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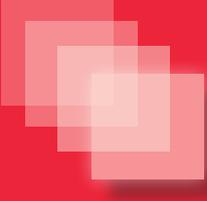
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Participation in the Women, Infants and Children (WIC) Program

A Synthesis of the Literature

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Introduction

In the United States, the [Special Supplemental Nutrition Program for Women, Infants and Children](#) (WIC) is a federal program run by local agencies (within states, territories, and tribal nations) providing food, nutrition education, health screenings, and referrals to other social services to eligible pregnant and postpartum women, infants, and children up to five who are at or below 185% of the federal poverty line and at nutritional risk (Trippe et al. 2018). For context, federal agencies in the United States measure poverty by comparing income against a threshold of basic needs (set at three times the cost of a minimum, nutritionally adequate diet) adjusted for household size and composition. Per that indicator, 15.0% of American households live below the poverty line (Trevelyan et al. 2016). Within WIC, nutritional risk is evaluated by a health professional and is medical- or diet-based; the evaluation is repeated every 6-12 months for participants to continue in the program. They receive a monthly package adapted to their particular needs in the form of a voucher redeemable for food at WIC centers and WIC-approved grocery stores.

Across the United States, WIC serves 53% of infants aged up to one year old and 25% of children aged one up to five (Thorn et al. 2015); hence, it is an important program in the lives of low-income American families. Yet only 53% of people who qualify do participate (Trippe et al. 2018). There is a sizable academic and professional literature on WIC; however, reviews are lacking. So, in this paper, we

synthesize the academic and professional literature about participation in the WIC program. In outline, we find that WIC is a well-regarded public assistance program, by the American public at large and by Hispanics and Spanish speakers in particular. Yet, eligible people face several barriers to participation, both operational – originating from the program’s functioning, and systemic – deriving from broader patterns of inequality in American society. Those barriers, hypothetically, might explain the observed gap between the enrolled and the unenrolled eligible populations in WIC.

First, we present our method of literature synthesis. We provide facts about enrollment, in general and by eligible populations (i.e., women, infants, children), and compile survey results about perceptions and experiences, by the general American public and by WIC participants. Next, we describe barriers to participation through a twofold typology: operational and systemic. We conclude with a mention of the recently implemented transition from paper vouchers to an electronic card.

Methods

The literature we include is both academic (i.e., journal articles) and professional (i.e., publications of government agencies, state health departments, and WIC centers). We searched for 16 terms: “perception of WIC,” “public perception of WIC,” “staff perception of WIC,” “uses of WIC centers,” “WIC client interview,” “WIC client survey,” “WIC complement,” “WIC EBT effects,” “WIC embarrassment,” “WIC hassle,” “WIC participant satisfaction survey,” “WIC safety net,” “WIC shame,” “WIC strategies,” “WIC supplement,” and “WIC use strategies”.

We identified the research problem and generated the starting searches based on exploratory fieldwork in two WIC centers in the city of Chicago (state of Illinois) and informational interviews with 11 staff members. Herein, we identified two types of participation in WIC – a supplement and a safety net, and two types of non-participation – a hassle and a shame. Then, we added to the search recurring

phrases in the literature, like “barriers,” “client surveys,” “participant satisfaction surveys,” and “state reports”. The final database includes 91 references, of which 66 are academic literature and 25 are professional literature. Only those that we do discuss within this paper are listed herein as references; the others are available upon request.

Enrollment

There is a substantial gap between the eligible and the enrolled populations in WIC. 7 million people were participating in 2018, representing a decrease from 2017 (participation was 7.3 million) and 2016 (7.7 million) (Trippe et al. 2018). In 2015, 53% of eligible people were participating, compared to 57% in 2006 (Trippe et al. 2018; USDA-FNS 2006). In reference to the total American population, WIC serves 53% of infants up to one year old and 25% of children aged one up to five (Thorn et al. 2015). By race and ethnicity, enrollment rates are 63% of eligible Hispanics, 57% of eligible Black Americans, and 42% of eligible non-Hispanic whites (Trippe et al. 2018).

