

## The Newcomer Well Woman Clinic: A Cross-Sectional Evaluation of an Innovative Care Model to Support the Sexual and Reproductive Health Needs of Refugee Women

Aditi Sivakumar

aditisivakumar04@gmail.com

Dalhousie University

Karla Willows Dalhousie University, Department of Obstetrics and Gynaecology

**Finlay Maguire** Dalhousie University, Department of Community Health and Epidemiology

**Jocelyn Stairs** Dalhousie University, Department of Obstetrics and Gynaecology

#### **Research Article**

**Keywords:** Refugees, Women's Health, Reproductive Health, Primary Health Care and Education, Contraception, Contraception, Papanicolaou Test

Posted Date: December 8th, 2022

**DOI:** https://doi.org/10.21203/rs.3.rs-2313951/v1

License: (a) This work is licensed under a Creative Commons Attribution 4.0 International License. Read Full License

Additional Declarations: No competing interests reported.

**Version of Record:** A version of this preprint was published at Journal of Obstetrics and Gynaecology Canada on May 1st, 2022. See the published version at https://doi.org/10.1016/j.jogc.2022.02.106.

### Abstract

**Background:** The Newcomer Well Woman Clinic (NWWC) was developed as a partnership between primary care physicians and obstetrics and gynecology residents to ensure timely provision of sexual and reproductive healthcare for refugee patients. Since 2015, the NWWC has provided monthly clinics offering contraceptive counselling, cervical cancer screening, and intrauterine device insertions with accompanying education sessions. This study aimed to evaluate women's experiences at the clinic and with interpretation services.

**Methods**: A sample of patients who attended appointments at the NWWC between January 2015-December 2020 were invited to participate in a telephone survey facilitated by an interpreter to evaluate their clinic experience. The survey was adapted from two validated survey measures: the PSQ-18 and CAHPS. Survey results were reported using descriptive statistics. Clinic audit data was used to summarize patient demographics and service delivery during this period.

**Results:** Since 2015, 288 patients have attended the clinic. Despite the COVID-19 pandemic, the number of appointments increased annually. 76% of eligible invitees consented to participate. Most patients were highly satisfied (74%) or satisfied (10%) with their care and found the education sessions helpful (80%). Frequently requested education topics included cervical cancer prevention (54%) and contraception (36%). 80% of patients used an interpreter at the clinic and 88% felt that their concerns were always conveyed appropriately to the physician.

**Conclusion:** Refugee patients were highly satisfied by the sexual and reproductive healthcare provided by the NWWC and with interpretation services. To meet the needs of refugees, innovative care models such as the NWWC could be adopted by healthcare systems.

### Plain English Summary

Since 2015, Canada has opened its doors to over 200 000 refugees, which has led to an increased demand for healthcare services that are specific to needs of refugees. Refugees, particularly women, are at-risk for several health concerns due to lack of access to sexual and reproductive healthcare or counselling. To address this problem, the Newcomer Well Women Clinic (NWCC) was created to provide sexual and reproductive healthcare and patient-centered teaching sessions to refugee women.

The NWWC has run for five years; however, patient experience at the clinic has never been previously studied. Therefore, we conducted a study to evaluate women's experiences at the clinic and with interpretation services used at the clinic. We invited patients who attended the NWWC between January 2015-December 2020 to complete a telephone survey about their experience at the clinic. We also summarized the characteristics of the patients at the clinic, including their age, country of origin, language spoken, etc.

Our results showed that since 2015, 288 patients attended the clinic. 76% of patients agreed to complete the survey. Most patients (84%) were highly satisfied with the healthcare they received at the NWWC. 80% of patients valued the teaching sessions and wanted more information about contraception and cervical cancer. Most patients (80%) required an interpreter at the clinic and 88% of patients found the interpreters helpful.

Refugee women valued the care they received at the NWWC. The NWWC could provide a model for similar clinics across Canada to help improve delivery of healthcare to refugees.

### Background

Since 2015, Canada has opened its doors to over 200 000 refugees, which has led to an increased demand for primary healthcare services tailored to the health needs of refugees [1, 2]. The 1951 Refugee Convention defined refugees as, "Someone who is unable or unwilling to return to their country of origin owing to a well-founded fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group, or political opinion." [3]. Refugee women and girls are a particularly vulnerable group who are at risk for several sexual and reproductive health concerns that vary based on their exposures, trauma, living conditions, socioeconomic background, and access to preventive services [4, 5]. Timely access to comprehensive, high-quality sexual and reproductive healthcare has been identified as foundational to successful resettlement for refugee women [6]. The Canadian Clinical Guidelines for Immigrants and Refugees have identified cervical cancer screening and contraception as two priority healthcare areas for newly resettled refugees [5]. However, several studies have demonstrated that refugee women are vulnerable to unmet contraceptive needs [7, 8], and have lower uptake and frequency of screening than is recommended by provincial and territorial guidelines [5,9]. They may also have limited knowledge of cervical cancer screening and contraceptive options [10, 11]. Creating safe spaces for education and provision of clinical care has been identified as a method of improving uptake of these preventative health services [5]. Dedicated clinics that provide primary health services, often referred to as refugee health clinics, have been identified as an effective means of providing clinical care to refugee populations [12]. However, refugee health clinics have been challenged to provide adequate care, including sexual and reproductive healthcare, to an increased volume of newcomers [2].

