Protecting and improving breastfeeding practices during a major emergency: lessons learnt from the baby tents in Haiti

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Problem The 2010 earthquake in Haiti displaced about 1.5 million people, many of them into camps for internally displaced persons. It was expected that disruption of breastfeeding practices would lead to increased infant morbidity, malnutrition and mortality.

Approach Haiti's health ministry and the United Nations Children's Fund, in collaboration with local and international nongovernmental organizations, established baby tents in the areas affected by the earthquake. The tents provided a safe place for mothers to breastfeed and for non-breastfed infants to receive ready-to-use infant formula. Such a large and coordinated baby tent response in an emergency context had never been mounted before anywhere in the world.

Local setting Baby tents were set up in five cities but mainly in Port-au-Prince, where the majority of Haiti's 1555 camps for displaced persons had been established.

Relevant changes Between February 2010 and June 2012, 193 baby tents were set up; 180 499 mother-infant pairs and 52 503 pregnant women were registered in the baby tent programme. Of infants younger than 6 months, 70% were reported to be exclusively breastfed and 10% of the "mixed feeders" moved to exclusive breastfeeding while enrolled. In 2010, 13.5% of registered infants could not be breastfed. These infants received ready-to-use infant formula.

Lessons learnt Thanks to rapid programme scale-up, breastfeeding practices remained undisrupted. However, better evaluation methods and comprehensive guidance on the implementation and monitoring of baby tents are needed for future emergencies, along with a clear strategy for transitioning baby tent activities into facility and community programmes.

Abstracts in عربى, 中文, Français, Русский and Español at the end of each article.

Background

On 12 January 2010, an earthquake measuring 7.3 on the Richter scale hit Haiti. Its epicentre was close to Port-au-Prince, the capital city. Overall, about 3 million people, or 30% of the country's population, were affected - half of them children. Approximately 300 000 people were killed and another 300 000 were injured.1 The earthquake destroyed homes and forced 1.5 million people into displacement.² Many of these people took up residence in one of the country's 1555 crowded camps for internally displaced persons.³ Port-au-Prince, where the majority of the camps were established, was already home to a poor population with little access to basic social services. The rate of exclusive breastfeeding (21.7%) in the city was the lowest in the country even before the earthquake and there was fear that breastfeeding practices would be further jeopardized during the emergency.4

The humanitarian response to the crisis was fast and multifaceted. In collaboration with local and international nongovernmental organizations (NGOs), the Haitian health ministry and the United Nations Children's Fund (UNICEF) established baby tents (points de conseils en nutrition pour bébés [infant nutrition counselling units]) throughout the areas affected by the earthquake (the cities of Port-au-Prince, Jacmel, Leogane, Petit Goave and Gonaive). Similar smaller initiatives, described elsewhere, had been launched in Bosnia, Kenya, the Philippines and the United Republic of Tanzania

in response to various types of emergencies.^{5,6} These initiatives helped to inform Haiti's response, but Haiti's baby tent programme was the world's largest coordinated response of its kind in an emergency context.

In this article we describe Haiti's baby tent strategy, the results achieved, the challenges encountered and some potential ways to address these challenges. We also discuss certain recommended features of future emergency programmes in support of infant and young child feeding.

Context

Before the earthquake

According to empirical evidence, 19% of all deaths among children younger than 5 years in the developing world could be prevented through appropriate infant and young child feeding practices.⁷ In Haiti, implementation of the infant and young child feeding practices recommended by the World Health Organization (WHO) and UNICEF was hindered by certain circumstances and beliefs. 8-10 For example, infants were often separated from their working mothers during the day and some people felt that the first milk was "dirty" and harmful to neonates. According to the 2005-2006 Demographic and Health Survey, 44% of Haitian mothers initiated breastfeeding immediately after birth and 41% of infants less than 6 months old were exclusively breastfed. Of infants in this age group,

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another 23.7% were prematurely given liquid, semi-solid and solid foods of suboptimal quality.11

