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Determining Barriers To Service And Preferred Methods Of Nutrition Education For Working And Student Women, Infant, And Children (Wic) Participants

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"DETERMINING BARRIERS TO SERVICE AND PREFERRED METHODS OF NUTRITION EDUCATION FOR WORKING AND STUDENT WOMEN, INFANT, AND CHILDREN (WIC) PARTICIPANTS"

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"Determining Barriers to Service and Preferred Methods of Nutrition Education for Working and Student Women, Infant, and Children (WIC) Participants"

(TITLE)

BY

Stephanie L. Bess, R.D., L.D., C.L.C.

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Determining Barriers to Service and Preferred Methods of Nutrition Education for Working and Student Women, Infant, and Children (WIC) Participants

Stephanie L. Bess, R. D., L. D., C. L. C.

Abstract

Introduction

The passing of the 104th Congress' Personal Responsibility and Work Opportunity Reconciliation Act of 1996 may inadvertently limit accessibility to the services provided by the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC). The law requires teenage mothers to complete high school or its equivalent and all families to spend a designated number of hours per week working or completing job skills training. Each state has set up its own methods for verifying compliance with these requirements with denial of services being the penalty for non-compliance. As this population is pushed to become "self-sufficient," growing numbers are being forced to choose between work or school and program participation. These changes necessitate an evaluation of WIC's role in meeting participant/guardian needs to attain self-sufficiency.

Purpose of Research

The purpose of this thesis research was to determine the barriers to services identified by working/student WIC participants/guardians, as well as to determine preferred nutrition education topics and methods. Specifically, the objectives were to identify barriers to nutrition services, to identify desired nutrition education topics, and to identify desired methods of nutrition education. Information related to these objectives was collected and analyzed. There has been a lack of this type of information in Illinois since the Personal Responsibility and Work Opportunity Reconciliation Act of 1996 was passed.

Methodology

Convenience samples were used for data collection. First, focus groups were held to collect qualitative data related to the study objectives. The common themes that arose from the focus groups were used to develop a participant questionnaire. The questionnaire was then used to gather quantitative data.

Results

Barriers to services were noted by focus group participants and questionnaire respondents. A quarter of questionnaire respondents indicated having had problems scheduling WIC appointments because of conflicts with their work schedules. In total, 39.4% of respondents indicated the best time for their WIC appointment was outside of the regular schedule (8:00 a.m. to 4:30 p.m. weekdays) of most WIC clinics in Illinois.

Nutrition education topics of most interest to questionnaire respondents were related to healthy eating on a budget, and getting toddlers and picky eaters to eat nutritious foods. The majority of respondents had received handouts or individual education contacts in the past. Preferences for nutrition education delivery centered around handouts, self-study activities and individual education contacts.

Conclusion

With the exception of participants in this study indicating WIC Program staff had been helpful to them, the barriers to services were similar to the findings of previous studies. While 52.3% (n=80/153) indicated they had no problems scheduling a WIC appointment, 25.5% (n=39/153) indicated having had a problem scheduling because of work. Of those who indicated they had had a problem with scheduling 74.4% (n=29/39) were employed full-time. In total, 39.4% (n=65/165) of respondents indicated the best time for their WIC appointment was outside of the regular schedule (8:00 a.m. to 4:30

p.m. weekdays) of most WIC clinics in Illinois. Thus working and/or attending school does create barriers for some participants.

Nutrition education topic preferences of this sample were very similar to those indicated in previous studies. Questionnaire responses indicated participants were most interested in the following nutrition education sessions: 47.6% Eating Healthy on a Budget (n=80), 45.2% Cooking Fast and Healthy (n=76), 37.5% Good Eating Habits for Kids (n=63), and 35.7% Getting Your Toddler to Eat Healthy Foods (n=60). Thus, interest in topics related to thrifty, fast meals and healthful eating for toddlers appeared to be greatest while interest in family meals and use of WIC foods was limited.

Responses to questions related to methods of nutrition education delivery were also reflective of previous research results. Questionnaire responses indicated more than half of respondents had received individual education or handouts and slightly less than half had been to group education sessions in the past. A few respondents noted receiving education via video. When asked to identify a preferred method of nutrition education delivery, the majority of respondents selected handouts. Individual education contacts and self study modules followed respectively. Email or internet messages were marked as preferred least often. A few respondents indicated they did not have access to email or the internet while others added stars next to this option suggesting they would be interested in receiving education on-line. There were discrepancies between preferred methods of delivery and the type of education that had been received previously.

Dedication

I want to dedicate this completed thesis to my biggest fan, editor and critic: Bennett Bess, to Marilyn Bess who made graduate work a possibility for me, and to my dear friend Susan Shankland.

Acknowledgements

I would like to thank the Illinois Department of Human Services' Bureau of Family Nutrition for their financial and administrative support of this research. I want to thank my thesis committee for their expertise, experience and vast patience with me in completing this project with special thanks to Dr. Martha Brown. Finally, a big thank you to the Springfield Department of Public Health WIC staff and Susan Shankland for their assistance in carrying out this research.

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Chapter 1

Introduction

During this time of cutbacks and downsizing, services to America's poor have not gone untouched. Work and school requirements mandated by national welfare reform in the now familiar Personal Responsibility and Work Opportunity Reconciliation Act of 1996 (Public Law 104-193, 1996), as well as the state government's push for self-sufficiency in Illinois, might make it more difficult for participants in the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) to continue to receive services.

The passing of the 104th Congress' Personal Responsibility and Work Opportunity Reconciliation Act of 1996 (Public Law 104-193, 1996), may inadvertently limit accessibility to WIC services. The law requires teenage mothers to complete high school or its equivalent and all families to spend a designated number of hours per week working or completing job skills training. Each state has set up its own methods for verifying compliance with these requirements with denial of services being the penalty for non-compliance. As this population is pushed to become "self-sufficient," growing numbers are being forced to choose between work or school and program participation. These changes necessitate an evaluation of WIC's role in meeting participant/guardian needs to attain self-sufficiency.

Purpose of Research

The purpose of this thesis research was to determine the barriers to services identified by working/student WIC participants/guardians, as well as to determine preferred nutrition education topics and methods. Specifically, the objectives were to identify barriers to nutrition services, to identify pertinent nutrition education topics, and

to identify desired methods of nutrition education. Heretofore there has been a lack of this type of information in Illinois.

Research Questions

Research questions to be answered included:

1. What are the barriers to receiving WIC services for working and/or student participants/guardians?
2. What nutrition education topics do working and/or student participants/guardians desire?
3. Which methods of nutrition education delivery do working and/or student participants/guardians prefer?

Definition of Terms

For the purpose of this research, the terms referred to in this study were defined as follows:

1. Participants: those individuals (pregnant or post-partum) who received WIC services for themselves.
2. Guardians: those individuals who brought any number of infants and/or children to WIC for services.
3. Part-time work/school: 1-34 hours a week (Johnson, Smiciklas-Wright, and Crouter, 1992).
4. Full-time work: 35 hours plus per week (Johnson et al.).
5. Proxy: A person of the participant's/guardian's choice who may act in their place to use the WIC food vouchers and receive nutrition education.

Chapter 2

Review of Literature

In order to support the research plan, a review of literature was completed to evaluate the components of this study. Research involving evaluation of barriers to service, nutrition education preferences, topics and delivery methods, of low-income and/or working/student participants/guardians, and the use of focus groups in a variety of settings was reviewed.

WIC Program

The WIC program is preventative and has been administered from the federal level by the U. S. Department of Agriculture's Food and Nutrition Service since its inception in 1974. The program's purpose is to decrease the incidence of nutrition-related risks such as iron deficiency anemia, short stature for age, and low birth weight. Prevention is attempted through the provision of nutrition education (mandated in 1978 Public Law 95-627), breast-feeding support, and nutritious supplemental foods (milk, eggs, legumes, cereal, juice, and cheese). The program is open to eligible pregnant, postpartum, and lactating women, as well as infants and children up to age five. Participants must meet income and residential requirements and be evaluated every six months for nutrition risks. The income specifications require participants to annually earn less than 185 percent of the current U. S. Poverty Income Guidelines; thus all participants are low-income. The Illinois WIC Program currently provides 245,000 residents with such assistance each year (Special Supplemental Nutrition Program for Women, Infants, and Children (WIC), 2002, October 29).

