progress SDG6.2 – access to adequate and equitable sanitation and hygiene for all and end open defecation.

Sanitation programmes aimed at increasing latrine usage among adults are unlikely to work in changing the behaviour of children who may be too young to use a latrine or who have not been trained or encouraged to use a latrine (Bauza et al., 2020). If children are not using a toilet directly, the caregiver must carefully pick up and dispose of children’s excrement into a latrine (Bauza et al., 2020). This is now considered by the world Health Organisation as the only reliably safe method of child faeces management (WHO, 2018).
Existing sanitation programs

The Solomon Islands Government (SIG) is committed to improving sanitation across all rural areas and implementing demand-based approaches, particularly Community-Led Total Sanitation (CLTS). At present, the Solomon Islands CLTS approach does not explicitly address CFM, and there is an opportunity to incorporate a CFM component or implement a subsequent intervention that complements CLTS to address CFM explicitly.

The Solomon Islands Rural Sanitation Policy was designed to address the broader sanitation situation in the country, and is based on sanitation promotion through CLTS (Government of Solomon Islands, 2017). The National Sanitation Plan (Government of Solomon Islands, 2017) and community engagement guidelines outline the approach to improve sanitation and hygiene. However, they do not currently address CFM despite young children comprising 15% of the population (Government of Solomon Islands, 2009).

Experience elsewhere has been that improvements to ‘household’ sanitation, without including a focus on CFM, have very little effect on CFM practice in households (Freeman et al., 2016) and it has been argued that efforts are required to actively integrate promotion of safe CFM within sanitation programmes.

In a global review of CLTS-types of approaches, adapted for local use, it appeared that few of these include specifically targeting infants or young children, and none included discussion or promotion of hardware to support safe child faeces management (Marjorin et al., 2019). A review of CLTS processes and protocols in Sub-Saharan Africa said that most countries’ CLTS programmes require children’s faeces to be safely disposed of. However, only two out of 15 countries reviewed had an indicator for child faeces disposal (Thomas and Bevan, 2013).

Prior to this time there was no locally-relevant communication materials for promoting CFM in Solomon Islands. Through this research project, a CFM behaviour-change intervention has been developed: “Safe and equitable child faeces management in Solomon Islands”.

This CFM intervention is designed specifically for the Solomon Islands context – it is based on evidence from rural communities about CFM practices, and is designed to be integrated with CLTS programs.

Addressing the gender inequities of safe CFM

The fact that women and older children, mainly siblings, are likely to bear major responsibility for childcare duties complicates the efforts to improve child faeces management. An improvement in CFM practices, that focuses on those that currently have responsibility, could further increase the burden of work on women and children.

However, breaking ingrained gender norms can be a lengthy and laborious process that, if not done carefully, can expose women and children to dangerous male retaliation. Severe backlash – rejection by men that the responsibility for safe CFM should be shared with them and which results in abuse could be exhibited by some men, who may reject modernisation of gender roles and associated changes in the dynamics of interpersonal power.

Unlike research from Papua New Guinea (Kamundi et al., 2017), this CFM research in Solomon Islands indicated that there appeared a low risk of harm to women if fathers and men are encouraged to take on active roles in safe CFM (at least in these study areas within Solomon Islands). There was no evidence that women within the research villages were fearful of backlash from men or other women (such as older women), or, were concerned about involving their family men, and their communities more broadly, in CFM. In fact, during all research phases (formative research, baseline and endline assessments, intervention activities), women regularly and confidently called for more involvement of fathers and men in CFM; in this case this intervention is not recommended, and instead greater attention on addressing inequitable gender norms is preferred, through targeted gender and social inclusions strategies.

During the pilot of the intervention, some parents suggested culture was a leading reason for CFM to be the responsibility of mothers, and this was raised by both men and women. This includes a perception that culture or kastom dictated a man should not be involved in CFM and doing so may lead to witchcraft or black magic outcomes. However, there was
some indication of changing social gender norms related to CFM – these were not initiated by the intervention activities but these activities reinforced these changing attitudes and beliefs. A number of fathers and mothers suggested that the involvement of men in childcare had changed over time, sometimes in response to the presence of the Church. Following the intervention, women reported greater confidence to discuss these changes with male family members.