Women are eligible while pregnant and postpartum, breastfeeding or not. Women who are Hispanic, younger, less educated, single, and in poor health are more likely to participate overall (Liu and Liu, 2016; Swann 2007). In 2016, 54% of enrolled pregnant women did so in their first trimester, 37% in their second trimester, and 9% in their third trimester (Thorn et al. 2016). Interviewed participants cite a need to receive infant formula as soon as the child is born as a motivator for early enrollment (Morrissey 2010). Notably, the sociodemographic correlates of early enrollment contrast with those of participation overall: early participants are more likely to be white, older, married, to have another preschool-aged child in their household, to speak English as their primary language, and to have received cash welfare during their childhood (Tiehen and Jacknowitz 2008). Pregnant teenage women are less likely to enroll early due to factors like unawareness of pregnancy, lack of information, reluctance to accept assistance, and lack of transportation (USDA-FNS 2002).

Child enrollment is the lowest of all eligible populations (i.e., relative to pregnant women, breastfeeding women, postpartum non-breastfeeding women, and infants) and has remained so since 1994 (Singleton et al. 2021; USDA-FNS 2006). About 70% of WIC entries occur before the child is one year old (Jacknowitz and Tiehen 2009), and most dropouts (23%) occur in the transition from infancy to age one. Cases of re-enrollment after dropping out are uncommon, occurring in only 10% of participants (Castner et al. 2009). The most documented factor for that high dropout rate at one year is a perceived decrease in the value of food packages, mostly because they stop including infant formula (Almeida et al. 2020). In a survey on perceived food package value conducted in the state of Illinois, 36% of participants think that the food package for children makes it worth it to continue in the program, compared to 91% for infants and 76% for pregnant and postpartum women (Weber et al. 2018b).

Lastly, note that WIC stands apart from other programs regarding the participation of children of immigrants. Since the United States has birthright citizenship, U.S.-born children of immigrants qualify for public assistance regardless of their caregivers’ legal status. In general, children of immigrant caregivers are less likely to receive assistance than children of U.S.-born caregivers; the most significant differences concern Temporary Assistance for Needy Families (TANF, a cash assistance program) and the Supplemental Nutrition Assistance Program (SNAP, colloquially known as “food stamps”). Yet, children of immigrants are equally likely to participate in Medicaid (a health insurance program) and more likely to participate in WIC (Fomby and Cherlin 2004).

Perceptions and experiences

Surveys conducted by the National WIC Association and state agencies provide evidence about perceptions of WIC, by inquiring into opinions of the program and beliefs about its effectiveness. The general American public has a positive opinion of WIC, and this, strikingly, across race and party identification – two major cleavages in American society.

By race, 66% of non-Hispanic whites, 98% of Black Americans, and 72% of Hispanics have a positive opinion of the program. By party identification, 87% of strong Democrats and 55% of strong Republicans believe the same (NWA 2012).

Likewise, WIC participants generally report positive perceptions and experiences of the program. Various indicators suggest greater awareness and higher engagement among Hispanics and Spanish speakers in particular. For instance, about 60% of English speakers surveyed in the state of Colorado are either unaware that WIC provides nutrition education brochures or never used them, whereas 76% of Spanish speakers do use these brochures (Sannoh 2015). When participants surveyed in the state of California are asked if they would try something new that they learned from nutrition education classes, 85% of Hispanics say yes, compared to 62% of Asian Americans and 73% of non-Hispanic whites (Nestor 2001).

Concerning WIC services, nationally, 90% of surveyed participants rate the program as good to excellent in providing food that they like and 94% agree that the nutrition education programming is useful (USDA-FNS 2012). 81% of participants in the state of Pennsylvania rate the health screenings as very helpful (Sword 2016). 82% of participants in the state of Indiana agree that using WIC vouchers is easy (Amankeldi and Eastcott 2012). Concerning the program's effectiveness, 98% of participants in Indiana made at least one lifestyle change since enrolling – mostly, increased fruit and vegetable consumption (reported by 79% of participants in Indiana, and also by 75% in Colorado) (Amankeldi and Eastcott 2012; Sannoh 2015).