As the government urges service agencies to help those receiving various types of assistance to become more self-sufficient, it seems an appropriate time to re-evaluate the

program hours, service delivery, and educational topics offered to families with heads of household working, going to school, or both. The need for program review is reinforced by the Illinois Department of Human Services' (IDHS) Mission Statement, written in July 1997: "To assist Illinois residents to achieve self-sufficiency, independence, and health to the maximum extent possible by providing integrated family-oriented services, promoting prevention, and establishing measurable outcomes, in partnership with communities" (Illinois Department of Human Services, www.dhs.state.il./about/). Currently in Illinois, 98 agencies offer WIC services through 220 sites statewide. Of these sites, only 18 offer Saturday appointments, only six offer appointments after 5:00 p.m., and only three schedule appointments before 8:00 a.m. (Illinois Department of Human Services WIC Program [IDHS WP], 2002).

The passing of the 104th Congress' Personal Responsibility and Work Opportunity Reconciliation Act of 1996 (Public Law 104-193, 1996) may inadvertently limit accessibility to WIC services. The law requires teenage mothers to complete high school or its equivalent and all families to spend a designated number of hours per week working or completing job skills training. Each state has set up its own methods for verifying compliance with these requirements with denial of services being the penalty for non-compliance. As this population is pushed to become "self-sufficient," growing numbers are being forced to choose between work or school and program participation. These changes necessitate an evaluation of WIC's role in meeting participant/guardian needs to attain self-sufficiency.

Barriers to Services

Previous research has examined the jobs held by working women, including low-income women; the nutrition education needs of working and low-income women; and

barriers to social services such as the WIC Program. There is an apparent lack of available research examining a combination of these topics and extremely limited research dealing with any one of them specifically since the passing of the Personal Responsibility and Work Opportunity Reconciliation Act of 1996 (Public Law 104-193, 1996).

The Illinois Department of Public Health WIC Program's WIC Participant Survey (1996) sampled ten percent of active WIC participants/guardians annually. In 1996, 2,732 of 25,215 (10.8%) respondents indicated that, in regard to nutrition education sessions, they had a conflict between clinic hours and school/work hours (Illinois Department of Public Health WIC Program [IDPH WP], 1996). This number rose to 3,080 of 25,965, or 11.8% in the Illinois Department of Public Health WIC Program's WIC Participant Survey in 1997 (Illinois Department of Public Health WIC Program [IDPH WP], 1997). The survey results have limited generalizability as many clinics have poor attendance rates, which may leave many people who cannot get time off from school or work, out of the sample population.

The typical WIC participant has a high school degree or less formal education, though more are now working toward associate or technical degrees. In 1996 the Illinois Department of Public Health reported (IDPH WP, 1996) 43.3% of its WIC participants had less than a high school degree, 36.1% had a high school degree, and 17.7% of participants had education greater than a high school degree. In 1992 the U.S. Department of Labor had forecast an increase in jobs related to all three above-mentioned degree areas. Those occupations expected to have the largest numerical job growth between 1990 and 2005 included: home health aides, 91.7%; systems analysts and computer scientists, 78.9%; computer programmers, 56.1%; child care workers, 48.8%;

and receptionists and information clerks, 46.9%. The occupations with the largest numerical growth made up 50% of overall projected employment growth for the time period (U.S. Department of Labor, 1992).

In 1997 Presser and Cox found that 24.7% of low-educated women (high school degree or less) with young children were working in those fields expected to experience the largest growth. The study was based on analysis of a sub-sample of the May 1991 Current Population Survey (CPS), which is a monthly, nationally representative survey. The selected sub-sample included 2,671 women between the ages of 18 and 34, who were employed, had a high school education or less, and a minimum of one child under the age of 14 at home. This sub-sample was considered representative of 5.0 million people at the time of publication according to the authors (Presser and Cox, 1997).

Presser and Cox (1997) also found these women's occupations too often require non-standard workdays and/or hours, which can be described as anything other than a fixed day schedule with at least half of working hours between 8:00 a.m. and 4:00 p.m. Thus, a large number of women leaving welfare and entering the workforce are likely to take jobs with non-standard workdays and/or hours that may or may not coincide with their WIC appointment, which is usually scheduled three months in advance.

According to Presser and Cox (1997) over half (56.7%) of low-educated women work standard, but inflexible, daytime hours. As most WIC clinics schedule appointments during these same standard hours, those individuals with inflexible work schedules may find it difficult to get away from their jobs for the hour or two it takes to apply/reapply and receive WIC food vouchers (referred to as food instruments or FIs in Illinois). Many times a participant/guardian must take an entire day off from work if he/she wishes to receive services. Dodds, Ahluwalia, and Baligh (1996) found through 17 focus group

discussions involving 141 participants of private, non-profit agencies, that these inflexible hours made public assistance programs such as WIC and the Food Stamp Program inaccessible, or not worth the effort, to low-income families. Focus groups comprised of low-income North Carolinians who were receiving some sort of public assistance considered these public programs a last resort due to the marginal benefits provided relative to the time off from work required to apply. Poor treatment during the application process from WIC and food stamp employees further compounded the problem reported in this study.

Attending school may have a similar impact on scheduling problems. Over seven percent of WIC participants/guardians responding to an Illinois WIC Participant Survey (IDPH WP, 1997) were 17 years of age or less. This younger population may be underrepresented due to poor attendance at nutrition education sessions typically held during school hours. High school hours are usually 8:00 a.m. to 2:00 or 3:00 p.m.. Schools have policies defining excusable absences, and medical need is usually given priority. Damron et al. (1999) reported 29 percent of 2,233 eligible women declined to participate in their study because of work or school conflict. Of those who did participate but only attended one of three nutrition sessions, 32 percent attributed their poor attendance to work or school conflict in a post-intervention survey. Thirty-nine percent of those who did not attend any nutrition sessions cited the same problem.

Of those who are compliant with the Personal Responsibility and Work Opportunity Reconciliation Act of 1996 (Public Law 104-193, 1996), many will have to leave school or work, retrieve his/her baby/child from a child-care location, and travel to WIC, all prior to the one hour application process. The logistics of the application process and the lack of flexible clinic hours may force a parent/guardian to choose

between receiving needed nutrition education and food for his/her family and keeping an expected school/work schedule. These concerns would apply to non-traditional students, returning students, and single parents as well.

Nutrition Education Needs

The effect of women entering the workforce has traditionally had a considerable impact on society. The ability of a working mother to provide a healthful diet for her family is an age-old concern that continues to be a hotly debated issue. Research has evaluated both the psychological and emotional impact working has on a mother. A purposive sample of 39 working mothers with at least one child under age five indicated that working mothers tended to feel torn between providing their families with nutritious meals, and offering those foods that the family prefers, according to Kirk and Gillespie (1990). Nutrition education could lessen the dilemma associated with these choices for mothers of all income levels. When Johnson, Smiciklas-Wright, and Crouter (1992) compared four non-consecutive days' 24-hour dietary recalls of children aged two to five years whose mothers did not work (n=123) to those whose mothers worked full- (n=44) or part-time (n=49), they found a statistically significant difference in the number of meals the children ate away from home (1.65, 5.57 and 2.59 meals a week, respectively). They did not, however, find a relationship between maternal employment and poor nutrient intake of children. This study raised questions about the nutritional quality of foods prepared at home.

Participants of the WIC program seem to be interested in nutrition education. Nearly half (46%) of those surveyed in Illinois indicated that they would be interested in learning more about their children's eating habits, such as how to get a "picky" child to eat, and 22.9% said they would like information on how to eat well "on the run" (IDPH

WP, 1997). In Pestano-Binghay, Reis, and Walters' 1993 needs assessment, 964 low income, minority, Chicago women expressed interest in learning how to do the following: offer healthful foods to the family (62%), serve meals the family enjoyed (49%), and find time to prepare such meals (24%). Education topics of interest as indicated by the Pestano-Binghay et al. (1993) questionnaire were food preparation and meal planning, as well as getting children to eat nutritious foods. In 1999, Tarone reported similar concerns expressed by parents in focus group sessions, including the lack of time to plan and prepare meals, inexperience in dealing with picky eaters, and the negative influences of others (Tarone, 1999).

Since there are a variety of ways to provide nutrition education, educators need to be aware of what methods and topics are preferred by the specific population they are teaching. Low-income minority women in the Pestano-Binghay et al. (1993) assessment most preferred written handouts, followed by demonstrations, videos, films, slides, and individual education contacts. Forty-one participants in the Expanded Food and Nutrition Education Program (EFNEP) favored "hands-on activities," group sessions, and videos according to Hartman, McCarthy, Park, Schuster, and Kushi (1994). Through the assessment of 728 pre- and post-surveys, four focus group sessions involving 16 women, and 41 individual interviews, WIC participants were found by Carroll, Stein, Byron, and Dutram (1996) to most dislike lectures. These same WIC participants/guardians were found to support the receiving of interactive, multimedia education through computer kiosks. More than half requested that compatible written information be distributed as well (Carroll et al., 1996). Most participants in the Damron et al. (1999) focus groups preferred on-site education that was brief, participatory, and provided practical information.

