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Assessment of General Health Status Among Refugee Women in Greater Cairo

Eman M. Shebl [a], Raneyah H. Shaker [a], Rasha S. El-Desouky [a], Mohamed F. Othman [b]

[a] Public Health Community, Environmental and Occupational Medicine Department, Faculty of Medicine Benha University, Egypt.

[b] Preventive Medicine Department, Ministry of Health, Egypt.

Corresponding to:
Dr. Mohamed F. Othman.
Preventive Medicine Department, Ministry of Health, Egypt.

Email: m.fayez.moh@gmail.com

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Abstract:

Background: Egypt is one of the top ten countries hosting refugees as it is located in the Middle East which produces more than one-third of refugees worldwide. Women are the most vulnerable group to face health hardships and violence during migration. Aim: Health promotion of female refugees and asylum seekers in Egypt. **Patients and Methods:** A cross-sectional study has been conducted on 320 refugee women at four public facilities chosen by simple random sampling out of thirteen public primary Ministry of Health (MOH) facilities supported by the United Nations High Commissioner for Refugees (UNHCR). A structured interview questionnaire was adopted and modified to cover the targeted areas. **Results:** More than one-third of the studied group were Syrian and the other two-thirds were Africans. There was a highly significant statistical difference between the country of origin of participants as regards current marital status and main source of income while there was a non-significant difference regarding the current work status. There was a statistically significant difference in the length of stay in Egypt as regards their rating of overall health. There was a statistically significant difference in the length of stay in Egypt as regards taking medications. **Conclusion:** The study showed that there was a statistically significant difference in the length of stay in Egypt as regards refugee women's rating of overall health and also taking their needed medications, but a non-significant difference had been observed in length of stay in Egypt regarding smoking status. The study also uncovered the community's need to increase the budget, efforts and pay attention to refugee studies and extend the scope to the economic, health and social sectors.

Keywords: General health status; Migrants; Refugee; UNHCR.

Introduction

One of the outstanding achievements of the 20th century in the humanitarian field has been the establishment of the principle that the refugee addressed in the context of international cooperation and burden sharing. [1]

The Middle East has many concurrent displacement crises: Syria, Yemen, Libya, Iraq, and long-standing Palestinian's problem. These displacement crises produce around one-third of refugees from all over the world[2].

A refugee is a person who owing to a well-founded fear of being persecuted for reason of race, religion, nationality, membership of a particular social group or political opinion, is outside the country of his nationality and is unable or owing to such fear, is unwilling to avail himself of the protection of the country. An asylum-seeker is someone whose request for sanctuary has yet to be processed. Every year, more than one million people seek asylum [3].

According to International Conference on Population and Development (ICPD-1994); reproductive health care includes family planning, antenatal care, safe delivery, post-natal care, prevention and appropriate treatment of infertility, prevention of abortion and management of its consequences, treatment of reproductive tract infections, care and treatment of STDs, information, education and counselling on reproductive health, prevention and surveillance of violence against women, care for survivors of violence, actions to eliminate traditional harmful practices and appropriate referrals for further diagnosis and management [4].

Egypt is a low-middle-income country and its economy depends on agriculture, tourism, petroleum, gas, the Suez Canal and remittances from Egyptians working abroad [5] Egypt has borders with Libya, Sudan and Palestine. Deserts constitute the vast majority of Egypt's land [6]

Previously and for a long time Egypt was considered to be a transit or crossing country, but recently many considered it a final destination [7,8]

By October 2022, 288,173 refugees and asylum-seekers from 60 different nationalities were registered with UNHCR. Half of them are Syrian; the others are mainly from Sudan, South Sudan, Eritrea, Ethiopia, Yemen and Somalia [8,9 and 10]

The medical services at many public clinics are available free of charge and the refugees can access them without legal papers [7,11]

Rationale:

Assessing the general health status of refugee women in Egypt is an important issue and the need for these studies has increased with the doubling of the number of refugees and the expectations of continuous increase during the coming periods.

Aim:

1. To find out socio-demographic characteristics among participants of different origin.
2. To identify Relation between length of stay in Egypt and participants' general health status
3. To assess the length of stay in Egypt & taking medications.