After the earthquake

Haiti's health ministry and nutrition partners (UNICEF, WHO, the United Nations World Food Programme and various NGOs) feared that harsh living conditions in the camps for displaced persons would lead to the abandonment of appropriate infant and child feeding practices. They also realized that infants whose mothers had died or were missing would need to be fed and cared for. There were also fears that a flood of donated infant formula and milk products would lead to the uncontrolled distribution of these products and to increased rates of diarrhoea and death among infants as a result of unhygienic bottle feeding practices. Haiti had been a recipient of donations of all kinds from the United States of America for decades. In the weeks immediately after the earthquake, Haiti received infant feeding products from different countries in enormous quantities, in violation of the International Code on the Marketing of Breast Milk Substitutes, which restricts the marketing of breast-milk substitutes to protect breastfeeding.¹²

It became clear that infant feeding had to be facilitated through the creation of spaces where mothers could receive antenatal and postnatal counselling and safely breastfeed their infants, and where infants who could not be breastfed (e.g. orphans and infants separated from their mothers) could be given ready-touse infant formula. This led to the establishment of the baby tent programme.

The baby tents

The goal of the baby tent programme was to promote and sustain optimal infant feeding practices while reducing the health risks associated with the unregulated use of infant formula. Baby tents were relaxed, friendly and stimulating spaces where mothers could breastfeed comfortably and be supported by a trained counsellor and their own peers. The tents were spacious, light, clean, attractive and, in places with electric power, equipped with fans. Safe drinking water was available and there were mats and mattresses for sitting and relaxing. The tents were often decorated with child feeding balloons and posters and children's songs were played in some of them between other activities.

The tents operated 6 to 7 days a week, as prescribed by the national guidelines developed by the health ministry and Haiti's nutrition cluster partners. Activities included registration and assessment of the feeding and nutritional status of new mother-infant pairs and pregnant women; individual nutrition counselling of pregnant and breastfeeding women; counselling of caretakers of non-breastfeeding infants on ready-to-use infant formula; infant growth monitoring; and group education sessions on health and nutrition, childcare and the caretaker-child relationship. Children with acute malnutrition were transferred to the closest government-run or NGO-run nutrition programme, as appropriate; those with other severe medical conditions, such as dehydration or pneumonia, were transferred to the closest health centre.

In some baby tents, pregnant women were given iron and folate tablets to prevent anaemia and birth defects; children received vitamin A, deworming tablets, zinc and oral rehydration salts for non-life-threatening dehydration resulting from diarrhoea. In addition, psychosocial support services were provided and caregivers with major psychosocial problems were referred to specialized psychiatric services.

The staff of a baby tent included a social worker, a guard and a nurse in charge. The nurse had overall responsibility for the tent, performed all the nutritional and health assessments and saw to it that all reports were written and correct. Tents providing psychosocial support had a psychologist on the staff. One individual routinely supervised four baby tents.

Women came and went with their children throughout the day. Every morning and sometimes in the early afternoons, nutrition staff members conducted community awareness and participation activities in the camps with the use of megaphones. They also paid home visits, sometimes assisted by the psychologist. Home visits were conducted to encourage absentee mothers or caretakers to return to the tents; to counsel mothers experiencing breastfeeding difficulties; to see if the caretakers of infants who could not be breastfed were using ready-to-use infant formula and to investigate why some infants were losing weight.

Baby tent activities were recorded in a register and updated daily. Admission, discharge and transfer data were collected and managed using a standardized form and an information system. Such data were shared monthly. The data presented here were therefore obtained from the nutrition cluster database. Breastfeeding data are cumulative (February 2010 to June 2012) and data on infants receiving ready-to-use infant formula are for 2010 only, as this component of the programme ended in February 2011.