Focus Groups

Focus groups as a form of qualitative research have become a valuable means of collecting data quickly and economically (Krueger, 1988). Within these groups, open-ended questions are used to encourage discussion, and sessions are videotaped or tape recorded. A trained moderator conducts each session and leads participants through various predetermined questions and topics. Common themes are determined for analysis following the discussion.

Several researchers have used focus groups to collect information on a variety of needs and wants of WIC participants/guardians. Carroll et al. (1996) used focus groups to evaluate the use of interactive, multimedia, computer education as an alternative to the usual forms of WIC nutrition education. Focus groups were used to assess the use of social service programs and to assess perceived barriers to program use, as well as suggestions for program improvement, by Dodds et al. (1996). Treiman et al. (1996) included focus groups to complete formative research on how to increase WIC participant's consumption of fruits and vegetables. Nutrition education focused on increasing intake of fruits and vegetables was evaluated via focus groups by Damron et al. (1999).

Focus group discussions have been used as the sole means of data collection as in Tarone (1999), Dodds et.al. (1996), Hartman et. al. (1994), Lewis and Yetley (1992), and Trenkner and Achterberg (1991), and in conjunction with other data collection methods. Carroll et al. (1996) used a combination of focus groups, individual interviews, and pre- and post-kiosk use surveys to determine participant's acceptance. Kirk and Gillespie (1990) combined "individual response probing instruments" with the use of focus groups as they studied the influences on working mothers' food choices for their families.

"Central location intercept interviews" based on focus group findings were used by Treiman et al. (1996) to confirm their findings and allow for data analysis. Focus groups with WIC participants were used to develop a pilot study followed by a full-scale nutrition program by Damron et al. (1999). Trenkner and Achterberg (1991) have stated that focus groups are optimally used with qualitative survey instruments.

Previous researchers have used a variety of recruitment methods for their focus groups including: random digit dialing of the telephone (Lewis & Yetley, 1992), random selection from mailing lists (Trenkner & Achterberg, 1991), purposive sampling (Kirk & Gillespie, 1990), and convenience samples (Carroll et al., 1996; Dodds et al., 1996; Hartman et al., 1994; Treiman et al., 1996). Incentives used for recruitment in previous studies of nutrition education and/or with low income families included $40 gift certificates for groceries used by Hartman et al. (1994). Cash payments offered ranged from: $10 (Treiman et al., 1996; Trenkner & Achterberg, 1991), to $20 (Carroll et al., 1996; Dodds et al., 1996) to $30, (Lewis & Yetley, 1992). Discussions ranged in length from 30 minutes for Trenkner and Achterberg (1991), to 90 minutes for Treiman et al. (1996). No study used fewer than four discussion sessions, including the pilot study. When working with low income, low literacy populations, Hartman et al. (1994) recommend the researcher clarify the organization conducting the research in the beginning to avoid suspicion, offer incentives to participants, contact participants by mail due to frequent telephone changes and disconnections, try using pre-formed groups if time and resources are limited, hold discussions in a familiar place, and provide transportation and childcare if necessary.

Summary

In summary, the aforementioned studies have documented that low-income families often work in settings which may limit their ability to complete the application process for service acquisition and that this may be a growing trend. It has also been indicated that many low-income families are interested in, and are in need of, nutrition education related to providing their children healthful diets particularly for the "picky eater." A number of studies have evaluated participants' preferences for education delivery with varying results. Focus group research is an effective method for collecting qualitative information from participants and has been used in many ways in a number of settings.

While research has been used to evaluate barriers to services and nutrition education needs, there are limitations to these studies. Few studies have evaluated WIC participants, particularly since the Personal Responsibility and Work Opportunity Reconciliation Act (Public Law 104-193, 1996) was passed. In Illinois, data has not been collected on usual workdays or times, or on preferred times for WIC appointments. Previous studies that did evaluate barriers to services did not assess for specific scheduling problems. There has been very limited information published regarding those who attend school and the types of barriers and preferences with which they are faced. Finally, changes in the type of nutrition information desired as a result of a participant/guardian attending work and school have not been evaluated. The proposed study addressed these variables.

Chapter 3

Methodology

Population and Sample

A convenience sample was drawn from WIC participants/guardians in the Springfield, Illinois Urban League WIC Program for focus groups and from the Springfield, Illinois Department of Public Health WIC Program for the questionnaire distribution. Selection criteria included: current program participation (active enrollment of either the individual or his/her infant/child), and working or attending school full- or part-time.

Focus group sample. At the time of WIC certification (determination of eligibility) participants/guardians were asked if they would be interested in participating in group sessions in which they might share their opinions on barriers to services, and nutrition education. For three months informational posters and sign-up sheets were located within the WIC clinic (participants are seen every three months to maintain active program status), to solicit interest in the focus group sessions. Those who expressed an interest were given an informational letter (see Appendix A) and asked for a work and/or home telephone number, as well as a mailing address, for later contact. It was estimated that 50 interested persons were needed in order to ensure attendance of six to eight people at each of the four focus group discussions, since WIC attendance rates are usually around 50%. Due to low response rates during participant visits, a WIC report was generated indicating those who were active in the program who had used paycheck stubs as proof of their income. From the report, a random sample of 100 participants was selected and informational letters including a postage paid response card were mailed.

Questionnaire sample. A questionnaire based on focus group results was distributed to active, working/student participant/guardians who were not part of the focus groups themselves during the first six months of calendar year 2002. Intake clerks for the WIC Program were given a script to use for screening participants when they came in for their certification appointments (see Appendix B).

Data Collection Instruments

Focus groups. A focus group discussion guide was used with questions based, in part, on the WIC participant survey from 1996 (IDPH WP, 1996) (see Appendix C). The State Nutrition Coordinator and members of the IDHS Nutrition Services Staff reviewed the guide for face validity and literacy level. No major changes were found to be necessary following the pilot focus group session.

Participant questionnaire. Videotapes of each focus group session (excluding the pilots) were reviewed to determine common themes. Once all focus group information was analyzed, a questionnaire based on themes from the focus groups was developed (see Appendix D). The State Nutrition Coordinator and members of the IDHS Nutrition Services Staff reviewed the guide for face validity and literacy level. Of the 20 education topics offered to the focus groups, the 10 most popular choices were added to the questionnaire. Four additional education topics were added with the input of the IDHS Nutrition Services Staff. The questionnaire was pilot tested for validity with 20 WIC participants prior to mass distribution.

Data Collection Procedures

Prior to the implementation of the procedures for this study approval was obtained from both the Illinois Department of Human Resources and the thesis committee.

Focus groups. Focus groups were scheduled once a satisfactory number of interested respondents were identified. All participants of focus groups signed a release form for videotaping and were assured of confidentiality (see Appendix E). Exact dates and times for the sessions were based on participant preferences/needs. All sessions took place at the Springfield, Illinois Urban League, which provided free parking, a central, familiar location, and adequate space. Focus group sessions lasted 35 minutes on average, and participants received a $30.00 gift certificate for groceries. A moderator (the primary researcher) and an assistant were present for each session, and childcare was available.

A pilot session was held and audiotaped at 6:00 p.m. on July 28, 1999 with three participants in attendance. A second pilot session, held on September 14, 1999 at 6:00 p.m.; involved five participants and was videotaped. No changes were made to the Discussion Guide (see Appendix C) following the pilot sessions. Sessions scheduled for October 7, 1999 at 7:30 a.m., and for January 26, 2000 at 6:00 p.m. had only one attendee each. Since focus groups were not possible with one attendee, the questions were provided to the participants on paper and the written responses were kept. On November 2, 1999 at 7:30 p.m. three people attended a session which was videotaped. Of the seven people scheduled for the evening of February 9, 2000, three came, but at various times such that only one person was available at any given point. Again, questions were provided in written form and responses were kept on file. A focus group was scheduled for April 25, 2000 at 7:15 a.m.. No one attended though three were scheduled to come. A final session was scheduled for 6:00 p.m. on April 26, 2000. Eighteen people were expected and ten came, participated and were videotaped.

The first ten minutes of the sessions were used to collect basic demographic information such as years of school, current employment status, etc., from the participants through a brief written questionnaire. The moderator used a discussion guide to direct the session (see Appendix C) following introductions. The assistant was responsible for the video camera, taking notes, collecting questionnaires, and paying the subjects.

