SOCIAL SUPPORT EXPERIENCES AMONG YEMENI REFUGEE WOMEN IN ADDIS ABABA, ETHIOPIA: A DESCRIPTIVE PHENOMENOLOGICAL STUDY

Samuel Amare, ORCID: 0009-0005-7316-2865

Wolaita Sodo University, Wolaita Sodo, Ethiopia
*Corresponding author: Samuel Amare, lesamuelye@gmail.com

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Abstract. Social support from informal support sources plays a pivotal role in smoothing the adaptation process of refugees in their host countries. This study's main objective was to examine the social support experiences of Yemeni refugee women in Addis Ababa. The study employed a qualitative, descriptive phenomenological design. Thirteen Yemeni refugee women were interviewed using a semi-structured interview guide. Using purposive sampling, study participants were selected. The study’s findings indicated that refugee women received various types of social support from family, friends, and independent sponsors, including instrumental support, emotional support, and informational support. For refugee women, strengthening their existing informal social networks is crucial since these networks provide them with informational, emotional, and instrumental support.

Key words: Social support, informal support source, Yemeni refugee women, Addis Ababa, Ethiopia.

1. Introduction
Over one hundred eight million individuals had been forced to flee from their homes by the end of 2022 as a result of intimidation, violence, or violations of their human rights,
and of these individuals, 35.3 million were refugees [1]. Low- and middle-income countries hosted 76% of all refugees [1]. Most refugees (70%) of them are living in exile in neighboring countries [1]. With over 900,000 refugees and asylum seekers hosted in Ethiopia, that ranks third among African nations [2]. Over 74,000 urban refugees reside in Addis Ababa, the country’s capital [3]. More than 2400 Yemeni refugees, the second-largest urban refugee group, were living in Addis Ababa [3].

Refugee women face several challenges in their host countries, including limited access to resources, challenges relating to their mental health, economic hardship, and problems integrating into the new community in which they are residing [4]. Refugee women experience higher levels of insecurity than refugee men do in their host countries [5]. Refugee women face more integration challenges than refugee men, especially poor health and lower educational attainment [6]. Studies indicated that social support has a protective function for refugees' well-being [7-11]. Social support is "an interpersonal transaction involving one or more of the following: emotional concern (liking, love, empathy), instrumental aid (goods or services), information (about the environment), or appraisal (information relevant to self-evaluation)" [12, p.39]. Social support can be provided by informal networks of friends, families, and ethnic communities, as well as by formal networks such as those provided by health-care and social work practitioners [13]. This study emphasized receiving support from informal support sources.

Specifically, studies indicated that social support from informal support sources plays a pivotal role in smoothing the adaptation process of refugees in their host countries [9,14,15]. For example, a qualitative study conducted among refugee women in Australia revealed that the instrumental and emotional support refugee women received from their peers in the group helped them to cope with various adversaries [16]. In addition, a study conducted among Syrian refugees in Canada revealed that family and friends support helped refugees' access employment and housing [17]. Furthermore, a qualitative study among Syrian refugees in Canada revealed that family members play a large role in providing information about Canada’s health system to newly arrived refugees [18].

Despite the significance of informal support sources in refugees' positive well-being outcomes, the previous studies have not illuminated the contextual social support experiences among refugee women in Ethiopia. Most prior studies concentrated on forced migrants from the global south who obtained refugee status in developed countries [19-22]. The studies were conducted in resettlement countries’ contexts. Thus, the studies did not consider the contextual social support experiences of refugee women residing in Ethiopia. The lack of such studies in Ethiopia highlights the need for a context-sensitive understanding of the issue. Hence, this study examines the social support experiences of Yemeni refugee women in Addis Ababa, Ethiopia.

