# Research Article

# **Breastfeeding Outcomes in Washington State: Determining** the Effect of *Loving Support Peer Counseling Program* and Characteristics of Participants at WIC Agencies

Catherine Hui Min Lee, PhD<sup>1</sup>; Jean O'Leary, MPH, RD<sup>2</sup>; Phyllis Kirk, MS, RD, CD, IBCLC<sup>2</sup>; Timothy A. Lower, PhD<sup>2</sup>

## ABSTRACT

**Objective:** Determining the effect of the *Loving Support Peer Counseling Program* (LSPCP), and characteristics of participants on breastfeeding (BF) outcomes at *Special Supplemental Nutrition Program for Women, Infants, and Children* (WIC) agencies in Washington State.

Design: Nonrandomized treatment vs control.

**Setting:** Public Health–Seattle and King County (PHSKC), Catholic Health Initiatives Franciscan Medical Group (CHIFMG).

**Participants:** Women enrolled in WIC (intervention: PHSKC, n = 15,290; CHIFMG, n = 3,582). **Interventions:** Clinics with a LSPCP.

**Main Outcome Measures:** BF initiation and BF duration of all infants who turned 8 months old during the reported period.

Analysis: Two-tailed binomial test and tree-based regression.

**Results:** Both PHSKC and CHIFMG clinics with a LSPCP expressed significant (P < .001) improvement in BF initiation and BF duration for >6 months. The likelihood that women enrolled in WIC would initiate BF at PHSKC clinics increased by 3%, whereas those in CHIFMG clinics increased by 6.8%. Women receiving services in smaller PHSKC clinics (n < 60 women) were likely to breastfeed their infants at >1 week. The proportionalities of non-Hispanic and black participants in PHSKC clinics were the primary and secondary predictors of the likelihood of BF discontinuing between 7 and 28 days' duration. In addition, clinics serving participants who spoke Tigrigna had increased rates of BF for a minimum of 6 months. **Conclusions and Implications:** Findings may be used to reevaluate funding allocations, secure grants to reduce program constraints to stabilize LSPCP, develop strategies to reduce BF cessation at larger clinics, and improve peer counseling and other BF support to black and non-Hispanic women in the early post-partum period. The findings contribute to the study of the effects of LSPCP on BF initiation and duration while furthering a scholarly understanding of the way in which the WIC program interacts with participant characteristics at 2 local WIC agencies in Washington State.

**Key Words:** breastfeeding, tree-based regression, peer counseling program, WIC (*J Nutr Educ Behav.* 2017;

Accepted September 2, 2017.

<sup>1</sup>Forecasting and Research Division, Washington State Office of Financial Management, Olympia, WA

<sup>2</sup>Prevention and Community Health Division, Washington State Department of Health, Olympia, WA

*Conflict of Interest Disclosure:* The authors' conflict of interest disclosures can be found online with this article on www.jneb.org.

Address for correspondence: Catherine Hui Min Lee, PhD, Forecasting and Research Division, Washington State Office of Financial Management, 210 11th Ave SW, Olympia, WA 98501; Phone: (360) 902-0588; Fax: (360) 725-0198; E-mail: catherinelee\_98@yahoo.com © 2017 Society for Nutrition Education and Behavior. Published by Elsevier, Inc. All rights reserved.

https://doi.org/10.1016/j.jneb.2017.09.002

## INTRODUCTION

Promoting and supporting breastfeeding (BF) is a key component of the *Special Supplemental Nutrition Program for Women, Infants, and Children* (WIC).<sup>1</sup> In 2014, 88,561 infants were born in Washington State.<sup>2</sup> Almost half of them were served by Washington State WIC.<sup>3</sup> This signifies the substantial role the state WIC program has in improving the lifelong health and nutrition of women, infants, and young children. Despite the compelling

#### 2 Lee et al

**ARTICLE IN PRESS** 

benefit of BF for infants and mothers,<sup>4</sup> BF rates among WIC infants in Washington State<sup>5</sup> has been historically lower than the state's general population.<sup>6-11</sup> It is well established that social and demographic factors dictate the likelihood of a woman's decision to breastfeed, such as the woman's family and social network,12-14 cultural tradition and practices,<sup>15,16</sup> race and ethnicity,<sup>17,18</sup> poverty level,<sup>19</sup> and the social norms of the community in which she lives.<sup>20-22</sup> Hence, BF is a health behavior that could be protected and supported by interventions that incorporate malleable factors in women's social networks. The peer counseling program was reported to be an effective intervention strategy that accounts for modifiable social behavior to promote and improve BF initiation and continuation in the US.<sup>16</sup> There is increasing evidence that BF peer counselors provide positive value and impact to low-income women of highrisk populations in their communities, while also improving BF initiation in a number of states such as Florida,<sup>13</sup> Texas,<sup>23</sup> Missouri,<sup>24</sup> Maryland,<sup>25</sup> Massachusetts,<sup>26</sup> Michigan,<sup>27</sup> and New York,<sup>28</sup> whereas longer BF was evident among participating women in Florida,<sup>13</sup> Massachusetts,<sup>26</sup> and Michigan.<sup>27</sup>