Participant questionnaire. Springfield, Illinois Department of Public Health WIC staff were provided with a plan and a script for questionnaire distribution (see Appendix B). Those willing to participate received no payment for completing a questionnaire. Participants were assured of anonymity prior to completing the questionnaire. The self-reported questionnaires were pilot tested in January 2002. Twenty questionnaires were completed for the pilot and no major problems were noted. A total of 172 questionnaires were returned from February 1, 2002 through June 30, 2002. Employment status of "other" was selected by four participants/guardians who qualified the response by noting they were on medical leave, laid off, unemployed, or worked on Sunday only. Four questionnaires were not used in the final analysis as the respondents indicated they were not working nor attending school at the time and did not qualify their responses to indicate a history of being a working or student participant/guardian. All other questionnaires were determined to be complete enough for use with at least 10 of the 13 questions answered. Responses were used to help determine the external validity of themes arising in focus groups and determine recommendations.

Data Analysis

To answer the research questions formulated for this study both qualitative and quantitative data were collected and analyzed. Data collected during focus group

sessions were qualitative and were analyzed as follows. Two reviewers, including the primary researcher, watched each focus group session tape a total of three times. The first review was done to refresh the analysts' memories. A second review was used to determine common themes, which were noted. A final review allowed the reviewers to check for accuracy and determine the level of group agreement for each theme. Major themes of the focus groups were determined by the number of times issues arose, group agreement indicated verbally (either positive, negative, or neutral), and the length of time spent on given topics. Non-verbal responses were not tallied. Inter-rater reliability was established to validate scoring.

The common themes determined from the focus group results were used to develop the Participant Questionnaire (see Appendix D) which was used to collect quantitative data. Data from the questionnaires were analyzed for frequency and crosstabulated using the Statistical Package for Social Sciences (SPSS) (SPSS Inc., 1997). Following is a description of how specific data for each question were evaluated.

What are the barriers to receiving WIC services for working and/or student participants/guardians? To assess barriers to receiving WIC services focus group participants were asked to describe a good or bad experience they had had in keeping a WIC appointment. Participants were also asked to discuss how WIC could be of more assistance to them, any barriers they had experienced to receiving WIC services , if they ever sent proxies to WIC for education in their place, and their opinion of Saturday WIC appointments. Responses to these questions were used to develop the first ten questions of the questionnaire. For Question One codes were added to allow for selection of both employment and attending school. To determine participants' workdays Question Two was originally separated into each day of the week. For analysis of Question Two codes

were added to group those who worked Monday through Friday, all days, and for varying days. Question Three required a variety of work hours to be clustered resulting in ten possible categories. To assess for the length of time of participation on the WIC Program, the oldest child's age was used and converted to months. All questions were analyzed for frequencies. Information regarding employment/school status was cross-tabulated with responses regarding problems keeping WIC appointments.

What nutrition education topics do working and/or student participants/guardians desire? Desirable nutrition education topics were identified at the end of focus group sessions by providing participants with a listing of potential nutrition education topics (see Appendix F). Those class titles selected most often were used on the Participant Questionnaire (see Appendix D) for Question 11. Questionnaire responses were analyzed for frequencies.

Which methods of nutrition education delivery do working and/or student participants/guardians prefer? Preferences for nutrition education delivery were assessed by asking focus group participants to describe a memorable experience they had had in relation to WIC Nutrition Education Sessions. Participants were also asked their preference for receiving education. Responses to these questions resulted in the development of Participant Questionnaire Questions 12 and 13 (see Appendix D). These questions were analyzed for frequencies. Preferred methods of nutrition education delivery were analyzed after combining the "Like the Most" and "Ok" responses.

Chapter 4

Results and Discussion

The presentation and discussion of the results of this study begin with a description of the focus group and questionnaire samples. The results of each research question are discussed in turn following the sample descriptions.

Description of the Sample

Springfield, Illinois is an urban area located centrally within the state. At the time of this study Springfield had 111,454 residents (State of Illinois: Illinois Census 2000, 2001). The WIC programs of Springfield serve a varied population of urban (Springfield) residents and rural county residents. Reports of race and ethnicity indicate that Springfield Urban League WIC participants were: 45.83% white, non-Hispanic; 44.8% black, non-Hispanic; 7.27% Other; and 1.5% Hispanic when the focus groups were conducted [Illinois Department of Public Health WIC Program (IDPH WP), Racial Ethnic Participation Report, November 2000]. At the time of questionnaire distribution Springfield Department of Public Health WIC participants were: 55.38% white, non-Hispanic; 38.57% black, non-Hispanic; 3.73% Other; and 1.4% Hispanic [Illinois Department of Public Health WIC Program (IDPH WP), Racial Ethnic Participation Report, February 2002].

Focus group. Of the twenty-six participants in the focus groups, 50% (n=13) worked full-time, nearly 27% (n=7) worked part-time, and 23% (n=6) did not work but attended school. The hours in class of those going to school varied greatly. Nearly 70% (n=18) of the focus group participants had only one child on WIC. Just over 19% (n=5) of participants had two children and two people (8%) had three children on WIC at the

time the focus groups were held. Ages of the children ranged from one month to 48 months.

Participant questionnaire. Of the 168 participants who returned a questionnaire and met study requirements, 58.9% (n=90 work only and n=9 work and going to school) were employed full-time, 29.8% (n=38 work only and n=12 work and going to school) were employed part-time and 21.4% (n=36) were receiving some schooling (see Figure 1). A Monday through Friday workweek was indicated by 43.9% (n=68) of the 155 participants who responded to the question. An equal number of participants noted that their scheduled varied. Working "all days" of the week was reported by 10.3% (n=16) (see Figure 2).

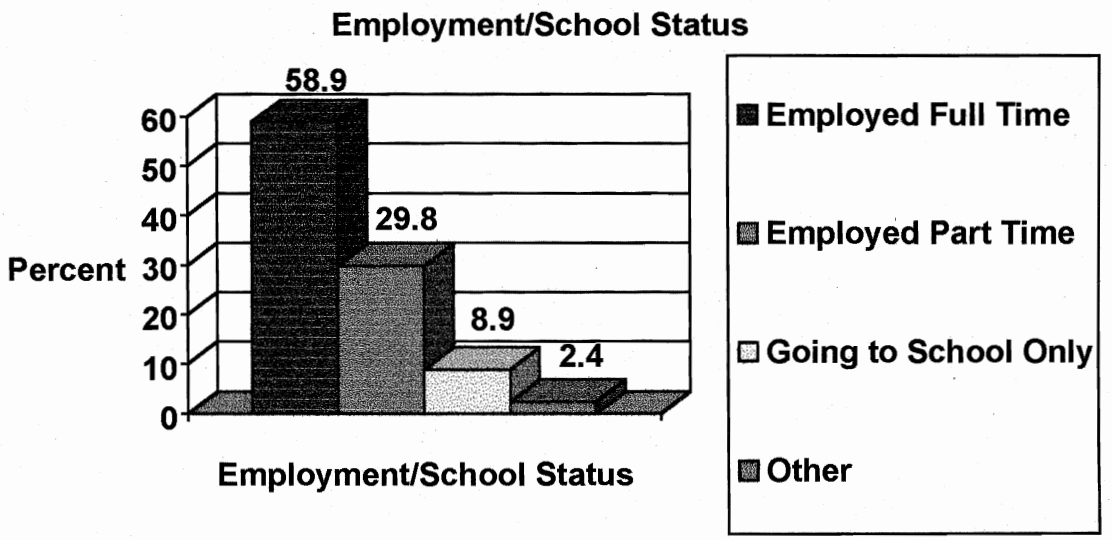

Figure 1. Employment/School status of questionnaire respondents (n=168).