Research question:

Do the sociodemographic factors of the refugee women in Egypt affect their general health status?

Subjects and Methods

Participants:

- Type of study: Cross-sectional study
- Study settings: Four public facilities were chosen by simple random sampling out of thirteen public primary MOH facilities supported by UNHCR in greater Cairo; Al-Hosary unit, Al-Hay Al-Sades unit, Al-Zahraa unit and Al-Haggana unit.
- Study duration: from March 2021 to March 2023.
- Ethical considerations: Approval of the REC of the Faculty of Medicine,

Benha University was taken. An informed consent was obtained from all individual participants included in the study {MS. 13.12.2019}.

- Study population: Three hundred and twenty females were recruited among those attending the chosen facilities.
- The inclusion criteria: Female, between 18 and 45 years. Refugee or Asylum Seekers have UNHCR registration.
- The exclusion criteria: Female below 18 or over 45 years or any female does not have UNHCR registration, otherwise all females could be included from any nationality or races fit the inclusion criteria and agree to participate in the study.

Methodology:

A structured interview questionnaire sheet was used. It was adopted and modified from [13]. It consisted of sections: Background and General health status.

MedCale software version 16.1 (© 1993-2016 MedCale software) was used to calculate the required sample size using the percentage of migrant females (44%) according to Guro and Turfan, 2019.

Statistical Analysis:

The collected data were statistically analyzed by SPSS 27.0 for Windows (SPSS Inc., Chicago, IL, USA): Editing, Coding, Data entry, Normality of distribution by Kolmogorov-Smirnov test, Chi-square ($\chi2$) and Fisher's Exact Test (FET) for categorical variables and Kruskal Wallis Test for non-normally distributed quantitative variables.

All tests were two-sided. The accepted level of significance in this work was ($P \leq 0.05$). A P-value ≤ 0.01 was considered highly statistically significant (HS) and $P > 0.05$ was considered non-statistically significant.

Results

Table 1: Distribution of participants according to socio-demographic characteristics.

Variable		N = 320	
		No	%
Country of origin	Syria	114	35.6
	Eritrea	71	22.2
	Sudan	38	11.9
	South Sudan	37	11.6
	Ethiopia	22	6.9
	Somali	19	5.9
	Yemen	12	3.8
	Iraq	7	2.2
Age (yrs)	15 - <20	18	5.6
	20 - <25	٥٢	16.3
	25 - <30	55	17.2
	30 - <35	87	27.2
	35 - <40	43	13.4
	40 – 45	65	20.3
Length of stay in Egypt	< 3y	113	35.3
	3y- <6y	138	43.1
	3y - < 9y	55	17.2
	9y - < 12y	13	4.1
	>12 y	1	0.3

According to (Table 1), more than one-third of the studied group were Syrian and the other two-thirds were African distributed as seventy-one Eritrean (22.2%), thirty-eight Sudanese (11.9%), thirty-seven South Sudanese (11.6%), twenty-two Ethiopian (6.9%), nineteen Somali (5.9%) and some Yemeni (3.8%)

and Iraqi (2.2%). Regarding participants' age, more than a quarter were 30 to less than 35 years old.

Level of education shows a bell-shaped curve with negative skewness (right modal). Preparatory and secondary was the median (137 cases) with 126 lass (14 cannot read, 46 can read and write and 66 with primary degree) and 57 holding university degree and postgraduate degrees.

The figure shows that sixteen women (9%) have been married for less than three years while the majority of the participants (91%) are married for more than three years among them one-third (36.2%) were married for more than fifteen years.

