

The Southern Philippines Medical Center Human Milk Bank: policy notes

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INTRODUCTION

In 2018, the Southern Philippines Medical Center (SPMC) established the first human milk bank (HMB) in the Davao Region in accordance with provisions of Republic Act (RA) 10028, or the “Expanded Breastfeeding Act of 2009.”¹ The SPMC HMB facility is committed to serving newborns in need of safe human milk when their mothers are unable to provide contact breastfeeding. Its breastmilk collection from lactating mothers at the SPMC wards had been challenged by the limitations imposed at the start of the COVID-19 pandemic, especially during the enhanced community quarantine (ECQ) in April 2020. It was able to quickly organize a system of breastmilk collection from breastfeeding advocates in the community. At present, the HMB receives its breastmilk supply from properly-screened donors during in-house ward collection and scheduled pick-up from the community.

MAIN EVIDENCE

The SPMC HMB breastmilk collection from 2019 to 2021 was illustrated in the infographic article by Melgazo, et al in April 2022. Before the start of the ECQ on April 4, 2020, the SPMC HMB had been collecting an average of 44,955 cc/quarter of breastmilk from in-house donors. Later in April 2020, the SPMC HMB started collecting breastmilk donations from mothers in the community. Despite a decrease in the total number of donors, there was a fourfold increase in the amount of breastmilk collected from the last quarter before community collection (620 donors supplying 56,563 cc of breastmilk) compared to the first quarter when community collection started (318 donors supplying 233,108 cc of breastmilk).² Since the start of community collection, the milk bank has been collecting an average of 223,349 cc/quarter of breastmilk from both in-house and community donors. With the addition of breastmilk collected from the community, SPMC’s donor breastmilk supply has increased fivefold.² The article on the program profile of the SPMC HMB by Adolfo, et al in April

2022 described the current structure and design of the HMB facility, equipment, finances, and staffing pattern. It also detailed the processes and services of the HMB, including its regular in-house and community breastmilk collection.³

In the evidence-to-policy diagram, we enumerate important findings described in the infographic and program profile articles, and outline our policy recommendations based on these findings.

RELATED EVIDENCE

Most milk banks are hospital-based, producing donated breastmilk for their own admitted neonates, and some of them supply hospitals, or even communities, covering a wide geographical region.^{4 5} Similarly, the SPMC HMB currently provides donor breast milk to SPMCs postoperative newborns admitted at the neonatal and pediatric intensive care units whose mothers are unable to provide contact breastfeeding. Admitted postpartum mothers provide a limited supply of breastmilk to the admitted infants, and this may be attributable to the intermittent breastmilk collection from the SPMC wards. The availability of staff who can provide lactation counseling will help address breastfeeding challenges, especially in the early postpartum period.⁶