In focus group discussions, participants in a rural area of the state of North Carolina describe the staff as caring and nurturing (Isaacs et al. 2020). Nearly all (98%) of participants surveyed in Colorado feel like they are treated with respect at their WIC center (Sannoh 2015). 99% of participants in Indiana rate staff members as pleasant in phone consultations, and 85% in Colorado rate them as friendly (Amankeldi and Eastcott 2012; Sannoh 2015). 31% of par-

ticipants in Pennsylvania like to learn through conversation with the staff, and 84% in Missouri always feel comfortable asking questions (Missouri DHSS 2014; Sword 2016). Likewise, in Missouri, 94% of English speakers and 84% of non-English speakers say that the staff uses words that they can understand (Missouri DHSS 2014).

A field study identifies five frameworks through which participants perceive and experience the program: WIC is food (82% of respondents), a hassle (65%), economic assistance (60%), WIC is stigmatizing (43%), and WIC is emergency assistance (33%) (Morrissey 2010). Some of those frames are positive, like food and assistance, and some reflect barriers that we now turn to discuss, like it being a hassle or stigmatizing.

Operational barriers

Operational barriers are those integral to the program's functioning. About 60% of participants surveyed in the states of Missouri and Utah find none of WIC requirements to be hard (Missouri DHSS 2014; UDOH 2008). Nevertheless, 16% of former participants in the state of Arizona dropped out of the program because they felt it was a “hassle,” meaning that the benefits no longer exceeded the costs to participate: mostly, spending time – applying, going to appointments, and the like (Horton et al. 2013). Similarly, 65% of participants in a field study framed WIC as a “hassle,” meaning that “barriers to access such as social stigma make the program less than desirable to use” (Morrissey 2010, p. 358). Although the word “hassle” certainly encompasses a number of phenomena, this perception as a whole – essentially, that the downsides outweigh the benefits – encourages participants to drop out and keeps eligible non-participants from enrolling, hence the need to identify the operational problems that feed into it. Those are issues redeeming vouchers (especially at grocery stores), long wait times at clinics, and difficulties completing the requirements for continuation in the program.

Participants do not encounter problems with redemption at WIC centers, in general. Participants surveyed in Missouri

report that items are always (65%) or sometimes (30%) in stock (Missouri DHSS 2014). Rather, issues revolve around WIC-approved grocery stores: 80% of former participants interviewed in the state of Minnesota (Huynh 2013) and 29% of current participants surveyed in the state of Indiana (Amankeldi and Eastcott 2012) have experienced difficulties finding the required items. Those are, specifically, difficulties finding the prescribed sizes and types of foods (like bread, cereal, and juice) and lack of labeling or mislabeling (Chauvenet et al. 2019; Wallace et al. 2020). What is more, when items are out of stock, the voucher format causes additional problems. Since vouchers must be redeemed all at the same time, participants have to decide whether to redeem the rest of the voucher without that item or to return to the store at another time hoping it would be back in stock (Najjar 2013), but they may neither have the food supply to be able to wait nor the opportunity to come back at another time. Some participants strategize by entering into an arrangement with the staff whereby they do not redeem all items at once (Morrissey 2015).

Concerning the checkout process at grocery stores, 33% of participants surveyed in Indiana characterized it as challenging, especially when checking out WIC items separately from non-WIC items with undertrained cashiers (Amankeldi and Eastcott 2012). Participants recount having to teach the cashier how to process the vouchers and implementing tactics like choosing a cashier who looks the most knowledgeable or the least contentious, shopping outside popular hours or when they know a specific cashier would be working, and sticking the grocery cart out far in front of them (so that their line looks long) to keep other customers from lining up behind (hence not causing a hold-up during voucher processing) (Bertmann et al. 2014; Horton et al. 2013; Weber et al. 2019). However, even with a trained cashier, the process still takes longer than the average checkout and other customers can display frustration. Participants in focus group discussions recount having felt the need to explain their financial situation to the other customers or left the store altogether (Bertmann et al. 2014). Former participants interviewed in Minnesota cited this ordeal as one cause for dropping out (Huynh 2013).