The Halifax Newcomer Health Clinic (HNHC) is a local refugee clinic that has provided preventative care and primary medical services for all refugees residing in Halifax, Nova Scotia, Canada. In 2015, family physicians at HNHC partnered with obstetrics and gynecology residents at Dalhousie University to create the Newcomer Well Woman Clinic (NWWC), a specialized clinic that exclusively provides sexual and reproductive education and care for refugee women. The NWWC has now run for five years; however, a formal review of patient experience has never been undertaken. Therefore, we conducted a crosssectional survey study to evaluate women's experiences at the clinic and with interpretation services used at the clinic. The secondary aim of this study was to quantify service delivery since the inception of the clinic.

### Methods

#### The Newcomer Well Woman Clinic

Female patients of reproductive age who are seen through the HNHC are offered appointments at the NWWC. The goals of the NWWC are to educate refugee women about cervical cancer screening to promote awareness and uptake, provide contraceptive counselling and access to contraception at the woman's discretion, including intrauterine device (IUD) placements. Additionally, the NWWC works to create a discrete, safe, female-centric environment and foster resident advocacy and cultural safety through long-term partnerships. Women attending the NWWC are first invited to participate in a teaching session prior to their clinic appointment. Interpreters are available upon request of the patients. Residents are recruited on a volunteer basis to participate and provide care to these women under the supervision of a family physician.

#### Study Population

Women who were seen at the NWWC between January 2015-December 2020 were invited to participate. Women seen for Papanicolaou (pap) testing or contraceptive counseling at the HNHC outside of the NWWC were excluded. Women who attended appointments at the Well Woman Clinic between January 2015-December 2020 were recruited by the clinic administrator. A research team member then contacted potential study participants to obtain informed consent and conduct the telephone survey questionnaire. All participant interactions were facilitated by an interpreter, if required.

#### Study Questionnaire

The questionnaire was developed by the Dalhousie Obstetrics and Gynecology Department in association with the Family Physicians at the HNHC. The questions were adapted and modified from the PSQ-18 and the Consumers Assessment of Healthcare Providers and Systems (CAHPS) Interpreter Services survey, which are validated questionnaires of patient experience. The questionnaire assessed participants' demographic background, clinic set-up, education sessions, use of contraceptives, patient satisfaction and quality of interpretation services. Measures of patient satisfaction were presented as 5-point Likert scales. In addition, participants reported sexual and reproductive health topics that they felt would be important to include in future education sessions. The questionnaire is available for review in Supplemental Digital Appendix A. Additionally, for audit purposes, the HNHC clinic staff previously collected de-identified data regarding clinic bookings, no-shows, and services provided. Data from the pre-existing audit database was used to determine clinic use and services provided between January 2015 and December 2020.

#### Statistical Analysis

Baseline characteristics were reported using descriptive statistics. Statistical analysis was performed using Stata 16.1 (College Station, Texas). Categorical and dichotomous variables and Likert scale questions were reported as proportions. Continuous variables were reported as median and

interquartile range. We compared the preferred language of respondents to that of all attendees of the NWWC. Student's t-test were used for continuous variables and Chi-squared test for categorical variables. Significance of trends in volume of clinic services over time was assessed using the Mann-Kendall test. We obtained approval for this study from our institutional Research Ethics Board (Nova Scotia Health REB Project No. 1026689).

### Results

A review of clinic audit data determined that since 2015, 288 patients attended the clinic. Since the inception of the clinic, the number of appointments increased annually despite the COVID-19 pandemic, ultimately demonstrating a growing usership (Figure 1). Additionally, 71% (n=204/288) of patients who have attended the NWWC since the inception of the clinic underwent pap testing and 19% (n=56/288) underwent an IUD placement. The Mann-Kendall test showed a significant increase in the volume of clinic services over time (p<0.001).

Sixty-six patients were contacted as potential participants for the study. 50 participants consented to participate and completed the telephone survey study (76% response rate). Most respondents spoke Arabic (n = 25/50, 50%), immigrated from Syria (n= 22/50, 44%) and were married (n= 37/50, 74%). The highest level of educational attainment for most of our respondents was middle school (grades 7-9) or lower (n=27/50, 54%). The median duration of residence in Canada was 3 years (IQR 2-5 years). Demographic characteristics of respondents can be found in Table 1.