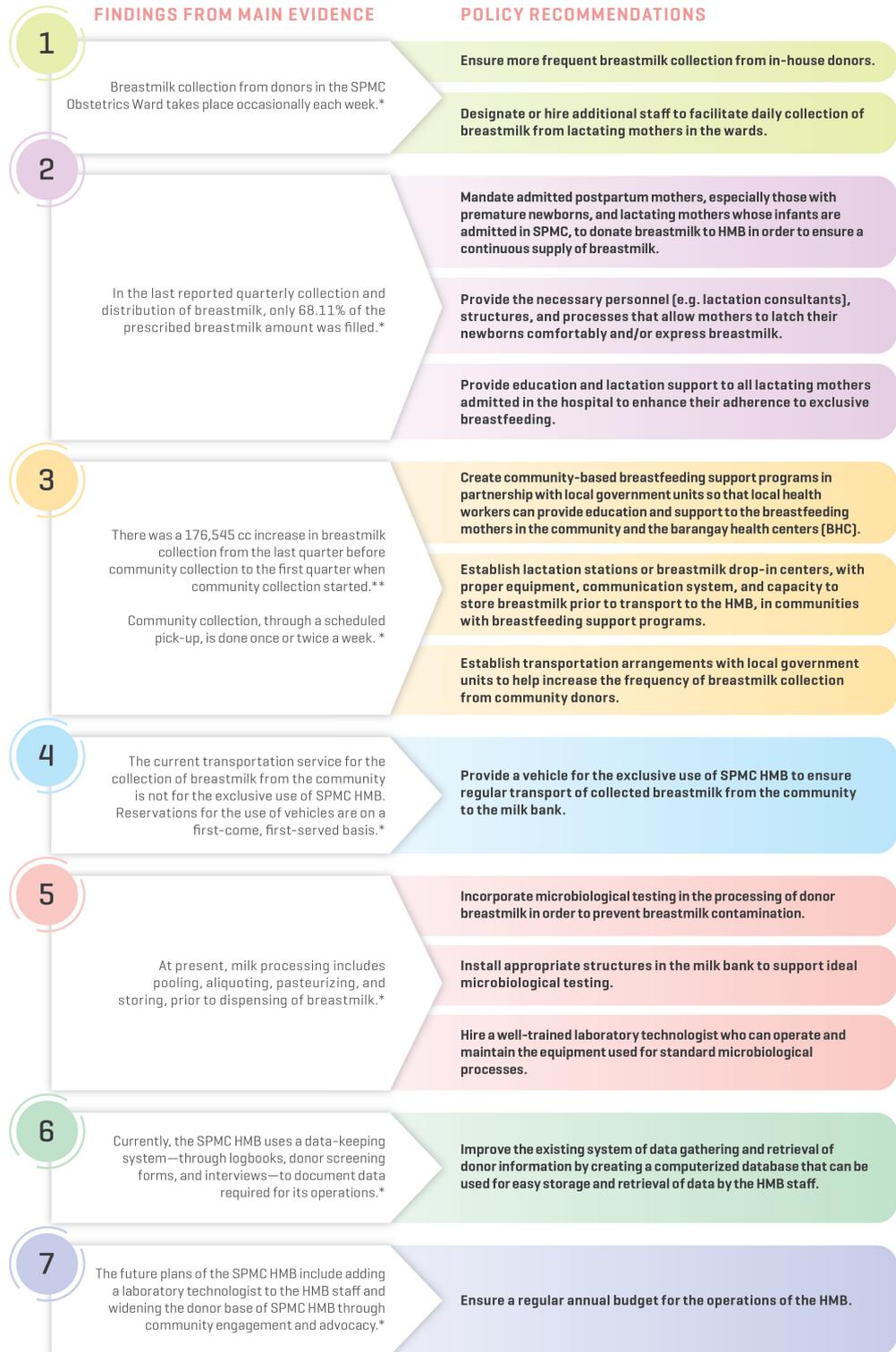
The physical challenges associated with breastfeeding—i.e., adverse outcomes such as mastitis, and dry and bleeding nipples, latching difficulties, and low milk supply—and the lack of social support and resources to achieve breastfeeding goals impact the promotion of exclusive breastfeeding during infancy.⁷ Implementing visitor restrictions within the hospital allows lactating mothers to have more time to latch their newborns and to receive lactation support from the hospital staff.⁸ Providing a facilitating and supportive environment for breastfeeding, and giving education to enhance breastfeeding skills/techniques and milk expression, can boost a mother’s adherence to exclusive breastfeeding.

Providing community-based breastfeeding support in the early postpartum period, and



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EVIDENCE to POLICY



*Adolfo MB, Salas NJP. The Southern Philippines Medical Center Human Milk Bank. SPMC J Health Care Serv. 2022;8(1):3.
 **Melgazo MI, Ladrero CXD. Breastmilk collection and distribution at the Southern Philippines Medical Center Human Milk Bank from 2019 to 2021. SPMC J Health Care Serv. 2022;8(1):4.

even during pregnancy, has resulted in increased breastfeeding rates in terms of duration and exclusivity.⁹ Community-based breastfeeding support may include the establishment of drop-in centers and provision of professional support to address problems in lactation and breastmilk expression. This support service will be able to provide all mothers, especially those with lactational challenges, equitable and guaranteed access to donor breastmilk.⁹⁻¹²

An important goal in the establishment of a HMB is to ensure that milk banks attain an ideal level of quality and safety in the process of donor recruitment, in ensuring the quality of processed breastmilk, and in the appropriate use and distribution of breastmilk.¹³ One important factor to consider in human milk banking is safeguarding the nutrient content and biological activity of the milk. This can be done by ensuring the availability of highly specialized equipment that accurately measure the macronutrient and immunological components of donated raw and processed breastmilk. The test equipment must be operated and maintained by a well-trained staff, such as a microbiologist or a laboratory technologist, who must also lead in the creation of infection control policies in milk banking. Microbiological testing identifies the type of pathogen that may be present in donor breastmilk and determines the acceptable microbiological limits of the test result, thereby ensuring the safety of the processed breastmilk.¹⁴