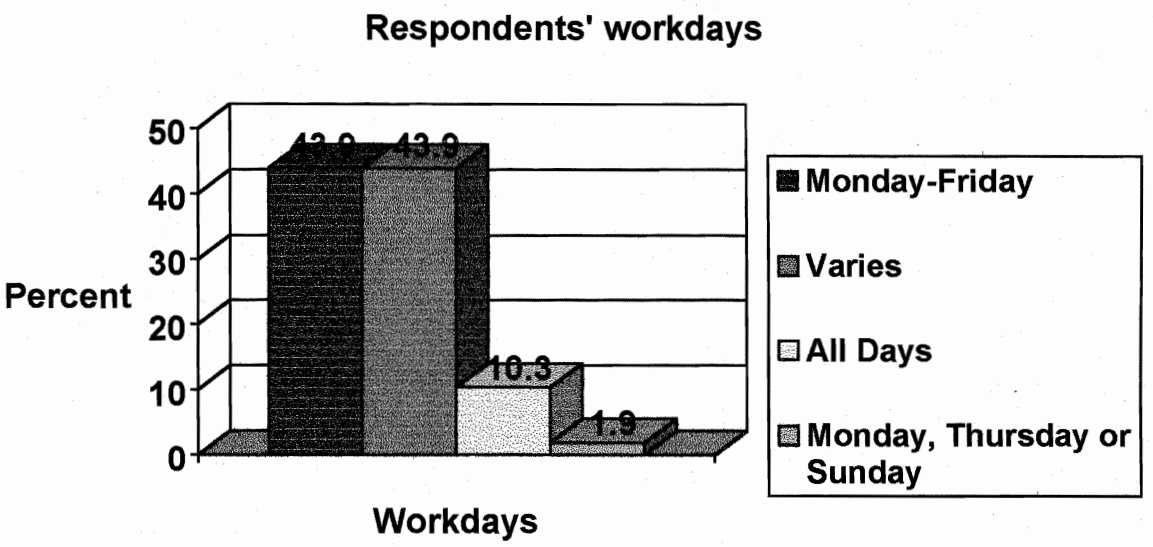

Figure 2. Workdays of questionnaire respondents (n=155).

Work hours varied for 54.4% (n=81) of the 149 participants who answered that question. Seventeen percent (n=26) worked 8:30 a.m. to 5:00 p.m. and 12.8% (n=19) worked 8:00 a.m. to 4:00 p.m. (see Table 1). These findings were in accordance with those of Presser and Cox (1997) who found low-educated women with young children often work in jobs with non–standard workdays and/or hours.

The length of time of enrollment on the WIC Program ranged from 1 to 228 months. About one-third (33.6%; n=49) had participated in the program from 1 to 12 months, 27.4% (n=40) had participated from 13-24 months, and 39% (n=57) had participated longer than 24 months.

Table 1

Usual Work Hours of Questionnaire Respondents

Work hours	Frequency	Percent
Varies	81	54.4
8:30-5:00	26	17.4
8:00-4:00	19	12.8
7:00-3:00	11	7.4
8:00-3:00	8	5.4
7:00-4:00	1	0.7
10:00-5:00	1	0.7
8:00-2:00	1	0.7
5:00-10:00	1	0.7
TOTAL	149	100.0

Research Questions

Research question one: What are the barriers to receiving WIC services for working and/or student participants/guardians? Focus group participants were positive toward the WIC Program and voiced their appreciation for the aid the program provided. Some participants indicated later hours and Saturday appointments would be nice, but many did not think the WIC clinic would offer them. Participants also indicated it was difficult to get away from work to go to WIC appointments because of their supervisor or

time factors. These results were mixed compared to previous focus group research by Dodds et al. (1996). While Dodds et al. (1996) found low-income North Carolinians reported difficulties getting away from work to apply for WIC and Food Stamps, they also noted poor treatment during the application process left applicants feeling program benefits were not worth the trouble. The focus group participants of the current study did not report being treated poorly.

The majority of respondents indicated the best time for an appointment was during standard, weekday, clinic hours of 8:30 and 11:30 a.m. (n=42/165; 25.5%), or 1:30 and 4:30 p.m. (n=42/165; 25.5%). However, 20% (n=33/165) of those surveyed indicated a preference for the hours of 4:30 to 6:00 p.m. and nearly 11% (n=18/165) preferred 6:30-8:30 a.m. appointments. In total, 39.4% (n=65/165) of respondents indicated the best time for their WIC appointment was outside of the regular schedule (8:00 a.m. to 4:30 p.m. weekdays) of most WIC clinics in Illinois (see Figure 3).

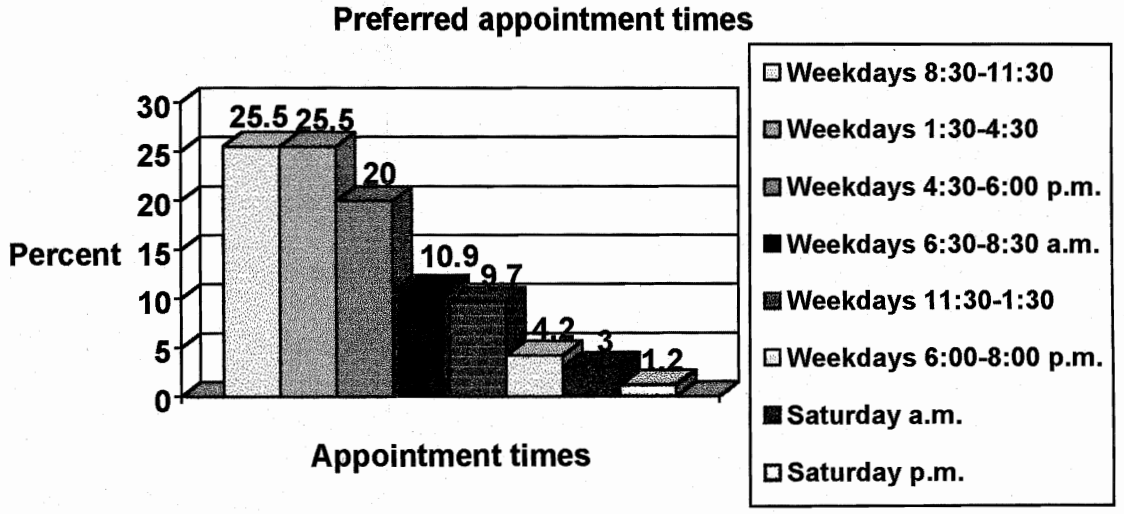

Figure 3. Best time for appointments for questionnaire respondents (n=165).

Responses related to problems scheduling a WIC appointment were mixed with 52.3% (n=80/153) of respondents indicating they had had no problems. Slightly over 25% (n=39/153) indicated having had a problem scheduling because of work and of those, 74.4% (n=29/39) were employed full-time. These numbers were higher than those of the Illinois Department of Public Health WIC Program's WIC Participant Survey in 1997 (IDPH WP, 1997), but were somewhat lower than the results of Damron et al. (1999). Almost 8% (n=12/153) indicated problems related to their school schedule and nearly six percent (n=9/153) had problems keeping an appointment because of transportation issues.

In Illinois WIC participants are allowed to designate a proxy to attend certain appointments for them and to use their WIC food instruments at the grocery store. Having a proxy could be helpful to working/schooling WIC participants. Proxies could shop for participant/guardians or attend WIC education appointments at times when the participant/guardian could not do so. Focus group participants indicated they were unaware of the process for obtaining a proxy or did not take advantage of the option. However, only 4.2% (n=7/167) of questionnaire respondents indicated they were unaware of the proxy process. Of the 116 respondents who indicated they had a proxy, 20.7% (n=24/116) had never had their proxy act for them. An additional 55.2% (n=64/116) had their proxy act for them six or fewer times per year.

Research question two: What nutrition education topics do working and/or student participants/guardians desire? Many focus group participants stated that going to work had changed the way they prepared meals and shopped. The three most selected nutrition education topics were Eating Healthy on a Budget, Eating Out Can Be Fast & Nutritious,

and Getting Your Toddler to Eat Healthy Foods. No "least" helpful information from the WIC Program was noted.

Questionnaire responses (Questionnaire #11, Appendix D) indicated participants were most interested in the following nutrition education sessions: 47.6% Eating Healthy on a Budget (n=80), 45.2% Cooking Fast and Healthy (n=76), 37.5% Good Eating Habits for Kids (n=63), and 35.7% Getting Your Toddler to Eat Healthy Foods (n=60). Subjects selected the least were: Smart Smiles: Infant Oral Health 18.5% (n=31), Family Meals: How Can I Make Them Work? 17.9% (n=30), and Using WIC Foods 17.3% (n=29) (See Table 2).

These results were similar to those of the 1997 IDPH WIC Participant Survey (IDPH WP, 1997), which indicated participants were interested in their children's eating habits, picky eating and eating on the run. This also correlated with the findings of Pestano-Binghay, Reis, and Walters (1993) who found participants were interested in getting children to eat nutritious foods, as well as in food preparation and meal planning. Tarone (1999) found parents to be concerned about the lack of time to plan and prepare meals and how to deal with picky eaters.