Programme results

Table 1 outlines key programme results. Overall, 193 baby tents were established after the earthquake: 108 in 2010 and 85 in 2011. They were attended by 180 499 infant-mother pairs and 52 503 pregnant women over a period of 29 months. Of the 180 499 infants enrolled, 54% (97 469) were less than 6 months old - the age group for which exclusive breastfeeding is the international recommendation. Of these younger infants, 70% (67759) were exclusively breastfed as recommended; of the other 30% - those who reportedly received "mixed feeding" (i.e. breast milk plus other foods or liquids) - 10% moved to exclusive breastfeeding before the end of their participation in the baby tent programme. In 2010, 13.5% of all infants less than 12 months old who participated in the programme (i.e. 8787) had no possibility of being breastfed and hence were given ready-to-use infant formula for up to 6 months. The main lessons learnt from this programme are summarized in Box 1.

Challenges and potential solutions

Establishing the baby tent programme proved challenging in several respects. Before the earthquake breastfeeding practices and guidelines were generally poor. Training materials for workers and programme monitoring tools on optimal infant feeding practices appropriate for the Haitian context, particularly on the use of ready-to-use infant formula, did not exist. Following the earthquake, the health ministry was severely weakened and there arose an urgent need for trained health workers who could provide counselling and for qualified psychologists, which were very few. The displacement of large numbers of people and the lack of social cohesion made it

Table 1. Number of baby tents and their beneficiaries in terms of enrolment and fraction of infants who received ready-to-use infant formula or exclusive breastfeeding

Year	No. of baby tents ^a established	No. of mother— infant pairs enrolled	No. of pregnant women enrolled	No. of infants enrolled	No. of infants < 12 months old on ready-to-use infant formula ^b	No. of infants < 6 months old with possibility of being breastfed ^c	No. of children < 6 months old who were exclusively breastfed
2010	108	65 216	10 040	65 216	8787	31 677	22319
2011	85	80 021	29300	80 021	-	45 238	31 396
2012 ^d	0	35 262	13 163	35 262	-	19 971	14 044
Total	193	180 499	52 503	180 499	8787	96 886	67 759

- ^a Officially known as points de conseils en nutrition pour bébés.
- ^b Ready-to-use infant formula was given in 2010 only.
- ^c Infants receiving ready-to-use infant formula were, by definition, excluded from this category.
- d January to June only.

Box 1. **Summary of main lessons learnt**

- It is important to promote optimal infant and young child feeding practices through people with effective counselling skills during times of normality, before disaster strikes.
- There is a need for clear and easily adaptable infant feeding guidelines for emergencies that include a set of minimum implementation and reporting standards and monitoring tools for use at the individual and project levels.
- Involvement of community leaders and caregivers in the design and implementation of baby tent programmes are essential to ensure community awareness, participation and follow-up.

difficult to ensure community participation in baby tent programmes and to follow up some of those mothers and infants who participated. Maintaining confidentiality while integrating infant and young child feeding practices and providing psychosocial support to mothers was also very difficult. Equally challenging was determining how many infants needed ready-to-use infant formula and how much formula would be needed; setting criteria for determining when an infant could never be breastfed; procuring enough infant formula in generic, uniform units of a single serving, and managing formula stocks. Because of space constraints, readyto-use infant formula was distributed in the same tents where breastfeeding counselling was conducted and this may discourage mothers who could breastfeed. Urban mothers often worked or had to procure food outside their home and had to leave their children with others. The impact of the earthquake on the environment was not negligible either: larger tins containing ready-to-use infant formula led to

spoilage; smaller tins generated more plastic debris. The forms used initially to monitor and report programme activities went through several revisions because they contained too many variables. Finally, transitioning from baby tents to infant and young child feeding practices sustainable over the longer term proved to be an arduous process. The same was true of efforts to integrate these practices within health centres.

To overcome these challenges, optimal infant and young child feeding practices were intensely promoted within baby tents and in the community using culturally appropriate messages and materials. Counsellors and health professionals were trained in counselling techniques and in infant and young child feeding practices; community leaders and caregivers became involved in baby tent programme activities and were empowered from the beginning and throughout; national guidelines, monitoring tools and training materials and job aids on infant and young child feeding were developed in Haitian Creole and a central database was established.