HMBs in the Philippines collect data on the donor breastmilk that they receive and distribute. However, an organized data registry that connects to a centralized data repository still does not exist. Creating a data registry that may be replicated in other HMBs will allow data standardization and transparency for benchmarking and research.¹⁵ A registry will also facilitate biovigilance to track and trace the HMB processes from donor to recipient. Recording of adverse events from donor breastmilk may also provide data on the link between feeding and neonatal outcomes.¹⁴ An HMB data collection system can also aid in monitoring the operations of the milk bank, especially in keeping track of whether the number of donors could sufficiently meet the demands for donor milk.¹⁶ Data collected and stored in HMB registries can help fill in current knowledge gaps. The new knowledge generated may be

used by the Philippine National Committee on Human Milk Banking to further enhance the guidelines on human milk banking in the country.

At present, there are 21 accredited HMBs located in different regions of the country, with the majority (12) of the milk banks located in the National Capital Region.¹⁷ In most regions, HMBs have been experiencing lack of funding to maintain their operations.¹⁸⁻¹⁹ The SPMC HMB faces numerous challenges, including limited funding and lack of staff. These resources are necessary to safely process and test human milk.

As stipulated in the Department of Health Implementing Rules and Regulations for RA 10028, government agencies shall use their respective budget for gender and development to establish and maintain lactation stations. The Department of Budget and Management may also allocate additional funds for lactation stations equivalent to the agency's savings if the agency complies with the provisions of RA 10028.²⁰ In the early history of human milk banking in the Philippines, the first three hospitals with operational HMBs—namely, Dr. Jose Fabella Memorial Hospital, Philippine Children's Medical Center, and Philippine General Hospital—were established with additional funding and donations from private individuals and institutions, especially in the acquisition of equipment for HMB operations.⁵ Similarly, SPMC HMB was established with the help of initial funds drawn from the city's congressional funds and contributions from other sectors.²¹

The Dr. Fabella Memorial Hospital HMB, one of the pioneer HMBs in the country, has been providing 95% of its pasteurized donor breastmilk to different hospitals in many regions of the Philippines, while retaining only 5% of its supply for dispensing to babies admitted in its hospital.²² Likewise, with more donors from the community in the future, SPMC HMB may be able to expand its scope of operations to include recipients in facilities outside of SPMC and in the community. Donor human milk banking is merely one strategy for promoting and supporting breastfeeding. In developing countries like the Philippines, donor milk banking should not only be appropriate and safe, but should also be sustainable in order to make breastmilk more accessible to infants who need it.

Contributors

CMPA and MIM contributed to the conceptualization of this article. All authors wrote the original draft, performed the subsequent revisions, approved the final version, and agreed to be accountable for all aspects of this report.