Table 2

Nutrition Education Topic Preferences of Questionnaire Respondents

Title	Frequency	Percent
Eating healthy on a budget	80	47.6
Cooking fast & healthy	76	45.2
Good eating habits for kids	63	37.5
Getting your toddler to eat healthy foods	60	35.7
Snacks can be nutritious	52	31.0
Shop smart, shop quick	50	29.8
Eating on the run	45	26.8
Getting kids to eat vegetables	44	26.2
Planning meals for good health	42	25.0
Choosing low fat foods	42	25.0
Eating out can be fast & nutritious	35	20.8
Smart smiles: Infant oral health	31	18.5
Family meals: How can I make them work?	30	17.9
Using WIC foods	29	17.3

Research question three: Which methods of nutrition education delivery do working and/or student participants/guardians prefer? In analyzing responses to focus group questions there was a slight preference for individual education. Participants debated the benefits of group education versus individual contacts with some feeling it was helpful to hear what other mothers had to say and others preferring one on one

counseling with a health professional. Some participants stated that the type of education one needs is dependent on the stage of parenting one is in. New parents may benefit more from group discussions whereas those who have older children might benefit more from a more individualized approach.

Questionnaire responses (see Question #12, Appendix D) indicated more than half (56.0%; n=94/168) of respondents had received individual education or handouts and slightly less than half (47.6%; n=80/168) had been to group education sessions in the past. Few respondents (11.3%; n=19/168) noted receiving education via video (see Figure 4).

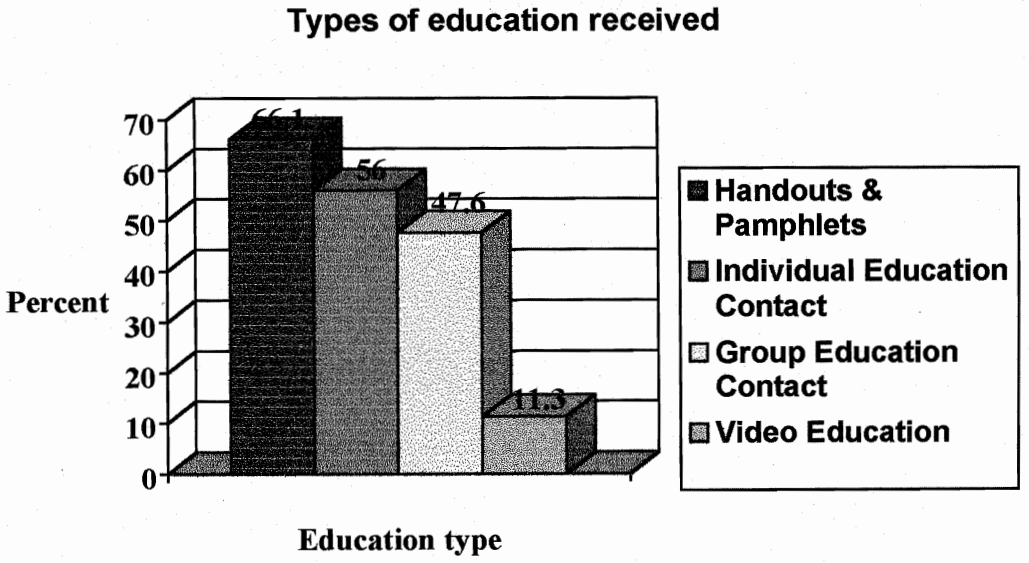

Figure 4. Nutrition education delivery methods experienced by questionnaire respondents (n=168).

When asked to identify a preferred method of nutrition education delivery (see Question #13, Appendix D) the greatest number of respondents (88.7%, n=149) selected handouts. Individual education contacts and self study modules followed respectively.

Email or internet messages were marked as preferred least often (see Table 3). A few respondents indicated they did not have access to email or the internet while others added stars next to this option suggesting they would be very interested in receiving education on-line.

Preferences for nutrition education were compared to types of education received (see Figure 5). Over 88% of participants indicated they preferred nutrition education through handouts yet only 66.1% reported receiving education via handouts/pamphlets. Individual education was preferred by more participants than had received it (81.0% vs. 56%). Group education was matched more closely with 62.5% preferring it and 47.6% receiving it. Video education had been received by 11.3% of respondents though 58.3% reported interest in the method of delivery.

These results were comparable to those of Pestano-Binghay et al. (1993) who also found a preference for written handouts. The results of Hartman et al. (1994) differ from those of the current study as they found EFNEP participants to prefer group sessions and videos. The study by Carroll et al. (1996) found WIC participants/guardians to support use of multimedia education which was not supported in the current research. Though the limited interest in e-mail or internet messages in this study may indicate a subsection of participants/guardians are comfortable using computers and not having human contact while receiving information.

Table 3

Nutrition Education Delivery Preferences of Questionnaire Respondents (n=168)

Method	Frequency	Percent
Handouts/pamphlets	149	88.7
Individual education	136	81.0
Self-study activities	108	64.3
Group education	105	62.5
Videotapes	98	58.3
Group education as a new parent, & individual education when children are older	94	56.0
Individual education as a new parent, & group education when children are older	92	54.8
Internet/email messages	74	44.0

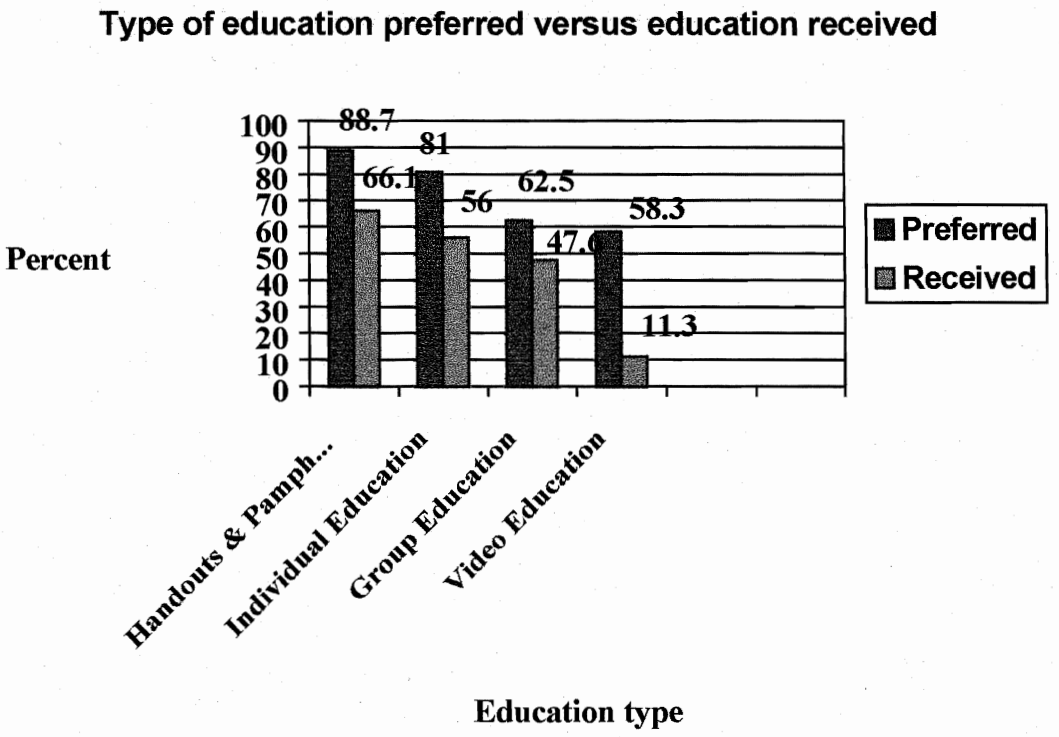

Figure 5. Nutrition education delivery method preferences versus methods experienced by questionnaire respondents (n=168).

Chapter 5

Summary, Conclusions, and Implications

Summary

The purpose of this thesis research was to determine the barriers to services identified by working/student WIC participants/guardians, as well as to determine preferred nutrition education topics and methods. Specifically, the objectives were to identify barriers to nutrition services, to identify pertinent nutrition education topics, and to identify desired methods of nutrition education. Information related to these objectives was collected and analyzed. There has been a lack of this type of information in Illinois since the Personal Responsibility and Work Opportunity Reconciliation Act of 1996 (Public Law 104-193, 1996) was passed.

Convenience samples were used for data collection. First, focus groups were held to collect qualitative data related to the study objectives. The common themes that arose from the focus groups were used to develop a participant questionnaire. The questionnaire was then used to gather quantitative data.

Focus group participants were recruited through the Springfield, Illinois Urban League WIC Program (see Appendix A). Focus group sessions involved 26 participants/guardians. A discussion guide was used to facilitate the sessions (see Appendix C). Basic demographic information was collected and participants were asked about previous experiences with the Illinois WIC Program including barriers to services, preferred nutrition education topics and methods of nutrition education delivery. Sessions were videotaped with participant consent (see Appendix E). All focus group participants received a $30.00 gift certificate for groceries.