The establishment of Loving Support Peer Counseling Programs (LSPCP) services in Washington State began in April, 2005, when 5 local WIC agencies accepted US Department of Agriculture funding to implement the program. Administration of LSPCP among local WIC agencies generally varies to serve local needs; however, all programs follow the Loving Support model. The model is structured according to evidence-based curricula<sup>29</sup> with a focus on benefiting WIC recipients via mother-to-mother support regarding BF initiation and continuation. Peer counselors typically consist of women who were or are WIC clients and who successfully breastfed their children. They are trained to provide culturally appropriate and clientcentered BF education and support to pregnant and BF women, as well as specific training on how to provide encouragement, help with normal BF challenges, and make referrals for situations outside their scope of practice. An important characteristic of this

Journal of Nutrition Education and Behavior • Volume **II**, Number **II**, 2017

program is the ability of peer counselors to provide BF support off-site and after clinic hours.<sup>30</sup> Beginning in federal fiscal year (FFY) 2010, Washington State WIC received \$1.9 million to expand the LSPCP. With these funds, it increased the number of agencies with LSPCP to 40 (including the 5 original agencies). Five years later (during FFY 2015), funding for the LSPCP in Washington State was reduced to \$1.4 million. This reduction resulted in funding cuts across the board to local agencies. As a result, 8% of those agencies were unable to continue operating the LSPCP, and WIC agencies that kept the program reduced the number and work hours of peer counselors.

Despite such circumstances, the number of mothers enrolled in WIC who initiated BF steadily increased over the years.<sup>5</sup> Notably, in FFY 2015, 88.5% of mothers participating in Washington State WIC initiated BF (Washington State Department of Health/Prevention and Community Health, unpublished data, 2015). This rate has increased by 11.5% since 2000<sup>5</sup> and surpassed the 2016 state's general population BF rates of 87.4%,<sup>31</sup> as well as the Healthy People 2020 goal of 81.9%.<sup>32</sup> However, little is known about BF continuation based on the demographic composition of participants within individual WIC agencies because of the state's increasingly culturally diverse population.<sup>33</sup> This prompted the following questions: (1) Did the LSPCP contribute to the improvement of BF initiation and duration among WIC infants in Washington State WIC agencies? (2) What demographic or program characteristics are associated with BF duration at an individual WIC agency?

### **METHODS**

## Participant Characteristics and Selection

The researchers conducted a formal assessment to determine the current BF outcomes at Public Health–Seattle and King County (PHSKC) and Catholic Health Initiatives Franciscan Medical Group (CHIFMG). Public Health– Seattle and King County is the largest local WIC agency in Washington State.<sup>34</sup> With 39 clinics located in King County, slightly over half of these clinics operate a LSPCP program (Table 1). On the other hand, CHIFMG serves 2 clinic locations in Pierce County. Both clinics operate a LSPCP. These 2 agencies were chosen for analysis primarily because they both expressed high programmatic fidelity (both were recipients of the US Department of Agriculture's 2014 Loving Support Gold Award of Excellence) while experiencing similar levels of funding reduction in 2015 (both had their LSPCP grants reduced by 25%). In addition, both agencies had similar WIC participant demographics (Table 1), were in an urban setting, and provided services in populous counties with similar demographics and population density.<sup>35,36</sup> This selection ensured greater restriction over variability of demographic characteristics in the evaluation.

### Data Source

Information for this evaluation came from 2 sources: the Washington State WIC Program's Client Information Management System, and data provided by the 2 agencies: PHSKC and CHIFMG, based on the Washington State BF Peer Counselor System, a database hosted by the Public Health Foundation WIC Program in California. Data reported in this evaluation were derived from 2 separate periods: FFY 2011 (October 1, 2010 to September 30, 2011) and FFY 2015 (October 1, 2014 to September 30, 2015). The Washington State Institutional Review Board approved this study for exemption with reference to Project E-070815-H.

### Design

The study design was a nonrandomized treatment and control aimed to determine whether there was significant improvement in the proportion of BF initiation and duration among infants at 2 local agencies operating a LSPCP; rates and duration of BF before and after LSPCP implementation were compared. Further steps were taken to determine whether there were significant differences in the proportion of BF initiation and duration among infants at WIC clinics with and without a LSPCP. Rates and duration of BF among those at clinics with a LSPCP

Download English Version:

https://daneshyari.com/en/article/6843551

Download Persian Version:

https://daneshyari.com/article/6843551

Daneshyari.com