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REFERENCES

1. Southern Philippines Medical Center. Southern Philippines Medical Center Breastfeeding Policy Manual. Unpublished.
2. Melgazo MI, Ladrero CXD. Breastmilk collection and distribution at the Southern Philippines Medical Center Human Milk Bank from 2019 to 2021. *SPMC J Health Care Serv.* 2022;8(1):4.
3. Adolfo MB, Salas NJP. The Southern Philippines Medical Center Human Milk Bank. *SPMC J Health Care Serv.* 2022;8(1):3.
4. European Milk Bank Association [Internet]. Milan: European Milk Bank Association; c2021 [cited 2022 Jun 20]. United Kingdom; [about 1 screen]. Available from: <https://europeanmilkbanking.com/country/united-kingdom/>.
5. Department of Health. The Philippine Human Milk Banking (Manual of Operation). Manila: Department of Health; 2013 Sep. Available from: <https://www.humanitarianresponse.info/en/operations/philippines/document/philippine-human-milk-banking-manual-operation-0>.
6. Brooks EC, Genna CW, Mannel R. The Lactation Consultant: Roles and Responsibilities. In: Wambach K, Riordan J, editors. *Breastfeeding and Human Lactation*. 5th ed. Burlington: Jones and Bartlett Learning; 2016.
7. Rueda C, Bright MA, Roussos-Ross D, Montoya-Williams D. Exclusive breastfeeding promotion policies: whose oxygen mask are we prioritizing? *J Perinatol.* 2022 Mar 26;1–5.
8. Chlon C, Ward L, Wexelblatt S, Mayborg L. Exclusive breastfeeding rates increase following implementation of strict visitor restrictions during covid-19 pandemic in a large medical system in the midwest united states. *Breastfeeding Medicine.* 2020; 15(10):A19.
9. van Dellen SA, Wisse B, Mobach MP, Dijkstra A. The effect of a breastfeeding support programme on breastfeeding duration and exclusivity: a quasi-experiment. *BMC Public Health.* 2019 Jul 24;19(1):993.
10. Cramer RL, McLachlan HL, Shafiei T, Amir LH, Cullinane M, Small R, Forster DA. Implementation and evaluation of community-based drop-in centres for breastfeeding support in Victoria, Australia. *Int Breastfeed J.* 2017 Nov 13;12:46.
11. Griffin S, Watt J, Wedekind S, Bramer S, Hazemi-Jebelli Y, Boyle R, Weaver G, Shenker NS. Establishing a novel community-focussed lactation support service: a descriptive case series. *Int Breastfeed J.* 2022 Jan 15;17(1):7.
12. Paynter MJ, Celis-Hecht Mendoza AK. The Roosevelt Hospital Banco de Leche: Nonprofit Human Donor Milk Bank in Guatemala City. *J Hum Lact.* 2019 Aug;35(3):563-568.
13. DeMarchis A, Israel-Ballard K, Mansen KA, Engmann C. Establishing an integrated human milk banking approach to strengthen newborn care. *J Perinatol.* 2017 May;37(5):469-474.
14. Tyebally Fang M, Chatzixiros E, Grummer-Strawn L, Engmann C, Israel-Ballard K, Mansen K, O'Connor DL, Unger S, Herson M, Weaver G, Biller-Andorno N. Developing global guidance on human milk banking. *Bull World Health Organ.* 2021 Dec 1;99(12):892-900.
15. Brownell EA, Lussier MM, Herson VC, Hagadorn JI, Marinelli KA. Donor human milk bank data collection in north america: an assessment of current status and future needs. *J Hum Lact.* 2014 Feb;30(1):47-53.
16. Human Milk Bank Da Nang City. Establishing the first human milk bank in Viet Nam. Available from: https://path.azureedge.net/media/documents/ID_hmb_vietnam_br.pdf.
17. Human Milk Bank [Internet]. Manila: Human Milk Bank; c2015 [cited 2022 Jun 20]. Human Milk Bank Locations; [about 1 screen]. Available from: <https://hmb.ph/milkBankLocation.php>.
18. Rodriguez F. Got milk? Makati says yes. 2014 May 30 [cited 2022 Jun 20]. In: Rappler [Internet]. Pasig: Rappler Inc. c2022. Available from: <https://www.rappler.com/moveph/59227-makati-human-milk-bank/>.
19. Gavilan J. 'Mother and baby-friendly' Quezon City opens human milk bank. 2015 Apr 10 [cited 2022 Jun 20]. In: Rappler [Internet]. Pasig: Rappler Inc. c2022. Available from: <https://www.rappler.com/moveph/89463-quezon-city-human-milk-bank/>.
20. Department of Health. An act expanding the promotion of breastfeeding, amending for the purpose Republic Act No. 7600, otherwise known as "An act providing incentives to all government and private health institutions with rooming-in and breastfeeding practices and for other purposes", The Implementing Rules and Regulation of Republic Act No. 10028 (2011 Aug 22).
21. SunStar. 1st breast milk bank to be established in SPMC in 2018. 2017 Jul 28 [cited 2022 Jun 20]. In: Sunstar [Internet]. Manila: Sunstar Publishing Inc. c2022. Available from: <https://www.sunstar.com.ph/article/155699/1st-breast-milk-bank-to-be-established-in-spmc-in-2018>.
22. Dr Jose Fabella Memorial Hospital. Human Milk Bank. 2021 Sep 28 [cited 2022 Jun 20]. In: Dr Jose Fabella Memorial Hospital [Internet]. Manila: Dr Jose Fabella Memorial Hospital. Available from: <https://fabella.doh.gov.ph/hospital-services/human-milk-bank>.

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