A participant questionnaire was developed from the common themes of the focus group sessions (see Appendix D). The questionnaire was distributed to working or student participants/guardians at the time of reapplication to the Springfield, Illinois Health Department WIC Program. Intake clerks for the WIC Program screened participants/guardians using a script provided by the researcher (see Appendix B). Data from 168 completed questionnaires were analyzed for frequencies using SPSS.

Nearly 60% of the questionnaire respondents were employed full-time, including 5% who attended school in addition to their full-time work. Another 30% worked part-time including 7% who went to school and worked part-time. The remaining 21% were attending school only (see Figure 1). Days worked of questionnaire respondents varied for 43.9% and were standard Monday through Friday for another 43.9%. Slightly over 10% indicated they worked all seven days, and a small (1.9%) percent worked only one day a week (see Figure 2). Over half (54.4%) of respondents reported having varying work hours (see Table 1) which has been reported in other research (Pressor & Cox, 1997).

Barriers to services were noted by focus group participants and questionnaire respondents. A quarter of questionnaire respondents indicated having had problems scheduling WIC appointments because of conflicts with their work schedules (see Figure 3). These numbers were higher than those seen in previous survey research in Illinois, but lower than those of Damron et al. (1999). Preferred appointment times, as shown in Figure 3, were identified as early morning, evenings after 6:00, or Saturday by 19% of respondents, which were outside of most Illinois WIC Program hours at the time. An additional 20% of respondents indicated a need for appointments between 4:30 and 6:00 p.m.. In total, 39.4% of respondents indicated the best time for their WIC appointment

was outside of the regular schedule (8:00 a.m. to 4:30 p.m. weekdays) of most WIC clinics in Illinois.

The concept of having a proxy was unknown to many focus group participants, however nearly 96% of questionnaire respondents indicated they were aware of the proxy option and process. The number of times a year a proxy acted for respondents varied widely with 55% taking advantage of the opportunity fewer than six times per year while another 12% did so more than 12 times a year.

Nutrition education topics of most interest to questionnaire respondents were related to healthy eating on a budget, and getting toddlers and picky eaters to eat nutritious foods (see Table 2). These findings correlated with previous research of Pestano-Binghay et al. (1993) and that of Tarone (1999). The majority of respondents had received handouts or individual education contacts in the past (see Figure 4). Preferences for nutrition education delivery centered around handouts, self-study activities and individual education contacts (see Table 3). These results were similar to those of Pestano-Binghay et al. (1993) but opposed the findings of Hartman et al. (1994). While a low number of respondents indicated they would participate in internet/email education in this research, Carroll et al. (1996) found WIC participants/guardians to be interested in such a method of delivery.

Strengths

The research completed achieved the purpose of evaluating barriers to services, preferences for nutrition education topics and delivery methods of Springfield, Illinois working and/or student WIC Program participants/guardians. Focus group sessions provided qualitative data that was then used to develop a 13-question questionnaire for collecting quantitative data. This study specifically targeted working and/or student WIC

participants which had not been done since the Personal Responsibility and Work Opportunity Reconciliation Act of 1996 (Public Law 104-193, 1996) was passed. Collection of data related to usual workdays and times as well as preferred times for WIC appointments were completed. Previous studies that did evaluate barriers to services did not assess for specific scheduling problems as was done in this study. Finally, changes in the type of nutrition information desired as a result of a participant/guardian attending work and school were evaluated.

Limitations

Sample populations from both components of this study were drawn from those already involved with the WIC Program. Those who experienced barriers to services too great to apply for the WIC Program were obviously missing. Because the research was done solely in Springfield, Illinois there is limited generalizability to other areas of the state or WIC Programs nationwide.

A variety of factors may have been limitations to the data collected in the focus group sessions. The sample may not have been representative of working and/or student participants/guardians. Low attendance for the sessions was an ongoing problem. While focus group sessions were not held in the WIC clinic, participants may still have been hesitant to voice complaints about the program for fear of being penalized later.

Participant questionnaires had limitations as well. The sample may not have been representative of working and/or student participants/guardians. The Springfield Department of Public Health WIC Program, where the questionnaires were collected, offered evening appointments one night a week at the time of the study. Thus, working and/or student participants/guardians who utilized that clinic may never have experienced scheduling conflicts. Participant questionnaires were distributed by intake clerks in

addition to their usual duties and may not have been offered to every eligible participant/guardian.

Conclusions

This study focused on three research questions. The following section includes conclusions for each of the questions.

Research question one: What are the barriers to receiving WIC services for working and/or student participants/guardians? With the exception of participants in this study indicating WIC Program staff had been helpful to them, the barriers to services were similar to the findings of previous studies. While over half of respondents indicated they had no problems scheduling a WIC appointment, one quarter of them did note they having had a problem scheduling because of work. Of those who indicated they had a problem with scheduling the majority were employed full-time. Many respondents indicated the best time for their WIC appointment was outside of the regular schedule (8:00 a.m. to 4:30 p.m. weekdays) of most WIC clinics in Illinois. Thus, working and/or attending school does create barriers for some participants. WIC clinics may need to evaluate how scheduling is done if working/student participant guardians are to receive services as readily as those who do not work or attend school.

Research question two: What nutrition education topics do working and/or student participants/guardians desire? Nutrition education topic preferences of this sample were very similar to those indicated in previous studies. Questionnaire responses indicated participants were most interested in the following nutrition education sessions: Eating Healthy on a Budget, Cooking Fast and Healthy, Good Eating Habits for Kids, and Getting Your Toddler to Eat Healthy Foods. Thus, interest in topics related to thrifty, fast

meals and healthful eating for toddlers appeared to be greatest, while interest in family meals and use of WIC foods was limited.

Research question three: Which methods of nutrition education delivery do working and/or student particiants/guardians prefer? Responses to questions related to this research question were also reflective of previous research results. Questionnaire responses indicated more than half of respondents had received individual education or handouts and slightly less than half had been to group education sessions in the past. Few respondents noted receiving education via video.

When asked to identify a preferred method of nutrition education delivery the majority of respondents selected handouts. Individual education contacts and self study modules followed respectively. Email or internet messages were marked as preferred least often (see Table 4). A few respondents indicated they did not have access to email or the internet while others added stars next to this option suggesting they would be interested in receiving education on-line. There were discrepancies between preferred methods of delivery and the type of education that had been received previously (see Figure 5) suggesting participants do not receive nutrition education the way they would prefer.

Implications

While the findings of this study did not definitely answer all questions related to barriers to services, they can provide valuable information. Assessment of work and school schedules of WIC participants/guardians could provide clinics with information related to scheduling appointments in a manner which best uses limited resources. In this study 39% of respondents reported a preference for non-standard appointment times. Of those survey respondents who reported having difficulty scheduling or keeping

appointments, over 74% worked full-time. Setting up clinic hours to accommodate those who work and attend school might decrease the number who miss scheduled appointments resulting in less idle staff time, and might result in increased numbers receiving needed program benefits. Local WIC program personnel may want to consider offering early morning and evening appointments to best meet the needs of this population, and State administrators may want to consider requiring such appointments be offered to ensure achievement of the IDHS mission of self-sufficiency for program participants. In addition, the use of proxies could be encouraged to aid busy participants/guardians in keeping appointments and fully using program benefits.

Nutrition education topics of interest to working and/or student participants were similar to those noted by other populations in previous research. Topics dealing with healthy eating on a budget, and how to handle toddlers in regard to eating appeared to be important to parents/guardians regardless of their schedules. While these issues may be addressed in some clinics already, the WIC Program has historically been focused on individual nutrients, and education may need to be revised to deliver other key information to participants/guardians.

In fact, the way in which nutrition education is delivered is important to participants. Providing nutrition education in a format that a working and/or student participant/guardian prefers could determine whether or not she feels it is worth the trouble to come to the clinic. The Participant Questionnaire offered a variety of education delivery methods including self-study activities and internet/email messages which were not offered at the time of the study. Desire for self-study activities was high as shown in Table 3 with 64.3% of respondents noting interest in this method. Finding a good "match" between how the participant/guardian likes to learn and the methods of

delivery regularly utilized by clinic staff could improve learning and utilization of resources.

Routine evaluation of barriers, preferences, and overall participant satisfaction with services would likely help the practitioner in providing quality services in an appropriate fashion. Programs may also want to consider the use of participant advisory committees to keep staff current on participant/guardian needs.