There is also evidence of positive experiences at grocery stores, nevertheless. 85% of participants surveyed in Indiana have not encountered any problems with voucher redemption (Amankeldi and Eastcott 2012). 77% of participants surveyed in Colorado report that the items are readily available and stocked, and 74% can find the required sizes (Sannoh 2015). Former participants interviewed in Minnesota remember the staff as generally helpful: they would assist in finding items and accommodate needs if correct items and sizes were unavailable (Huynh 2013).

Additionally, participants encounter issues with the Cash Value Voucher (CVV) applied to fruits and vegetables – a set amount of money to be spent on the produce of their choice (instead of determined items to use the voucher on, as is the case for the other foods provided by WIC). The CVV can be redeemed at grocery stores and, in most places, at farmers' markets. Many participants think that it is “worth the hassle” given the variety of fruits and vegetables to choose from (Weber et al. 2019). They design tactics to make sure they use it all, such as bringing too many fruits and vegetables to checkout and either leaving some there or paying the difference if going over the limit (Bertmann et al. 2014). Nevertheless, some participants are unsure about the rules of what the CVV could be used on and how much money they would receive. For those who know how much is on their CVV, they frequently feel like it is not enough (Bertmann et al. 2014; Najjar 2013).

Wait time at clinics constitutes another operational barrier. Some former participants interviewed in Arizona have waited two hours or more for an appointment, citing it as a reason why they dropped out (Horton et al. 2013). Current WIC participants surveyed in the states of New York and Texas rank wait time as, respectively, the first (Woelfel et al. 2004) and the third main challenges in the WIC experience (after item retrieval and customer service at WIC-approved grocery stores) (Texas HHSC 2017). Nevertheless, 86% of participants surveyed in Indiana have rarely or never waited more than 15 minutes at a clinic (Amankeldi and Eastcott 2012).

Continuing participation in WIC comes with requirements – attending medical appointments at regular intervals, for the most part. Having to bring the children to the clinic for reevaluation is the most frequently cited reason for dropping out among participants surveyed in the state of New York (Woelfel et al. 2004). Another issue is that appointments are scheduled far in advance, which can make it hard to plan around or even remember them (Horton et al. 2013). Current and former participants interviewed in Minnesota cite little flexibility in scheduling appointments: some clinics are not open on nights and weekends, and others are open reduced hours due to budget cuts (Huynh 2013).

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Systemic barriers

Alongside those operational barriers, systemic barriers are those that originate from broader patterns of social inequality in the United States. In the case of WIC as a public assistance program, these include issues of stigma, fear, access, and language.

43% of participants in a field study frame WIC as stigmatizing (Morrissey 2010). Structurally, the stigma attached to public assistance programs can effectively discourage eligi-

ble non-participants from enrolling or returning, and limit participation in those enrolled. Eligible non-participants often believe that WIC is for poor people who cannot afford the foods provided by the program, feel that they would take the place of others in greater need, and think that they can get along on their own. Some former participants dropped out because they felt belittled by staff members of grocery stores. Some current participants missed one clinic appointment for various reasons and felt ashamed to attend the following ones (Horton et al. 2013).

Fear of repercussions affect immigrant families as well. Immigrant caregivers are often concerned that participating in WIC could cause their U.S.-born children to lose citizenship or be taken away, and their undocumented family members to be reported or deported. For instance, in a survey among clients of a Hispanic-serving organization in New York City, having heard the rumor that WIC receipt makes undocumented relatives vulnerable to being reported to the government is associated with an 85% lower enrollment rate (Pelto et al. 2020).