Eighty percent of respondents (n=40/50) used an interpreter to communicate with a physician at the NWWC, and most respondents (n=36/40, 90%) reported always being treated with respect by the interpreter. No respondents reported discrimination because of limited English language skills. Responses pertaining to interpretation and language barriers are presented in Table 2.

Most respondents expressed satisfaction with the care received at the NWWC, and 92% (n=46/50) of respondents strongly agreed that their concerns were addressed by the physicians. 86% (n=43/50) of respondents found it easy to make an appointment at the clinic and 96% (n=48/50) found it easy to get to the clinic. Patient satisfaction responses are presented in Table 3.

Forty-four percent of respondents (n=22/50) reported currently using a form of contraception, with the majority using an IUD (73%). Of those patients who are currently using a form of contraception, 86% were provided the contraceptive at the NWWC. All patients who were prescribed the contraceptive method at the clinic reported that the physician clearly explained the contraceptive choices available to them.

A majority of respondents (n=40/50, 80%) found the education portion of the visit helpful. 86% (n= 34/50) of respondents reported receiving education about contraception and 56% (n=28/50) of

respondents reported receiving education about cervical cancer at the NWWC. Cervical cancer prevention and contraception were identified by respondents as priority education topics (Figure 2).

### Discussion

In this study, female refugee patients reported high satisfaction with the sexual and reproductive healthcare provided by the NWWC model and with interpretation services that were used at the clinic. Patients also valued the accompanying education sessions provided at the NWWC, particularly topics related to cervical cancer prevention and contraception.

The results of our study are consistent with those of Khan and DeYoung, in which person-centred care, education, and culturally safe interpretation were identified as important aspects for successful service delivery and care of refugee women [13]. In 2016, the UN Refugee Agency stated that the average age of a refugee who immigrated to Canada was 28.9 years old [14]. In 2018, it was reported that 80% of refugees who settled in Canada were women and children [15]. Collectively, these studies, along with our findings, suggest that the creation of specialized health clinics that are specifically tailored towards the sexual and reproductive health needs of refugee women may improve satisfaction with healthcare delivery among this target population, who constitute the majority of refugees arriving in Canada.

As with many essential services, the COVID-19 pandemic had a direct effect on healthcare utilization and delivery across the country [16]. Stephenson *et al.*, reported that in 2020, the volume of primary care visits, particular in the realm of preventative care, substantially decreased [17]. Interestingly, this decreased utilization during the COVID-19 pandemic was not observed at the NWWC. Possible reasons for this include the ongoing provision of in-person appointments and engagement of the interpreter from the first point of contact at the screening checkpoint. The growing usership of the clinic also suggests that this population may be motivated to engage with sexual and reproductive health services. This is supported by the findings of Redwood-Campbell *et al.* who found that newcomer patients wanted to be proactive regarding their health, regardless of the norms surrounding preventative care within their home country [11].

Respondents of our study reported being highly satisfied with the care received through the NWWC model. High satisfaction levels may be attributed to the embedding of the NWWC within respondents' usual model of care. Partnerships have also served as a vital component for the successful delivery of healthcare at a specialized refugee clinic in Brisbane, Australia [18]. In this specific healthcare model, known as the Primary Care Amplification Model, pre-established local partnerships allowed for patients seen at the refugee clinic to be directly linked to a community general practice and community services for continuation of their health care within the local community [18]. Together, these findings emphasize the importance of local partnerships between various clinics and providers to promote comprehensive healthcare to refugee patients, preferably within a single environment where possible. Additionally, compared to a traditional healthcare model, the NWWC model may offer refugee patients more time with

their physicians. Refugee patients, who may have been forced to leave their country under stressful circumstances, often have a more complex medical history and health needs [19]. This may pose a challenge for healthcare providers working under a traditional healthcare model due to time and resource constraints [20]. By creating a dedicated, evening clinic staffed by 3-6 resident physicians, the NWWC is able to offer 30-45 minute appointments, which may contribute to patient satisfaction.

It has been extensively documented that refugee women are at risk for having inadequate knowledge regarding contraception and cervical cancer prevention [21, 22]. Educating refugees about sexual and reproductive health has been identified as a means of improving utilization of preventative healthcare services and sexual and reproductive health outcomes [21]. Therefore, one of the goals of the NWWC was to educate refugee women about cervical cancer screening and contraceptive options. To meet this goal, all refugee patients of the NWWC were invited to participate in a teaching session prior to their clinic appointment. Group education sessions were chosen as the preferred medium, as group sessions have been shown to provide refugee women with not only an enriching learning experience, but also a sense of community development and belonging [23]. Building social capital can be extremely important for refugee populations, who may experience feelings of loneliness and isolation, especially if they were separated from their friends and family [24]. The utility of group education sessions is further exemplified by Riggs *et al.*, who reported that among their cohort of refugee women within the NWWC requested more information about cervical cancer prevention and contraception, more dedicated sessions regarding these topics may further enhance uptake of these preventative healthcare services.