2. Methods

A qualitative research design was employed. A qualitative research design is preferred because it is important, particularly when working with marginalized groups such as refugees [23]. Specifically, descriptive phenomenology was chosen. Descriptive phenomenology is a suitable research approach to examine common experiences of problems in life [24, 25]. The study area was Addis Ababa. According to Abnet et al. [26], Addis Ababa serves as the diplomatic hub of Africa and is the capital of Ethiopia. Addis Ababa, located in the country’s center, is home to a diverse population from all walks of life [27].
Jesuit Refugee Service (JRS), a humanitarian organization that assists refugees, helped identify participants in the study. The phone numbers of Yemeni refugee community representatives from JRS were found. These representatives of the Yemeni refugee community assisted in the recruitment of all participants. Refugee women who fit the study’s eligibility criteria were invited to participate once the objective of the study was made clear to them. To identify participants, purposeful sampling was used. Thirteen participants in total participated in the study. The criteria for inclusion were being a Yemeni refugee woman, living in Addis Ababa, being at least eighteen years old, being willing to participate in the study, and being able to speak Arabic.

To find data on social support experiences, a semi-structured interview guide was used. The interview guide prompted participants to discuss their experiences. A semi-structured interview was chosen as it produces rich data. Since Arabic is the mother tongue of all participants, a semi-structured interview was conducted using that language. A female interviewer who was proficient in the participants’ language and had experience conducting semi-structured interviews was recruited and conducted the interview.

A one-day training was given for the interviewer, covering topics such as the study’s objectives, how to get to know participants and the study’s ethical considerations. Every participant only had one interview. There was a one- to two-hour duration for each interview. Data was collected between July 5, 2022, and September 1, 2022. Data transcription and translation were done by the interviewer.

In keeping with the tradition of descriptive phenomenological research, the data analysis placed an enormous focus on understanding the essence of the research participants’ experiences. Initially, reviewing the interview transcripts in their entirety was done to have a complete understanding of the participants’ experiences. Then, the meaning units were coded. Next, the meaning units were changed into the third person. Analyzing the changed meaning units for the constituents present in each participant’s experience was the last stage.

Participants who could read it were given a written information sheet by the interviewer before the semi-structured interview. For the respondents who couldn’t read, the interviewer gave a verbal description of the information sheet’s contents. Following a description of the study’s objective and the information sheet, each respondent orally provided the interviewer with their informed consent to participate. Information was given to respondents that they could end the interview process at any time. The study’s participants were informed that there was no risk or danger to them associated with participation in the study. Furthermore, to maintain confidentiality, participant names were not disclosed. Rather, a pseudonym was chosen.

3. Results
In the subsequent section, the socio-demographic characteristics of participants and refugee women’s informal support sources would be presented.

3.1 Socio-demographic characteristics of participants
Thirteen refugee women, ages thirty to sixty, participated in the study. The study participants had spent three and a half to 10 years residing in Addis Ababa. Of the study participants, two had been widowed, three had been married, four had divorced, and four were single. Eight of the participants were single mothers. Of the participants, four had finished secondary school, two had not completed secondary school, one was illiterate, and
one had completed primary school, and five had completed their higher degree in their home country.

3.2 Refugee women's informal support sources

In the host countries, informal social support sources are essential to promoting the well-being of refugee women. The study's participants reported receiving some form of social support from family, friends, and independent sponsors. The next section will describe the type of social support that refugee women receive from informal support sources and their experiences with it.

3.2.1 Instrumental support

Some of the study participants disclosed that they obtained instrumental support, including material and financial support, from family, friends, and independent sponsors. Family was one of the main sources of instrumental support for refugee women. Refugee women mentioned parents, siblings, and children when they referred family. Some refugee women who had children received financial assistance from their children to help them deal with a shortage of income. For example, Cally's child was employed in one of the Yemeni restaurants in Addis Ababa. With her son's financial assistance, she attempted to deal with the financial challenges. She said, "My son is a waiter in one of the Yemeni restaurants. He helps me financially". However, due to a lack of a work permit and language barriers, Cally's son was unable to get employment in Ethiopian restaurants. In a similar vein, Nahir reported that she was primarily leading her life thanks to her daughter's financial assistance. With her daughter's financial support, she was able to manage her financial problems:

"My daughter used to work for a gas company in Yemen before the civil war. This company still pays some percentage of her salary, although she is in Addis Ababa. We are living on this money. So I’m dealing with my economic problems with my daughter’s salary".

Moreover, Kalah sometimes asked her children for help when she encountered serious financial problems. She said that when her children had money, they gave it to her:

"My two children give me little money. They don’t just look at me when I’m starving. Of course, life is also hard for them. Because they have children, they need to cover their children’s expenses. They also live in a rental house, so they need to pay for it. They don’t support me as much as I need, but they do help me a little bit. They support me somewhat, though not enough”.