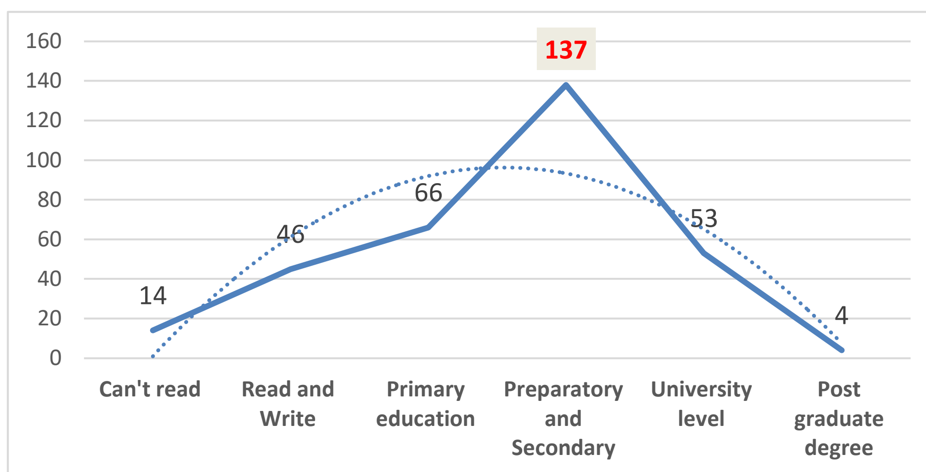

Figure 1: Distribution of studied participants according to the level of education.

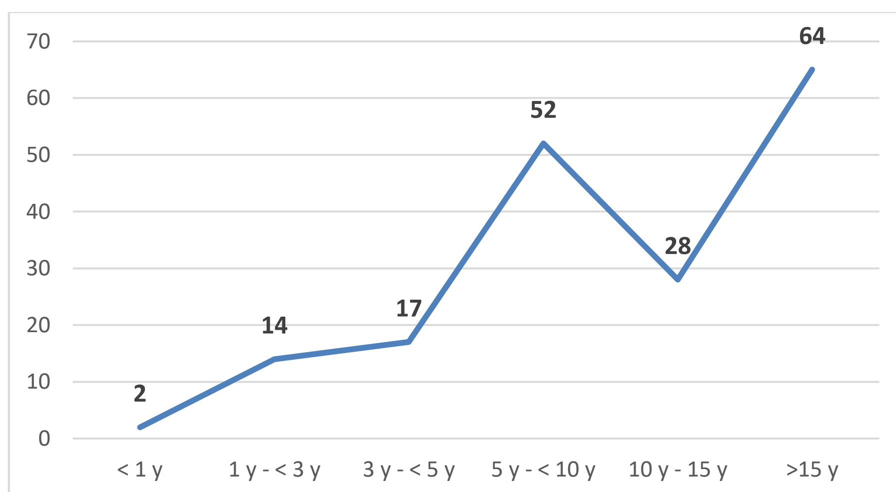

Figure 2: Distribution of participants according to Period of marriage to current husband (n = 177).

Table 2: Relation between the country of origin and the current marital status, the main source of income and the current work status.

Variable	Syria N =114 (%)	South Sudan N=37 (%)	Sudan N=38 (%)	Somalia N=19 (%)	Eretria N=71 (%)	Ethiopia N=22 (%)	Yemen N=12 (%)	Iraq N =7 (%)	
Current marital status									≤ .001 (HS)
Married	80(70.2)	18(48.6)	24(63.2)	11(57.9)	22(31.0)	10(45.5)	7(58.3)	5(71.4)	
Widowed	16(14.0)	2(5.4)	2(5.3)	2(10.5)	7(9.9)	4(18.2)	0(0.0)	0(0.0)	
Separated/ divorced	8(7.0)	2(5.4)	1(2.6)	1(5.3)	4(5.6)	2(9.1)	0(0.0)	0(0.0)	
Never married	10(8.8)	15(40.5)	11(28.9)	5(26.3)	38(53.5)	6(27.3)	5(41.7)	2(28.6)	
The main source of income									≤ .001 (HS)
No income	11(9.6)	4(10.8)	3(7.9)	2(10.5)	15(21.1)	1(4.5)	1(8.3)	0(0.0)	
Husband/ partner	63(55.3)	14(37.8)	19(50.0)	8(42.1)	9(12.7)	4(18.2)	4(33.3)	3(42.9)	
Other relatives	20(17.5)	5(13.5)	7(18.4)	2(10.5)	29(40.8)	3(13.6)	6(50.0)	4(57.1)	
Own work	10(8.8)	8(21.6)	4(10.5)	4(21.1)	13(18.3)	7(31.8)	1(8.3)	0(0.0)	
Social services	9(7.9)	6(16.2)	5(13.2)	3(15.8)	5(7.0)	7(31.8)	0(0.0)	0(0.0)	
More than one source	1(0.9)	0(0.0)	0(0.0)	0(0.0)	0(0.0)	0(0.0)	0(0.0)	0(0.0)	
Current work status									.104
Not working	26(22.8)	12(32.4)	5(13.2)	6(31.6)	18(25.4)	9(40.9)	1(8.3)	0(0.0)	
Working	88(77.2)	25(67.6)	33(86.8)	13(68.4)	53(74.6)	13(59.1)	11(91.7)	7(100)	