Participants need to transport themselves to a clinic to claim vouchers and attend medical appointments, to a WIC center to attend nutrition education classes, and to a WIC center or WIC-approved grocery store to redeem vouchers. In general, interviewed participants do not cite lack of transportation as their most pressing barrier, but rather as part of a set of barriers that make participation hard or inconvenient but not impossible (Horton et al. 2013; Huynh 2013). Surveyed pregnant teenagers, however, do cite lack of transportation as a reason why they cannot enroll (USDA-FNS 2002). Of participants surveyed in Missouri who already missed appointments, 6% of English speakers and 10% of Spanish speakers cite lack of transportation. Furthermore, 4% were unable to redeem all of their vouchers because they could not access any WIC center or WIC-approved grocery store (Missouri DHSS 2014). Relatedly, since most participants have children under five, they either need to arrange childcare or go to the WIC center or grocery store with their children, which can make the shopping process harder (Najjar 2013). Still, participants interviewed

in Minnesota present the childcare issue as making participation more inconvenient but not impossible (Huynh 2013). Note that some WIC centers do provide childcare, although with limited hours.

Lastly, for non-English speakers, the barrier of language can affect communication about program eligibility. A study report mentions that many non-English speakers were confused about their WIC status as it related to their eligibility to participate in the study. Then, language barriers affect ease of program enrollment, comfort with staff, understanding of program services like nutrition education, and appointment scheduling and attendance (Huynh 2013). 20% of Spanish speakers surveyed in Indiana identify language as a problem for redeeming vouchers at grocery stores, compared to less than 1% of English speakers (Amankeldi and Eastcott 2012).

Conclusion

Despite generally positive perceptions and experiences of the WIC program (especially by Hispanics and Spanish speakers), eligible people face several barriers to participation, which, hypothetically, explain the gap between the enrolled and the eligible but unenrolled populations. Systemic barriers comprise the stigma attached to public assistance program, fear of repercussions (for immigrant families), access to transportation and childcare, and language barriers (for non-English speakers). Operational barriers refer to the perceived hassle of program requirements, like redeeming paper vouchers.

In recent developments, the National WIC Association (NWA) has decided to switch to an Electronic Benefit Transfer (EBT) card. (In the United States, EBT is a system for issuing public assistance program benefits through a payment card.) As of August 2021, 77 WIC agencies have completed the transition, and the remaining 12 have all started to implement it (USDA-FNS 2021; Weber et al. 2018a). As the NWA states, this switch aims for streamlined benefit delivery and easier redemption at grocery stores, thus increasing accountability and reducing stigma (NWA 2019).

Surveys in state agencies that have completed the transition reveal strong support for the new electronic system, from staff and participants alike. Perceived benefits include easier tracking of redemption and purchasing patterns and quicker, smoother checkout, protecting participants from interpersonal stigma (Altaram Institute 2014; Zimmer et al. 2021). Participation has even increased (by 8% over three years) in agencies that completed the transition relative to those that still rely on paper vouchers (Vasan et al. 2021). Hopefully, the transition to EBT cards has the potential to reduce barriers to participation in WIC.

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Conflicts of interest

The authors declare that they have no conflict of interest.

Availability of data and material

The literature database is available from the corresponding author upon request.

Code availability

Not applicable

Abstract

This paper synthesizes the academic and professional literature about participation in the Women, Infants and Children (WIC) Program in the United States. First, we compile evidence about differences in enrollment, perceptions, and experiences by eligible populations (women, infants, children) and by social categories (e.g., race, educational attainment, immigration status). Second, we describe barriers to participation through a twofold typology: operational and systemic. Operational barriers concern the perceived hassle of several aspects of WIC, and systemic barriers involve issues of stigma, fear, access, and language.

Keywords

social inequality, Federal grant program, nutritional risk, barriers to public assistance, participation in public assistance programs, perceptions of public assistance programs, public assistance in the United States

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