Family members who lived in developed countries occasionally provided financial help to refugee women. Remittance from sibling was a financial source for Halima. Halima got financial assistance from her brother, who lived in Norway. She would face extreme economic hardship in Addis Ababa if her brother didn’t support her:

"After my brother went to Norway, he helped me by sending money. After he went to Norway, I was relatively good financially. Since he knows the life here, he is still supporting me. He had already faced many challenges here, so he knew everything. He understands my problems. If he had not gone to Norway, I would live a worse life than the one I am living now”.

Refugee women who had little children faced challenges while trying to engage in income-earning activities as no one would take care of their children. During this time, for
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refugee women like Afina, remittances from family members living abroad were the main financial source of support. Afina described:

"My husband’s father lives in Saudi Arabia and sends us money every month. We mainly live with this money. The money given by UNHCR is not enough for rent and food. If my husband’s family did not support us, we would suffer a lot in this country. However, the money we got from abroad helped our life a lot".

Another source of instrumental support for refugee women was friends from an ethnic-like refugee community. Since most of their fellow refugees suffered economic hardships, refugee women usually did not get material or financial support from them. However, their friends helped refugee women during difficult times, such as health problems and losing loved ones. For example, Marya reported that she received financial support from her Ethiopian national friend. Marya described:

"I went to Merkato, and my bag and my phone were robbed by robbers. Then I met a stranger. He paid us two months’ rent and bought us mattresses, blankets, and even a charcoal burner. This is the man who has stood by and encouraged me and my child until this day. He supported me financially".

Marya overcame some challenges that required money, thanks to her friend’s material and financial support. She experienced a sense of belonging to the local community as a result of the support. However, the assistance had a detrimental effect on her well-being. She worried about when she would give back the assistance she had been given. She described:

"I have an Ethiopian friend who supports me, and sometimes I don’t feel good when he offers me money because I feel like the money he has given me thus far is a lot. When he always supports me, I feel awful. Why do I disturb the same individual every time? So far, this person has given me huge assistance. Why then do I ask him for more assistance? Sometimes, I ask God to give me something so that I can please him. I frequently say when is the day that I work and delight my friend who always helps me? My mind is racing with the idea of when I’ll be able to pay this man back for his support. When should I buy a gift for his child and take it home? When should I buy something to make him happy? I can’t achieve this now because I don’t have a job".

The other source of instrumental support for refugee women was independent sponsors (wealthy Yemenis). Respondents frequently stated that they received financial and material support from wealthy Yemenis who worked and resided in Addis Ababa. These wealthy Yemenis weren’t refugees. As per respondents, most wealthy Yemenis married Ethiopian women and worked with the business licenses of their spouses. The wealthy Yemenis were born and raised either in Yemen or Ethiopia.

Most of the time, refugee women receive financial and material support from independent sponsors during the holiday. There is a notion called zakat that occurs during Ramadan. Each Muslim who fulfills the requirements for zakat has a religious duty to donate a certain amount of their wealth each year to the needy and the impoverished. Refugee women looked to wealthy Yemenis during Ramadan for support. Then, wealthy Yemenis provided them with material and monetary support (Zakat). Support came in the form of cash, sheep, flour, rice, oil, sugar, and other items. All of the participants expressed gratitude for the support they had received from wealthy Yemenis during the holiday. Marya
said “in our country, we celebrated Ramadan by buying many things. But in this country, we are not able to do this. So we can celebrate the holiday with the support of these rich people. In a similar vein, Cally stated, “May Allah give them all the things they need. We also live with the help of these rich people. During Ramadan, they give us money, grain, or oil.” Furthermore, Afina described:

“Wealthy Yemenis have given me a gift of sheep during Ramadan. The community leaders wrote on our WhatsApp group that there is a rich man who would give a sheep for Eid. Then, we phoned the rich person, registered our names, and were able to take the sheep. During Ramadan, another rich man gave me 1,000 birr. When such support was available, the community leaders notify us via WhatsApp. The community leaders give us the phone numbers of the investors. We call the given phone number and receive our support”.