Suggestions for Future Research

Further and continuing research is needed to identify the needs of the study population. As more participants/guardians receive job training and advance into new roles their needs will change. Determination of whether or not specific types of employment make a difference regarding preferences for nutrition education topics, delivery methods, and barriers to services, would also be useful. Evaluation of the needs of student participants/guardians compared to those of the full-time and of part-time working may provide further insight related to services, barriers and education preferences. Survey research and advisory committees may be a feasible way to stay "in touch" with participants/guardians and to inform them of available education topics, methods, and other clinic services.

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Appendix A

Letter to Interested Participants/Guardians

April 5, 2000

Dear WIC Family,

The WIC Program is interested in identifying and making changes to better serve its working and student WIC participants. A critical step in this process is to hear from WIC participants like you who have an interest in the issues and are trying to balance work, school, and parenting.

I hope you will be able to attend a group discussion regarding WIC, as I would like to know more about your opinions on: appointment times, WIC group education sessions, and any problems you may have had in keeping appointments due to work or school conflicts.

These discussions will be informal and will include about 6-8 people. They will not be part of WIC group education. Those who attend a session will receive a Schnuck's gift certificate, good for the purchase of their choice, worth $30.00. The session should last about one hour. Free child-care will be provided for the length of the evening (but not the morning) discussion and refreshments will be served at both discussions.

Group discussions are now being planned for Tuesday, April 25 at 6:00 p.m., and Thursday, April 27 at 7:15 a.m.. Please complete and return the enclosed response card to reserve your space in a group. Feel free to call me at 753-3838 with any questions you may have.

Thanks so much for your interest. I look forward to seeing you!

Sincerely,

Stephanie Bess

Appendix B

Guidelines for Questionnaire Distribution

1. Participants must be working, going to school, or both. Working means they have a job that pays. Going to school means they are taking at least one class.

2. They should be asked if they are interested in participating (the questionnaire should only take a few minutes), but it does not effect their WIC status.

3. Once the questionnaire is given they should not be helped. Keep a list of what type questions they have and if any questions seem to be a problem.

4. Once the questionnaire is completed it should be collected, looked over to see if it is complete, and filed in my folder. Keep a list of names of those who participate simply to avoid having anyone complete more than one questionnaire.

5. The following is a script you should use when distributing the questionnaire to ensure consistency in the asking.

When Offering the Questionnaire

If they show their own check stubs as proof of income:

It appears that you are eligible for WIC today guardian's name. Since you are a working participant on our program we would be interested in some input from you about your experiences with WIC. Would you be able to take a few minutes and answer these questions?

If Yes: "just bring this back to me when you are done. If you have any questions about this let me know."

If No: "alright, no problem. " (Go ahead and do what you would normally do.)

If they do not use their own check stubs as proof of income:

It appears that you are eligible for WIC today guardian's name. We are asking our working and student participants for input regarding the program. Are you currently working or attending school?

If Yes: "would you be able to take a few minutes and answer these questions?"

If Yes: "just bring this back to me when you are done. If you have any questions about this let me know."

If No: "alright, no problem." (Go ahead and do what you would normally do.)

If Not working or a student:

"alright, no problem." (Go ahead and do what you would normally do.)

Appendix C

Focus Group Discussion Question Guide

Introduction

1. Go around the table. Each of you state your first name and the ages of your child/ren. If you would like, briefly tell us something cute one of your children did in the past week.
2. Describe a good or bad experience you have had in keeping a WIC appointment. This may include scheduling problems, transportation etc.
3. Describe a memorable experience you have had in relation to WIC Nutrition Education Sessions.

Transitional Questions:

1. Since you began work/school have you made changes in meal preparation, shopping, or in how you feed your children or yourself?
2. What information has WIC provided that has been most helpful?
3. What information has been least helpful?

Key Questions:

1. As a working or student parent how do you feel WIC could be of more assistance to you?
2. As a student/employee what are the barriers to receiving WIC services?
3. Do you ever send proxies to WIC for education instead of you?
4. Why or why not?
5. What are your thoughts regarding Saturday WIC appointments?
6. Nutrition education is a requirement of the WIC Program. What is your preference in how to receive this education- one to one, group education, videotapes etc.
7. What topics would you like to receive more information about? (Pass out list.)

Summary of session

Summary: Is this an adequate summary?

Appendix D

Questionnaire

Please take a few moments to answer all of the following questions about your WIC experiences. We value your input as we work to better serve your needs and this will in no way affect the services your family receives.

---

1. Are you currently: (Check all that apply.)
   A. Employed full time (35+ hours/week) **B.** Employed part time (1-34 hours/week)
   C. Going to school **D.** Other_____
2. What days do you work? **A.** Mon. **B.** Tues. **C.** Wed. **D.** Thurs. **E.** Fri. **F.** Sat. **G.** Sun
3. What are your **usual** work hours?_____
4. How long have you or your children been on WIC? _____
5. Circle the best time for you or your children's WIC appointments.

Weekdays Early AM	6:30-8:30	Weekdays Early PM	4:30-6:00
Weekdays AM	8:30-11:30	Weekdays PM	6:00-8:00
Weekdays Lunch Hours	11:30-1:30	Saturday AM	8:00-12:00
Weekdays PM	1:30-4:30	Saturday PM	12:00-5:00

6. Have you ever had problems scheduling or keeping a WIC appointment because of any of the following? (Circle all that apply and briefly explain why.)
   A. School because _____
   B. Work because _____
   C. WIC Staff because _____
   D. WIC Clinic Hours because _____
   E. Transportation because _____
   F. No one to watch my other children because _____
   G. It is hard to get my children out of daycare/school to go to WIC because_____
   H. Other _____
   I. No problems

The WIC Program allows you to list two qualified people to attend nutrition education sessions, pick-up your WIC coupons, and use your coupons for you at the store. These people are called proxies.

7. Were you aware of the proxy process? **A.** Yes **B.** No
8. If **NO**, would you be interested in listing one now? **A.** Yes **B.** No
9. If you do not have a Proxy or do not want one, why not?
   _____
10. If you **do** have a proxy, how many times a year does he/she act for you?
    (Circle the best answer.)
    0 1 2 3 4 5 6 7 8 9 10 11 12 more than 12

11. Nutrition education is a major part of the WIC Program. Below is a list of education topics. Please make a check next to all of the topics of interest to you.

Choosing Low Fat Foods	Getting Kids to Eat Vegetables
Cooking Fast and Healthy	Good Eating Habits for Kids
Eating Healthy on a Budget	Planning Meals for Good Health
Eating on the Run	Shop Smart, Shop Quick
Eating Out Can Be Fast and Nutritious	Smart Smiles: Infant Oral Health
Family Meals: How Can I Make Them Work?	Snacks Can Be Nutritious
Getting Your Toddler to Eat Healthy Foods	Using WIC Foods

12. How have you learned about nutrition for you and your family at the WIC office? (Place a check in the box for all that apply.)

Group Education	
Individual Education	
Handouts/Pamphlets	
Videotapes	

13. How would you prefer to receive nutrition education? (Check one box for each.)

	Like the Most	OK	Would Not Participate
Group education			
Individual education			
Group education as a new parent, and individual education when my kids are older.			
Individual education as a new parent, and group education when my kids are older.			
Handouts/pamphlets			
Internet/Email Messages			
Self Study Activities			
Videotapes			

Thank you for your time & input as we try to find better ways to provide WIC services to you!!

Appendix E

Consent Form

Authorization For Release

I understand that my identity will be kept confidential, and that my image will be used by the researcher and her assistant for research purposes only. I also understand that if this information is used for publication or presentation my identity will be kept anonymous. Therefore, I grant full permission to Stephanie Bess, RD to use my electronically recorded video for her research project "Determining Barriers to Service and Preferred Methods of Nutrition Education for Working and Student WIC Participants in Illinois" without obligation or liability to me.

_____

Signature of Participant

_____

Date

_____

Signature of Witness

_____

Date

Appendix F

Nutrition Education Topics

The following is a list of possible nutrition education topics. Please circle all that are of interest to you and feel free to write-in any topics you would like to suggest as well.

- Feeding the Younger Baby (3-6 months)
- Eating on the Run
- Good Eating Habits for Kids
- Iron in Your Diet
- Vitamin A & C for Good Nutrition
- Nutrition for the Older Infant (6-12 months)
- Food Guide Pyramid
- Weaning Your Baby
- Smart Smiles: Infant Oral Health
- Getting Your Toddler to Eat Healthy Foods
- Nutrition & Lead
- Healthy Lifestyle Choices
- Eating Out Can Be Fast & Nutritious
- Meeting the Iron Challenge
- Choosing Low Fat Foods
- Healthy Choices Using the Food Guide Pyramid
- Using WIC Foods
- Getting Kids to Eat Vegetables
- Snacks Can be Nutritious
- Eating Healthy on a Budget