Additional barriers that refugee and newcomer populations face in terms of healthcare access include language barriers, low literacy rates and racial discrimination [26]. These factors have been shown to negatively impact refugee patients, particularly females, ability to access preventative health services [26]. Refugee patients who are fluent in English still report that they have difficulty understanding some of the medical terminology used by physicians [27]. To improve comprehension among refugee and newcomer populations, interpretation services have been identified as a vital element to improve service delivery among this population [28]. In our study sample, 80 percent of women used an interpreter at the NWWC. Moissac and Bowen stated that members of linguistic minority groups felt that language barriers led to delays in treatment, lack of confidence in appropriate care and feelings of inequity in care [29]. Pollock et al., also reported that newcomer patients felt that physicians did not show enough patience with those who speak very little to no English [30]. At the NWWC, the staff are provided training with respect to interpretation services and have developed good relationships with community interpreters. This may have contributed to positive experiences with interpretation services, as patients within our study reported feeling supported by both staff and interpreters. Davidson et al., reported that interpreters who are also member of the same refugee community can act as "refugee mentors" to patients and help improve access to care [21]. At the NWWC, patients are provided the option of in person interpretation, often from a member of the patient's community or video interpretation. This is done to balance the opportunity for mentorship with privacy within small communities. These findings

suggest that interpreters can contribute positively to patient experience and may also play a role in building trust between patients and the healthcare system.

This study is one of the first studies to evaluate Canadian refugee patient perspectives on a dedicated sexual and reproductive health clinic tailored to the needs of refugees and embedded within a primary care beacon clinic. Additionally, the survey used in the study was adapted from two validated questionaries for patient experience, the PSQ-18 and CAHPS Interpreter Services Survey, which are specific to immigrants and refugee populations. Further, over 75% of eligible patients agreed to participate in the study, which decreases the risk of response bias. Additionally, by conducting a telephone survey study and utilizing a member of the research team who does not play a role in clinical care, we hoped to increase the opportunity for candid response compared in-person interviews. Limitations of this study include possible miscommunication as a result of interpretation, although the same interpretation services as are used by the Clinic for clinical care were used to conduct the survey. Additionally, due to funding constraints, we were only able recruit a convenience sample of 50 respondents. However, our study was intended to be descriptive and hypothesis generating, and findings will inform future research in this population. Most participants were Syrian in origin, which may limit the generalizability of our results. This finding can be explained by the national commitment Canada made in 2015 to rapidly resettle Syrian refugees that is subsequently reflected in the patient population at the NWWC. Our study did include participants from fifteen other countries and reflects the diversity of patients at NWWC. Therefore we feel this study is generalizable to refugee patients receiving healthcare in Canada.

### Conclusion

In our sample population, refugee women were satisfied with the care received at the NWWC and with interpretation services used at the Clinic. Respondents also highlighted the importance of education sessions, particularly with respect to cervical cancer and contraception. Due to evolving global humanitarian crises, Canada is expected to welcome an influx of refugees over the next several months. Innovative care models such as the NWWC may represent a means of providing sexual and reproductive healthcare to female refugee patients to meet the needs of this growing population.

### Abbreviations

Halifax Newcomer Health Clinic (HNHC) Newcomer Well Woman Clinic (NWWC) Papanicolaou (pap)

### Declarations

#### Ethics approval and consent to participate

We obtained approval for this study from our institutional Research Ethics Board (Nova Scotia Health

REB Project No. 1026689).

**Competing interests** KW has received speaker honoraria from Merck. The remaining authors have no conflicts of interest to disclose.

#### Authors' contributions

AS (Corresponding Author) spearheaded the grant writing process, conceptualized a study design, interviewed participants, helped with data analyses, major contributor in writing and editing of the manuscript. KW helped with the grant writing process, conceptualizing a study design, and writing and editing of the manuscript. FM helped with creation of figures and tables, data analysis and writing and editing of the manuscript. JS helped with the grant writing process, conceptualizing a study design, data analysis and writing of the manuscript. All authors read and approved the final manuscript.

**Funding** Women Deliver Seed Grant, Atlee Endowment Fund and the Douglas G. Dauphinee Medical Research Fund. None of the funding bodies had a role in the design of the study and collection, analysis, interpretation of data and in writing the manuscript.

#### Availability of data and materials

All data generated or analyzed during this study are included in this published article [and its supplementary information files].