Other important measures might be applied in future catastrophes. Psychologists can be identified before the emergency. Confidential space for psychosocial support can be created. Before ordering ready-to-use infant formula, a census can be conducted to find out how many infants will need it. Flexibility should be exercised in setting and adhering to criteria for identifying infants who have no possibility of being breastfed. Ready-to-use infant formula should be procured in generic, uniform units of a single serving with identical instructions and should comply with labelling codes. It will also be essential to establish a robust mechanism for managing ready-to-use infant formula stocks and waste; to spatially separate the distribution of infant formula from the provision of breastfeeding counselling; to ensure a post-emergency baby tent exit strategy in which "model mothers" continue to receive support in their role as counsellors on infant feeding practices in each community and in which the population is informed about the reintegration of baby tent activities into existing health and community structures. Finally, UNICEF and WHO should consider issuing a joint statement or developing a global policy on baby tents as a component of any response to emergencies that could jeopardize infant feeding practices.

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حماية ممارسات الرضاعة الطبيعية وتحسينها أثناء حالة طوارئ كبرى: الدروس المستفادة من خيام الأطفال في هايتي المشكلة أدى الزلزال الذي ضرب هايتي في 2010 إلى تشريد حوالي هايتي البالغ عددها 1555 غيماً للأشخاص المشردين.

التغيرات ذات الصلة في الفترة من شباط/ فبراير 2010 إلى حزيران/ يونيو 2012، تم إنشاء 193 خيمة للأطفال؛ وتم تسَجّيل 180499 زوجاً من الأمهات وأطفالهن و52503 سيدة حامل في برنامج خيام الأطفال. وتم الإبلاغ عن إرضاع 70 ٪ من إجمالي الرضع الذين تقل أعهارهم عن 6 أشهر رضاعة طبيعية خالصة وتحول 10 ٪ من الرضع الذين يتلقون "تغذية مختلطة" إلى الرضاعة الطبيعية الخالصة أثناء تسجيلهم. وفي 2010، تعذر إرضاع 13.5 ٪ من الرضع المسجلين رضاعة طبيعية. وتلقى هؤلاء الرضع الغذاء البديل عن لبن الأم الجاهز للاستخدام. الدروس المستفادة بفضل الاستنهاض السريع للبرنامج ، ظلت ممارسات الرضاعة الطبيعية مستمرة. ومع ذلك، لابد من وجود طرق تقييم أفضل وإرشاد شامل حول تنفيذ خيام الرضع ومراقبتها من أجل الطوارئ المستقبلية، بالإضافة إلى وجود استراتيجية واضحة لتحويل أنشطة حيام الرضع إلى برامج مرفقية ومجتمعية.

1.5 مليون شخص، وكان العديد منَّهُم في مخيات للأشخاص المشردين داخلياً. وكان من المتوقع أن يؤدي قطع ممارسات الرضاعة الطبيعية إلى ازدياد معدل مراضة الأطفّال وسوء التغذية

الأسلوب قامت وزارة الصحة في هايتي وصندوق الأمم المتحدة للطفولة (اليونيسيف)، بالتعاون مع المنظمات غير الحكومية المحلية والدوُّلية، بإنشاء خِيام لِلأطفال في المناطق التَّى ضربُها الزلزال. ووفرت الخيّام مكاناً آمناً للأمهات لّكي يهارسن الرضاعة الطّبيعية، وللأطفال الذين لا يرضعن رضاعة طبيعية لكي يتلقون الغذاء البديل عن لبن الأم الجاهز للاستخدام. ولم يتم على الإطلاق تنفيذ مثل هذه الاستجابة الضّخمة والمنسقة لخيام الرضع في سياق

الطوارئ في أي منطقة في العالم. المواقع المحلية تم إنشاء خيام الأطفال في خمس مدن، ولكنها أقيمت بشكل رئيسي في بورت أو برانس، التي شهدت إنشاء معظم مخيات