Table 2 shows that there was a highly significant statistical difference between the country of origin of participants as regards current marital status and main source of income ($P \leq 0.001$) while there was a non-significant difference regarding the current work status (P =.104).
Table 3 demonstrates that there was a statistically significant difference in the length of stay in Egypt as regards their rating of overall health (P = .036). Forty-two-point-five percent of studied females who stayed in Egypt for less than three years had acceptable health while all participants who stayed in Egypt for more than twelve years had acceptable health. Also, the highest percentage of participants who stayed in Egypt for less than three years never suffered from Hypertension, Diabetes Mellitus or Anaemia.
The table also illustrates that there was a statistically significant difference in the length of stay in Egypt as regards taking medications (P = .012), but a non-significant difference had been observed in in length of stay in Egypt regarding smoking status (P = .402).

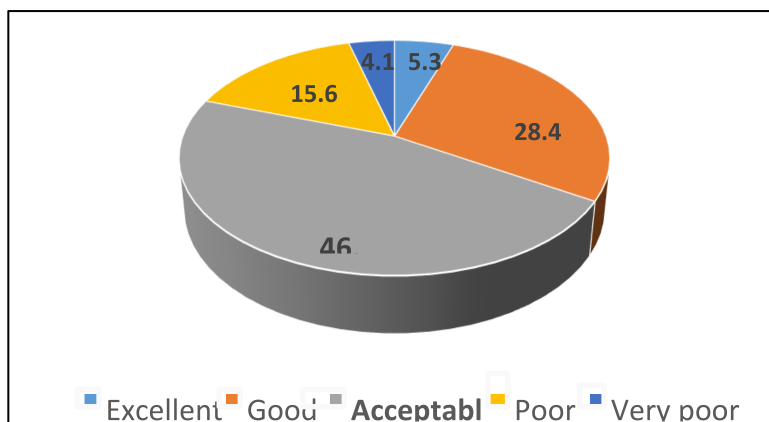

Figure 3: Distribution of studied participants according to their rating of overall health.

Table 3: Relation between length of stay in Egypt and participants' general health status.

Variable		Length of stay in Egypt										FET P-value
		<3y		3y- <6y		3y - < 9y		9y - < 12y		>12 y		
		N=113	%	N=138	%	N=55	%	N=13	%	N=1	%	
Their rating of overall health												.036 (S)
Excellent		10	8.8	4	2.9	3	5.5	0	0.0	0	0.0	
Good		44	38.9	36	26.1	8	14.5	3	23.1	0	0.0	
Acceptable		48	42.5	64	46.4	30	54.5	6	46.2	1	100	
Poor		8	7.1	28	20.3	10	8.2	4	30.8	0	0.0	
Very poor		3	2.7	6	4.3	4	7.3	0	0.0	0	0.0	
Current illness												
Hypertension	Yes	15	13.3	24	7.4	15	27.3	6	46.2	1	100	.004 (HS)
	No	98	86.7	114	82.6	40	72.7	7	53.8	0	0.0	
Diabetes	Yes	6	5.3	21	15.2	8	14.5	4	30.8	0	0.0	.049 (S)
	No	107	94.7	117	84.8	47	85.5	9	69.2	1	100	
Anemia	Yes	40	35.4	46	33.3	26	47.3	7	53.8	1	100	.136
	No	73	64.6	92	66.7	29	52.7	6	46.2	0	0.0	
Currently taking medications												
	Yes	23	20.4	28	20.3	17	30.9	7	53.8	1	100	.012 (S)
	No	90	97.6	110	79.7	38	69.1	6	46.2	0	0.0	
Currently smoking												
Every day		7	6.2	2	1.4	1	1.8	0	0.0	0	0.0	.402
Some days		16	14.2	14	10.1	6	10.9	1	7.7	0	0.0	
Not at all		90	79.6	122	88.4	48	87.3	12	92.3	1	100	