#### Acknowledgements

We would like to acknowledge Dr. Sepideh Behroozan, Dr. Timothy Holland, Dr. Heather Scott, Dr. Navpreet Bal, Dr. Lauren Adolph, John Gobran, Nikki Shanin-Azar and Cyril O'Brien for their contribution and support to our research.

### References

- 1. Government of Canada. Resettled Refugees Monthly IRCC Updates [Excel File]. Immigration, Refugees and Citizenship Canada: Ottawa (CAN); 2022. [cited 2022 Sept 17]. Available from https://open.canada.ca/data/en/dataset/4a1b260a-7ac4-4985-80a0-603bfe4aec11
- 2. Moulton D. Refugee health clinics grapple with demand. CMAJ. 2016; 188: e240.
- 3. United Nations High Commissioner for Refugees. The 1951 Refugee Convention. Geneva (CH): UNHCR Communications and Public Information Service; 1951. 52 p. Report No.: 1.
- 4. Ivanova O, Rai M, Kemigisha E. A systematic review of sexual and reproductive health knowledge, experiences and access to services among refugee, migrant and displaced girls and young women in Africa. Int. J. Environ. Health Res. 2018; 15:1583.
- Pottie K, Greenaway C, Feightner J, Welch V, Swinkels H, Rashid M, Narasiah L, Kirmayer LJ, Ueffing E, MacDonald NE, Hassan G. Evidence-based clinical guidelines for immigrants and refugees. CMAJ. 2011; 183: e824-925.

- 6. United Nations High Commissioner for Refugees. UNHCR Resettlement Handbook. Geneva (CH): UN High Commissioner for Refugees; 2011. 428p. Report No.: 2.
- 7. Aptekman M, Rashid M, Wright V, Dunn S. Unmet contraceptive needs among refugees: Crossroads Clinic experience. Can Fam Physician. 2014; 60: e613-9.
- 8. Forero R, Nahidi S, De Costa J, Mohsin M, Fitzgerald G, Gibson N, McCarthy S, Aboagye-Sarfo P. Application of four-dimension criteria to assess rigour of qualitative research in emergency medicine. BMC Health Serv. Res. 2018; 18:1-1.
- 9. Lofters A, Glazier RH, Agha MM, Creatore MI, Moineddin R. Inadequacy of cervical cancer screening among urban recent immigrants: a population-based study of physician and laboratory claims in Toronto, Canada. Prev. Med. 2007; 44:536-42.
- 10. Hawkey AJ, Ussher JM, Perz J, Metusela C. Experiences and constructions of menarche and menstruation among migrant and refugee women. Qual. Health Res. 2017; 27 :1473-90.
- 11. Redwood-Campbell L, Fowler N, Laryea S, Howard M, Kaczorowski J. 'Before you teach me, I cannot know': immigrant women's barriers and enablers with regard to cervical cancer screening among different ethnolinguistic groups in Canada. Can. J. Public Health. 2011; 102 :230-4.
- 12. Joshi C, Russell G, Cheng IH, Kay M, Pottie K, Alston M, Smith M, Chan B, Vasi S, Lo W, Wahidi SS. A narrative synthesis of the impact of primary health care delivery models for refugees in resettlement countries on access, quality and coordination. Int. J. Equity in Health. 2013;12: 1-4.
- 13. Khan A, DeYoung SE. Maternal health services for refugee populations: exploration of best practices. Glob. Public Health. 2019; 14: 362-74.
- 14. United Nations High Commissioner for Refugees Canada. Refugees in Canada: A glimpse into the lives and achievement of the one million refugees who arrived in Canada since 1980 [Internet]. Canada (CA): United Nations High Commissioner for Refugees Canada; 2019 [updated 2022; cited 2022 Sept 17]. Available from: https://www.unhcr.ca/in-canada/refugees-in-canada/
- Guruge S, Sidani S, Illesinghe V, Younes R, Bukhari H, Altenberg J, Rashid M, Fredericks S. Healthcare needs and health service utilization by Syrian refugee women in Toronto. Confl. and Health. 2018; 12: 1-9.
- 16. Moynihan R, Sanders S, Michaleff ZA, Scott AM, Clark J, To EJ, Jones M, Kitchener E, Fox M, Johansson M, Lang E. Impact of COVID-19 pandemic on utilisation of healthcare services: a systematic review. BMJ Open. 2021; 11: e045343.
- 17. Stephenson E, Butt DA, Gronsbell J, Ji C, O'Neill B, Crampton N, Tu K. Changes in the top 25 reasons for primary care visits during the COVID-19 pandemic in a high-COVID region of Canada. PloS One. 2021; 16: e0255992.
- 18. Kay M, Jackson C, Nicholson C. Refugee health: a new model for delivering primary health care. Aust. J. Prim. Health. 2010; 16: 98-103.
- 19. Deps P, Charlier P. Medical approach to refugees: importance of the caring physician. Ann. Glob. Health 2020; 86.