摘要

在重大紧急事件中保护和改善母乳喂养实践:海地婴儿帐篷的经验

问题 2010 年海地地震中大约有 150 万人流离失所, 其 中许多人进入为国内难民搭建的营地。预计中断母乳 喂养将导致新生儿疾病、营养不良和死亡数增加。

方法 海地卫生部和联合国儿童基金会与当地及国际非 政府组织合作, 在受地震影响的地区建立婴儿帐篷。 这些帐篷为母乳喂养的母亲以及没有母乳喂养的婴儿 接受液体婴儿配方奶提供安全场所。这种为应对紧急 情况而建立的如此大规模并且协调的婴儿帐篷在世界 任何地方均前所未有。

当地状况 在 5 个城市中建立了婴儿帐篷, 但主要位于 太子港,海地 1555 处为无家可归者搭建的营地绝大多 数建在这里。

相关变化 2010 年 2 月到 2012 年 6 月之间, 建立了 193 个婴儿帐篷;180499 对母婴和 52503 名孕妇在婴儿帐 篷计划中登记。据报告,6个月以下的婴儿中有70% 是纯母乳喂养, 10%"混合喂养"婴儿在登记后转为 纯母乳喂养。在2010年,13.5%的登记婴儿无法接受 母乳喂养。这些婴儿接受液体婴儿配方奶。

经验教训 由于计划快速扩大, 母乳喂养实践可以有 序保持。然而, 为了应对未来突发事件, 婴儿帐篷的 实施和监控需要有更好的评价方法和综合指导, 还需 要将婴儿帐篷活动过渡到设施和社区计划中的清晰战

Résumé

Protéger et améliorer les pratiques d'allaitement maternel au cours d'une situation d'urgence majeure: les leçons tirées des tentes pour bébés en Haïti

Problème Le tremblement de terre de 2010 en Haïti a déplacé environ 1,5 million de personnes, dont beaucoup dans des camps pour personnes déplacées à l'intérieur de leur propre pays. On avait prévu que la perturbation des pratiques d'allaitement conduirait à l'augmentation de la morbidité, de la malnutrition et de la mortalité infantile.

Approche Le ministère de la Santé d'Haïti et l'UNICEF, en collaboration avec des organisations non gouvernementales locales et internationales, avaient érigé des tentes pour bébés dans les zones touchées par le tremblement de terre. Ces tentes représentaient un endroit sûr pour les mères qui allaitaient, mais aussi pour les nourrissons non allaités qui recevaient du lait maternisé prêt à l'emploi. Une telle action coordonnée à grande ampleur dans un contexte d'urgence n'avait jamais été mise en place dans le monde auparavant.

Environnement local Les tentes pour bébés ont été mises en place dans cinq villes, mais surtout à Port-au-Prince, où a été créée la majorité des 1555 camps d'Haïti pour les personnes déplacées.

Changements significatifs Entre février 2010 et juin 2012, 193 tentes pour bébés ont été mises en place; 180 499 couples mère-enfant et 52 503 femmes enceintes ont été enregistrés dans le programme des tentes pour bébés. Parmi les nourrissons de moins de 6 mois, 70% suivaient un allaitement exclusif et 10% de ceux qui avaient une «alimentation mixte» sont passés à l'allaitement maternel exclusif à leur arrivée. En 2010, 13,5% des nourrissons inscrits ne pouvaient pas être allaités. Ces bébés ont reçu du lait maternisé prêt à l'emploi.

Leçons tirées Grâce à une mise en place rapide du programme, les pratiques d'allaitement n'ont pas été perturbées. Cependant, l'amélioration des méthodes d'évaluation et d'orientation globale sur la mise en œuvre et le suivi des tentes pour bébés reste nécessaire pour les situations d'urgence futures. De plus, une stratégie claire doit être définie en matière de transition des activités des tentes pour bébés vers des centres et des programmes communautaires.

Резюме

Поддержка и совершенствование практик грудного вскармливания во время крупномасштабных чрезвычайных ситуаций: уроки, полученные в детских палатках на Гаити Резюме

Проблема Землетрясение 2010 года на Гаити заставило покинуть место своего проживания около 1,5 миллиона людей, многие из которых поселились в лагерях для вынужденных переселенцев. Ожидалось, что прерывание практик грудного вскармливания приведет к увеличению заболеваемости, недостаточному питанию и смертности грудных детей.