According to respondents, they used to receive wealthy Yemenis’ support through the Yemeni embassy in Addis Ababa. Independent sponsors provided assistance items to the embassy, which then distributed them to refugees. However, following COVID-19, wealthy Yemenis stopped providing refugees through the Yemeni embassy in favor of Yemeni community representatives.

Refugee women also received financial support from independent sponsors when they faced severe medical problems. Wealthy Yemenis helped refugee women obtain appropriate medical treatment. Badia illustrated:

“The good thing here is that we have Yemeni businessmen. When we face big challenges, we go to them for support. The businessmen here in Ethiopia help Yemenis, who are suffering a lot. For example, a female refugee needed heart surgery. The doctor at Zewditu Hospital said that she needed immediate surgery and informed her that she should get heart surgery in one of the private hospitals. She was moved to Korea Hospital, which is a private hospital, and the hospital asked her to pay about 200,000 Birr for the treatment. One of humanitarian organizations said to wait for us for two days; otherwise, they couldn’t do anything else. If this woman delayed for one day, she would die. So we went to the Yemeni rich people. These rich people helped her in terms of finances, and the woman got the necessary medical treatment at the private hospital”.

Additionally, according to respondents, wealthy Yemenis supported them at times. For instance, Abia described that a wealthy Yemeni rented five of them a space in a bazaar during Ramadan. She then sold cosmetics in a bazaar. She also mentioned that Yemeni wealthy individuals paid her children’s private school tuition for some years.

Refugee women were generally appreciative of the material and financial support they got from family, friends, and independent sponsors. Their financial pressure was lessened, and their financial situation was somewhat stabilized by the support. However, they complain that it was insufficient and inconsistent.

### 3.2.2 Emotional support

Some respondents described that they received emotional support from family and friends. The family was one of the sources from which refugee women occasionally found emotional support. Fatim, Leila, Marya, Cally, Kalah, and Halima were among the respondents who received emotional support from their family members. Family members who live in Addis Ababa, including parents, grandparents, siblings, and children, provided
them with emotional support. In addition, family members who remained in Yemen provided emotional support to refugee women. The emotional support included encouragement, sympathy, listening, caring, and sharing feelings.

It was crucial for refugee women, who faced many adversaries in Addis Ababa, to receive emotional support from their closest family members. Refugee women overcame challenges related to adaptation with the emotional support of their family members. For instance, Fatim’s family provided her with emotional support when she was having difficulty adapting. She overcame numerous challenges in her adaptation with the emotional support of her family. The family was still her primary source of emotional support. She described that “I get emotional support from my family. My family is my main source of emotional support. When I feel tired or in pain, my family members say, it’s ok, one day everything will be alright”.

Friends were also another source of emotional support for some refugee women at times. Friends comforted, cared for, and encouraged refugee women during their difficult times. Respondents stated that while friends from Ethiopian nationals and other refugee communities provided them with emotional support, friends from their community provided it most of the time. Their friends’ emotional support improved their well-being. For example, Iman considered the emotional support she received from her friends to be valuable and incomparable to any financial assistance. She stated “It’s not just because someone gives you money; it’s because they encourage you. Emotional support is a great support above all else.” Marya went through a tough period when her sister became ill and finally died. She appreciated her friends’ moral support at the time. She described:

“When my sister was sick, my friends gave me strength by giving me emotional support. When my sister died, it was my friends who consoled me. I am very happy with the emotional support my friends have given me because they were with me when I was sad. They used to tell me that this thing would pass, don’t worry. This is a big support for me”.

Similarly, Fatm reported that she received care and comfort from her friends. She described that “most of my friends are refugees like me. I’m not expecting cash assistance from them. They give me moral support, and I’m satisfied with the support they give me because it helps me ease my stress.” Furthermore, Emani acknowledged the value of the emotional support her friends gave her when she was having trouble adjusting. She thought that there was someone closer to her, thanks to the emotional support:

“It’s good to have someone around. If you have someone around you, you will talk to that person and discuss different issues. My Yemeni friends here told me not to worry, and that we will go to Yemen when the civil war is settled. My friends also told me that tomorrow is another day. I have been leading my life so far with the moral support of sincere friends. I am very happy. It gives me the sense that there is someone nearer to me. Support is not just money and material. Money can be lost. If someone encourages you and gives you emotional support that is also good support”.