- Suphanchaimat R, Kantamaturapoj K, Putthasri W, Prakongsai P. Challenges in the provision of healthcare services for migrants: a systematic review through providers' lens. BMC Health Serv.Res. 2015; 15 :1-4.
- 21. Davidson N, Hammarberg K, Romero L, Fisher J. Access to preventive sexual and reproductive health care for women from refugee-like backgrounds: a systematic review. BMC Public Health 2022; 22 :1-37.
- 22. Ghebrendrias S, Pfeil S, Crouthamel B, Chalmiers M, Kully G, Mody S. An examination of misconceptions and their impact on cervical cancer prevention practices among sub-saharan african and middle eastern refugees. Health Equity 2021.
- Thiel de Bocanegra H, Goliaei Z, Khan N, Banna S, Behnam R, Mody SK. Refugee women's receptiveness for virtual engagement on reproductive health during the COVID-19 pandemic. Int. J. Behav. Med. 2022; 12: 1-0.
- 24. Im H, Rosenberg R. Building social capital through a peer-led community health workshop: a pilot with the Bhutanese refugee community. J. Community Health. 2016; 41 :509-17.
- 25. Riggs E, Muyeen S, Brown S, Dawson W, Petschel P, Tardiff W, Norman F, Vanpraag D, Szwarc J, Yelland J. Cultural safety and belonging for refugee background women attending group pregnancy care: an Australian qualitative study. Birth. 2017; 44: 145-52.
- 26. Floyd A, Sakellariou D. Healthcare access for refugee women with limited literacy: layers of disadvantage. Int. J. Equity in Health. 2017; 16: 1-0.
- 27. George P, Terrion JL, Ahmed R. Reproductive health behaviour of Muslim immigrant women in Canada. Int. J. Migr. Health Soc. 2014; 10: 88-101.
- Jacobs EA, Lauderdale DS, Meltzer D, Shorey JM, Levinson W, Thisted RA. Impact of interpreter services on delivery of health care to limited-English-proficient patients. J. Gen. Intern. Med. 2001; 16: 468-74.
- 29. language barriers on quality of care and patient safety for official language minority Francophones in Canada. J. Patient Exp. 2019; 6: 24-32.
- 30. Pollock G, Newbold B, Lafrenière G, Edge S. Perceptions of discrimination in health services experienced by immigrant minorities in Ontario. Welcoming Communities Initiative; 2011.

### Tables

Table 1. Demographics of Survey Respondents

Age, years, median (IQR)	38 (30-42)
Preferred Language, n (%)	
Arabic	25 (50)
English	6 (12)
Tigrinya	8 (16)
Other	11 (22)
Country of Origin, n (%)	
Eritrea	8 (16)
Syria	22 (44)
Other	20 (40)
Years in Canada, median (IQR)	3 (2-5)
Married, n (%)	37 (74)
Highest Level of Education, n (%)	
Elementary School (grades 1-6)	19 (38)
Middle School (grades 7-9)	8 (16)
Secondary School (grades 10-12)	7 (14)
Undergraduate Degree	9 (18)
Other	7 (14)

Table 2. Interpretation and Language Barriers

#### INTERPRETATION AND LANGUAGE BARRIERS

# Have you ever been treated unfairly at the clinic because you did not speak English very well? n (%)

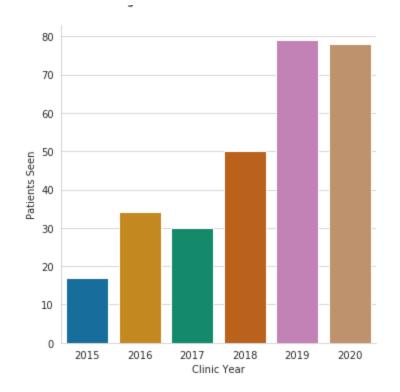
Never	40 (100)
Do you feel that you were treated with respect by the interpreter at the clinic? n (%)	
Always	36 (90)
Usually/Sometimes	4 (10)
Do you feel that the interpreter conveyed your concerns appropriately to the doctor? n (%)	
Always	35 (88)
Usually/Sometimes	5 (12)

Table 3. Patient Satisfaction Responses.