The approach to gender in this intervention is to mainstream it with the CFM activities. This is because many sanitation programs already include activities specifically targeting broader gender norms and roles, and also because of the intention to develop a simple intervention that can be incorporated into existing programs. The mainstreaming approach to influencing gender norms involved improving the voice of women specifically relating to CFM and to parenting young children, and, providing a shared space for parents to talk about a shared domestic issue so that men were more equipped and confident to engage in conversations around CFM. Following the CFM intervention there were reports that women were able to speak more to their husband about the issue, and that within the community it was more acceptable for men to discuss and promote safe sanitation and CFM.

During the piloting of the CFM intervention, there was a reduction in the reported open defecation by children (defecating on the ground outside, in the bush, by the sea or other public places). This was accompanied by an increase in the use of nappies and diapers; mothers also noted an increase in use of the latrine by younger children, but fathers did not. Researchers elsewhere have found that decision-making on purchasing of diapers and nappies is by a combination of both parents when traditional domestic/breadwinner roles are established, while the decision about when to commence latrine training is mostly the decision of the primary caregiver (Majorin et al., 2019). This might offer one explanation as to the shift away from open defecation amongst young children towards nappies and diapers rather towards the use of the latrines by those children – perhaps men manifest their motivation to improve CFM through the actions most common to them, which is supporting the use of nappies/diapers rather than latrine training of their children.

The pilot also found that following the CFM intervention, more men had the attitude that fathers’ involvement in CFM is important, and that disposal of children’s faeces to latrines is easy. It was also clear that more men increased their knowledge about the harm of children’s faeces to human health.
Influencing the CFM behaviours of parents

The CFM intervention was designing using theories of human behaviour change and formative research conducted in the Solomon Islands – for more information read the Research reports from the CFM research project here: www.watercentre.org/research/cfm

Proper and complete safe CFM involves a sequence of behaviours actions:

- defecation by the child
- capture of the faeces in a nappy/diaper/other
- transport of the faeces (for open defecation, using a tool such as a spade)
- disposal of the faeces into a latrine or toilet
- cleaning of the child
- cleaning of any tools or nappies used for transporting faeces
- washing hands

Although the cleaning of tools, hands, and children, are all important steps, the focus of this behaviour change communication is on the transport and disposal steps. This is because access to water and sanitation and hygiene practices generally are poor in most rural communities that addressing all of these behaviours in the CFM chain would require a much larger intervention, and safely disposing of children’s faeces will be an important contribution to stopping the spread of faecal pathogens from this source.

The CFM intervention focuses on encouraging and improving how parents and carers move young children’s faeces and where they dispose of it. Most commonly, this is needed when their small and mobile child defecates on the ground near the house. The intervention encourages parents to use a “tool” such as a spade, piece of cardboard, or other local materials, to move the faeces to their latrine or toilet for disposal.

The benefits of these behaviours include removing faeces from where the children are likely to play, meaning they are less likely to accidentally put the poo into their mouths, reducing the chance of transmitting pathogens and disease through the faeces, to other members of the family, improving the health of the whole family, through the faeces not coming into contact with people.

But most parents already know about these benefits through past education and awareness activities. And, most people’s attitude towards faeces left in the open is negative – they don’t like it. But, still not all parents and carers move children’s poo to the latrine. This tells us other messages are required to motivate people to safely dispose of children’s faeces.

The Promoting safe and equitable CFM in Solomon Islands toolkit includes an implementation guide supported by communication resources and background information. The toolkit is available from www.watercentre.org/research/cfm.

The implementation guide sets out four modules for CFM-focused community engagement, designed to be incorporated into sanitation programming such as CLTS.

The “Promoting safe and equitable child faeces management in Solomon Islands” intervention is designed for the Solomon Islands context and designed to be integrated to CLTS programs. The activities described in the implementation guide are implemented as part of the standard CLTS implementation steps – these activities do not require extra steps beyond the planned CLTS visits.

However, the resources and activities could be adapted to other similar contexts where CLTS and other sanitation programs addressing open defecation are being implemented.
References


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Cover image: Father and child, Guadalcanal Province, Solomon Islands (Photo: C. Lifoia, SINU)