Spending time with friends gave Leila joy, as she got emotional support from them. She indicated “When I’m with my friends, I forget about my life for a while. Spending time with them gives me joy or a mental break. They encourage and support me morally”. Moreover, Halima told her friends about the challenges she faced, and they acknowledged
that they shared her challenges. She understood from this that she was not the only one dealing with challenges with adaptation. She described:

"It is important because I see someone like me. I see someone who has the same kind of challenges as me. I feel that I'm not alone. The emotional support and talking about the challenges we faced helped me. When I faced challenges, I spoke to my friends, and they told me that they had also faced the challenges I faced. So it is very important".

3.2.3 Informational support

For some refugee women, the main sources of informational support were friends and family. Family and friends provided informational support to refugee women regarding a range of issues. Learning about the support services offered by refugee-serving humanitarian organizations was one of them. In the early phases of their arrival, friends from the ethnically similar refugee population were crucial in providing information to refugee women about where to go and how to receive social support from humanitarian organizations. For instance, Kalah stated that "the information I get from my friends is helpful. Based on the information I got from my friends, I went to humanitarian organizations to get some support. The information I get from my friends helps me". In a similar vein, at the beginning, Emani was unaware of the support that was offered by humanitarian organizations. After some time spent in Addis Ababa, her friend told her about some support available from humanitarian organizations:

"A friend who came from Yemen told me the information. We had a group of friends when we came from Yemen, and then after a while, we all split up. At some point, this friend called and told me about the existence of some support from JRS. Then I went to JRS and received the hygiene materials and job training".

In addition, some refugee women received information about available support at humanitarian organizations from family members who came to Addis Ababa earlier. For example, Halima's brother, who traveled to Addis Ababa before she did, gave her information on some types of support offered by humanitarian organizations:

"My brother was in Ethiopia before he left this country for Norway. So I didn't face challenges in knowing the organizations working with refugees. He already informed me about the support that humanitarian organizations were providing. I had information about their support".

Furthermore, before Fatim arrived in this country, her mother and sister had already arrived. They provided her with all the information regarding the support that was available at humanitarian organizations:

"When I arrived in Addis, my mom and sister were already there. I came after them. Then they welcomed me. My sister had information. So I got all the necessary information about the available social support at humanitarian organizations from my sister".

Learning about jobs that were accessible was the other issue. Some refugee women got information about formal-sector jobs from friends of a similar ethnic background. For example, when Cally first arrived, she was unable to find employment in the formal sector. She was unaware of where to look for work. As Cally continued to live in the city, she made friends who provided her with information on jobs in the formal economy. She left her job later because she was not paid the same as Ethiopian nationals for the same work that she did.
4. Discussion

The study’s findings indicated that refugee women received various types of social support from family, friends, and independent sponsors. Among these, instrumental support was one of them. Refugee women received instrumental support from their family members. Many refugees rely heavily on their families to help them make sense of and organize their experiences [28]. In my study, refugee women received instrumental support, specifically financial support, from their family members, such as children, siblings, and parents. The financial support that the refugee women got from family members occasionally covered some of their expenses. Some refugee women received financial support from abroad, while others received it from families who were in Addis Ababa. Some refugee women were primarily dependent on family members for material and financial support. This suggested that refugee women had limited alternatives to earn money or that they did not receive enough support from other sources. Studies have shown that family members’ instrumental support is essential to refugees’ adjustment processes [14-15]. For instance, a study conducted among Hmong, Syrian, and Somali refugees in the United States indicated that the financial and educational support from family members helped them settle into their host country [15]. The material and financial support somewhat alleviated the economic hardships faced by refugee women. However, refugee women reported that their family members provided insufficient and inconsistent financial assistance. According to Hynie and colleagues [14], the existence of family did not ensure that immigrant and refugee women would obtain the help they needed.