The medical care that I have been receiving at the Well Women's clinic is just about perfect,	
n (%)	

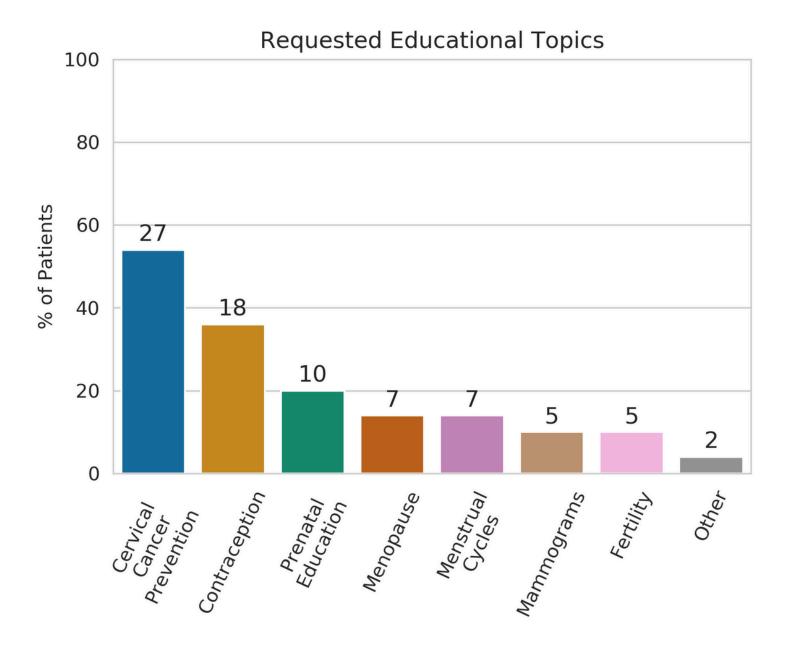
Agree, Strongly Agree42 (84)Neutral, Disagree6 (12)No Response2 (4)I feel comfortable with the doctors at the Well Women's clinic, n (%)43 (86)Neutral5 (10)No Response2 (4)The doctors treat me in a very friendly and courteous manner, n (%)2 (4)Agree, Strongly Agree48 (96)No Response2 (4)The doctors usually spend plenty of time with me, n (%)2 (4)Nutral, Disagree, Strongly Agree46 (92)No Response2 (4)Agree, Strongly Agree2 (4)No Response2 (4)No Response2 (4)No Response2 (4)No Response2 (4)No Response2 (4)No Response2 (4)Agree, Strongly Agree46 (92)No Response2 (4)No Response <th></th> <th></th>		
No Response2 (4)I feel comfortable with the doctors at the Well Women's clinic, n (%)43 (86)Strongly Agree43 (86)Neutral5 (10)No Response2 (4)The doctors treat me in a very friendly and courteous manner, n (%)48 (96)Agree, Strongly Agree48 (96)No Response2 (4)The doctors usually spend plenty of time with me, n (%)2 (4)Agree, Strongly Agree46 (92)No Response2 (4)I feel that my concerns are being addressed by the doctors, n (%)2 (4)Agree, Strongly Agree46 (92)Neutral2 (4)I feel that my concerns are being addressed by the doctors, n (%)46 (92)Neutral2 (4)Agree, Strongly Agree2 (4)Agree, Strongly Agree2 (4)I feel that my concerns are being addressed by the doctors, n (%)2 (4)Agree, Strongly Agree46 (92)Neutral2 (4)	Agree, Strongly Agree	
I feel comfortable with the doctors at the Well Women's clinic, n (%)Strongly Agree43 (86)Neutral5 (10)No Response2 (4)The doctors treat me in a very friendly and courteous manner, n (%)48 (96)Agree, Strongly Agree48 (96)No Response2 (4)The doctors usually spend plenty of time with me, n (%)46 (92)No Response2 (4)Agree, Strongly Agree46 (92)No Response2 (4)Agree, Strongly Agree2 (4)No Response2 (4)No Response2 (4)Strongly Agree46 (92)No Response2 (4)I feel that my concerns are being addressed by the doctors, n (%)46 (92)Neutral2 (4)Agree, Strongly Agree46 (92)Neutral2 (4)Agree, Strongly Agree2 (4)<	Neutral, Disagree	6 (12)
Strongly Agree43 (86)Neutral5 (10)No Response2 (4)The doctors treat me in a very friendly and courteous manner, n (%)2 (4)Agree, Strongly Agree48 (96)No Response2 (4)The doctors usually spend plenty of time with me, n (%)2 (4)Agree, Strongly Agree46 (92)No Response2 (4)No Response2 (4)Agree, Strongly Agree2 (4)No Response2 (4)No Response2 (4)Agree, Strongly Agree2 (4)No Response2 (4)Strongly Agree46 (92)No Response2 (4)Agree, Strongly Agree2 (4)Agree, Strongly Agree2 (4)Agree, Strongly Agree2 (4)Agree, Strongly Agree2 (4)No Response2 (4)Agree, Strongly Agree2 (4)No Response2 (4)Agree, Strongly Agree45 (92)Neutral2 (4)No Response2 (4)	No Response	2 (4)
(86)Neutral5 (10)No Response2 (4)The doctors treat me in a very friendly and courteous manner, n (%)2 (4)Agree, Strongly Agree48 (96)No Response2 (4)The doctors usually spend plenty of time with me, n (%)46 (92)Agree, Strongly Agree46 (92)No Response2 (4)I feel that my concerns are being addressed by the doctors, n (%)2 (4)Agree, Strongly Agree46 (92)Neutral2 (4)I feel that my concerns are being addressed by the doctors, n (%)46 (92)Neutral2 (4)Agree, Strongly Agree46 (92)Neutral2 (4)	I feel comfortable with the doctors at the Well Women's clinic, n (%)	