Подход Министерство здравоохранения Гаити и Детский фонд Организации Объединенных Наций, совместно с локальными и международными неправительственными организациями, установили детские палатки в пострадавших от землетрясения областях. Палатки обеспечивали безопасное место матерям для грудного вскармливания, а младенцы на искусственном вскармливании получали там готовые к использованию детские смеси. Такое масштабное и координированное задействование детских палаток в условиях чрезвычайной ситуации до сих пор не имело аналогов в мире.

Местные условия Детские палатки были установлены в пяти городах, в основном в Порт-о-Пренсе, где располагалась большая часть из 1555 гаитянских лагерей для вынужденных переселенцев.

Осуществленные перемены В период сфевраля 2010 года по июнь 2012 года было установлено 193 детских палатки. В программе детских палаток зарегистрировались 180 499 пар матерей с грудными детьми и 52 503 беременных женщин. Согласно собранным данным, из младенцев в возрасте до 6 месяцев, 70% находились исключительно на грудном вскармливании и 10% детей на смешанном вскармливании были переведены на исключительно грудное вскармливание за время участия в программе. В 2010 году 13,5% зарегистрированных младенцев не имели возможности получать грудное вскармливание. Эти младенцы получали готовые к использованию детские смеси.

Выводы Благодаря быстрому развертыванию программы удалось добиться сохранения практик грудного вскармливания. Тем не менее, на случай подобных чрезвычайных ситуаций в будущем необходимы более совершенные методы оценки и более подробные руководства по внедрению и мониторингу детских палаток, а также ясная стратегия по переходу от детских палаток к лечебным учреждениям и социально-ориентированным программам.

Resumen

Proteger y mejorar las prácticas de la lactancia materna en casos de emergencias graves: lecciones aprendidas en las tiendas para bebés en Haití

Situación El terremoto de 2010 en Haití desalojó a unos 1,5 millones de personas, muchas de las cuales se trasladaron a campos de desplazados internos. Se esperaba que la interrupción de las prácticas de lactancia conduciría a un aumento de la morbilidad infantil, la desnutrición y la mortalidad.

Enfoque El Ministerio de Salud de Haití y el Fondo para la Infancia de las Naciones Unidas, en colaboración con organizaciones no gubernamentales locales e internacionales, establecieron tiendas para bebés en las zonas afectadas por el terremoto. Las tiendas ofrecieron un lugar seguro para que las madres pudieran amamantar a sus hijos y para que los bebés no alimentados con leche materna recibieran sucedáneos de la leche materna listos para el consumo. Nunca antes, en ninguna parte del mundo, se había logrado establecer un despliegue de tiendas para bebés tan amplio y bien coordinado en una situación de emergencia.

Marco regional Las tiendas para bebés se establecieron en cinco ciudades, pero sobre todo en Port-au-Prince, donde se había instalado la mayoría de los 1 555 campamentos de Haití para las personas desplazadas.

Cambios relevantes Entre febrero de 2010 y junio de 2012, se establecieron 193 tiendas para bebés. Se inscribieron 180 499 parejas madre-hijo y 52 503 mujeres embarazadas en el programa de tienda para bebés. Entre los bebés menores de 6 meses, se observó que el 70% se alimentaba únicamente de leche materna, y que el 10% de los bebés que anteriormente recibía una "alimentación mixta", recibió una alimentación basada exclusivamente en leche materna durante la estancia en las tiendas. En 2010, el 13,5% de los bebés inscritos no pudo ser amamantado. Estos bebés recibieron sucedáneos de leche materna listos para el consumo.

Lecciones aprendidas La rápida ampliación de los programas permitió que las prácticas de lactancia se mantuvieran sin interrupciones. Sin embargo, es necesario disponer de mejores métodos de evaluación y de orientación integral sobre la aplicación y el seguimiento de las tiendas para bebés para futuras emergencias, junto con una estrategia clara para trasladar las actividades de tiendas de campaña para bebés a los programas comunitarios y de servicios.

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