Refugee women also received financial and material support from friends. Most refugee women received instrumental support from ethnic-like friends. This indicated that the social interaction between refugee women and other refugee communities, as well as the local community, was minimal. As their ethnic-like friends were not economically strong, refugee women were able to rely on them for assistance when they suffered from severe health problems or lost loved ones. This suggested that the Yemeni community had a supportive culture in times of difficulty. Consistent with the findings of my study, earlier studies revealed that friends are the primary source of instrumental support for refugees [9, 14,16,29]. Moreover, refugee women received financial and material support from independent sponsors, particularly during holidays and at the time of facing serious health problems. Refugee women expressed gratitude to friends, family, and independent sponsors for their instrumental support. However, the amount of support received from these sources was insufficient.

The study’s findings also revealed that refugee women received emotional support from informal support sources. The emotional support included encouragement, sympathy, listening, caring, and sharing feelings, which helped refugee women overcome some adaptation challenges. Refugee women sometimes received emotional support from the members of their closest families who lived in Addis Ababa. Refugee women also received emotional support from left-behind family members in Yemen. This suggested that refugee women found emotional support from a transnational source. For refugees, transnational sources of moral and emotional support are crucial [30]. In line with this study, multiple studies [14,15,19-22,31-33] indicated that family members’ emotional support are crucial in promoting refugees’ well-being in their host countries.

Refugee women also received emotional support from friends at times. Most of the time, refugee women receive emotional support from friends in the same ethnic group.
Refugee women felt more connected to someone because of the emotional support they received from their friends. It also made it easier to handle different adaptation challenges. In a similar vein, prior studies revealed that friends are those who provide refugees with emotional support during adaptation time in their host countries [14,16,21,29,34]. A qualitative study conducted among refugee women in Australia revealed that the emotional support refugee women received from their peers in the group enabled them to deal with a variety of challenges [16].

The study’s findings also showed that family members and friends who share a similar ethnic background provided refugee women with informational support for a variety of issues, including the available social support programs at refugee-serving humanitarian organizations and jobs in the formal sector. This indicated that friends and family filled the void in the humanitarian organization’s outreach to refugees regarding publicizing their support programs. In a similar vein, a study conducted among Syrian refugees in Canada revealed that family and friends informational support helped refugees access employment and housing [17]. Particularly, prior studies indicated that family is the source of informational support for refugees in their destination countries [14,15,18]. For example, a qualitative study conducted among Syrian refugees in Canada revealed that families are valuable resources for information regarding the Canadian healthcare system for refugees [18]. Moreover, previous studies indicated that friends became the major source of information for new arrivals [14,34]. For example, a qualitative study conducted among immigrants and refugees in Canada revealed that new arrivals ask refugees who spent longer periods in Canada for information on a variety of issues [35].

In general, refugee women received informational, emotional, and instrumental support from informal social support sources. For longer-lasting social and economic integration, social networks must diversify and grow, even though friends and family are still vital sources of support [36]. Furthermore, informal social support sources filled in the blanks that refugee-serving humanitarian organizations’ programs do not provide. However, the lack of social relationships and the limited number of family and friends made it difficult for refugee women to get adequate support from informal social support sources in Addis Ababa.

5. Conclusion
Refugee women received various types of social support from informal support sources like family, friends, and independent sponsors, which helped them adjust to the new environment. For refugee women, strengthening their existing informal social networks is crucial since these networks provide them with informational, emotional, and instrumental support. Refugee-serving humanitarian organizations like UNHCR, JRS, and EOC-DICAC need to create a socialization (cultural exchange) program that unites refugee women, other refugee communities, and the local community. This will allow for the exchange of support and opportunities for social interaction. Refugee women expressed gratitude for the instrumental support they got from informal support sources, but the amount of this support was inadequate. In the short term, the government and refugee-serving humanitarian organizations must work together to provide refugee women with sufficient support that meets their specific needs. In addition, they need to help refugee women obtain jobs in the long run. It is also the responsibility of concerned bodies to educate the local community about ways in which they can support refugee women. Family
members and friends provided refugee women information about the support programs offered by refugee-serving humanitarian organizations. However, humanitarian organizations must advertise their support in the mother tongue of refugee women. Humanitarian organizations also need to cooperate with Yemeni community leaders to use their networks to tell refugee women about available support programs.

Conflict of interest: The author declares no conflict of interest.

References


23. Liamputtong, P. *Qualitative research methods (4th ed.).* Oxford University; 2013.


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**Submission of manuscripts:** jes@meridian.utm.md