No Response2 (4)The doctors treat me in a very friendly and courteous manner, n (%)48 (%)Agree, Strongly Agree48 (%)No Response2 (4)The doctors usually spend plenty of time with me, n (%)46 (%)Agree, Strongly Agree46 (%)No Response2 (4)No Response2 (4)Intertional plenty of time with me, n (%)2 (4)Agree, Strongly Agree2 (4)No Response2 (4)I feel that my concerns are being addressed by the doctors, n (%)46 (%)Agree, Strongly Agree46 (%)Noutral2 (4)Agree, Strongly Agree46 (%)Agree, Strongly Agree46 (%)Agree, Strongly Agree46 (%)Agree, Strongly Agree46 (%)Noutral2 (4)	Strongly Agree	
The doctors treat me in a very friendly and courteous manner, n (%)Agree, Strongly Agree48 (96)No Response2 (4)The doctors usually spend plenty of time with me, n (%)46 (92)Agree, Strongly Agree46 (92)Neutral, Disagree, Strongly Disagree2 (4)No Response2 (4)I feel that my concerns are being addressed by the doctors, n (%)46 (92)Neutral, Nural46 (92)Neutral2 (4)	Neutral	5 (10)
Agree, Strongly Agree48 (96)No Response2 (4)The doctors usually spend plenty of time with me, n (%)46 (92)Agree, Strongly Agree46 (92)Neutral, Disagree, Strongly Disagree2 (4)No Response2 (4)I feel that my concerns are being addressed by the doctors, n (%)46 (92)Agree, Strongly Agree46 (92)Neutral2 (4)I feel that my concerns are being addressed by the doctors, n (%)46 (92)Neutral2 (4)	No Response	2 (4)
No Response(96)No Response2 (4)The doctors usually spend plenty of time with me, n (%)46Agree, Strongly Agree46Neutral, Disagree, Strongly Disagree2 (4)No Response2 (4)I feel that my concerns are being addressed by the doctors, n (%)46Agree, Strongly Agree46Agree, Strongly Agree46Output Disagree2 (4)Agree, Strongly Agree46Agree, Strongly Agree46Output Disagree46Output Disagree46 <tr< td=""><td>The doctors treat me in a very friendly and courteous manner, n (%)</td><td></td></tr<>	The doctors treat me in a very friendly and courteous manner, n (%)	
The doctors usually spend plenty of time with me, n (%)Agree, Strongly Agree46 (92)Neutral, Disagree, Strongly Disagree2 (4)No Response2 (4)I feel that my concerns are being addressed by the doctors, n (%)46 (92)Agree, Strongly Agree46 (92)Neutral2 (4)	Agree, Strongly Agree	
Agree, Strongly Agree46 (92)Neutral, Disagree, Strongly Disagree2 (4)No Response2 (4)I feel that my concerns are being addressed by the doctors, n (%)46 (92)Agree, Strongly Agree46 (92)Neutral2 (4)	No Response	2 (4)
Sector Synd(92)Neutral, Disagree, Strongly Disagree2 (4)No Response2 (4)I feel that my concerns are being addressed by the doctors, n (%)46Agree, Strongly Agree46Neutral2 (4)	The doctors usually spend plenty of time with me, n (%)	
No Response2 (4)I feel that my concerns are being addressed by the doctors, n (%)46 (92)Agree, Strongly Agree46 (92)Neutral2 (4)	Agree, Strongly Agree	
I feel that my concerns are being addressed by the doctors, n (%)   Agree, Strongly Agree 46 (92)   Neutral 2 (4)	Neutral, Disagree, Strongly Disagree	2 (4)
Agree, Strongly Agree46 (92)Neutral2 (4)	No Response	2 (4)
(92) Neutral 2 (4)	I feel that my concerns are being addressed by the doctors, n (%)	
	Agree, Strongly Agree	
No Response 2 (4)	Neutral	2 (4)
	No Response	2 (4)

### **Figures**



#### Figure 1

Number of patients seen by the Newcomer Well Woman Clinic 2015-2020.



#### Figure 2

Requested Education Topics.

### **Supplementary Files**

This is a list of supplementary files associated with this preprint. Click to download.

• SupplementalDigitalAppendixA.PatientQuestionnaire3.pdf