Discussion:

Forced migration is a wide-range concept that can include many forms of migration; displacement due to violence, war, and insecurity, internal displacement and development-induced displacement. [7]

The government of Egypt announced hosting 5-6 Million refugees in 2016 while scholars' estimates are about 1-3 million. UNHCR registered 267,734 refugees and asylum seekers by the end of November 2021 while IOM reported more than nine million migrants in Egypt by mid-2022. [2, 7]

Globally, 80% of the refugees and internally-displaced persons are children and women. Females remain particularly vulnerable to the consequences of insecurity; lack of opportunities and inequality exclude women from formal decision-making. Sexual and Gender-based violence is exacerbated by emergencies and displacement and is a serious rights violation that often goes underdressed. [5]

Challenges against improving the situation of reproductive health include lack of humanitarian access to conflict areas, limited funding, lack of resources, lack of health workers in conflict areas, delays in transportation of supplies and absence of Humanitarian Response Plans [12]

In the current study, percentages of participants from different nationalities were: (35.6%) Syrian, (22.2%) Eritrean, (11.9%) Sudanese, (11.6%) South Sudanese, (6.9%) Ethiopian, (5.9%) Somali, (3.8%) Yemeni and (2.2%) Iraqi. This distribution doesn't meet the announced numbers by UNHCR. This can be linked to the nature of the gathering in specific places and the study sample that covered four centers, so the demographic of the sample represents refugees and asylum seekers in those places.

Level of education demonstrated that most of the participants held secondary level certificates or lower while only one-sixth held university and postgraduate degrees. This is agreed with, who mentioned that refugee women in Egypt are often illiterate or poorly educated [7]

It also agrees with Masterson who reported that three-quarters (76%) of Syrian refugee women in Lebanon were less than high school [13]

The explanation is that well-educated refugees have better chances of reaching Europe by seizing opportunities for resettlement, studying or residency in developed countries.

The current study shows that 55.3% of participants were married, 10.3% were widowed 5.6% were separated or divorced and 28.7% were never married. There were 84.2% of married women staying with their husbands in Egypt while 15.8% had their husbands outside Egypt. This disagreeing with Masterson who reported that the majority of Syrian women (84.3%) were married in her study in Lebanon in comparison with the current study about the Syrian where 70.2% (80/114) of Syrian females are married. [14]

The explanation may be due to the variation between the time of conduction of the two studies, Masterson's was done just after the conflict so it reflected the sociodemographic of the Syrian society inside Syria, but the current study reflected the situation in Egypt where the younger generation had grown, marriage is some hard and Syrian males are less than in Syria before the conflict.

The study demonstrated that only one-fifth of studied females were suffering from hypertension, about one-tenth had DM, nearly one-third had Anemia and one-third of them suffered from other chronic diseases.

Less than half (45%) of participants in this study were working and more than half (55%) were not working or still looking for a job. Country of origin is not detector for current work status according to current study but it is related to main source of income.

This came in accordance with the 3RP report which mentioned that forty-two present of refugee women are working within the informal employment sector as caring, cleaning and seasonal workers and policies mentioned by CAPMAS and UNFPA that the government is forced to place restrictions on foreigners' rights of work to protect domestic rapidly increasing labor force. [6,10]

The explanation is that women depend on their own work to fulfil basic requirements in less than 15% while depending on their husbands in 38.8% of participants then on the other relatives, charity and assistance. Some nationalities like Yemenis and Syrians offer more protection to women and a low tolerance for their work.

Study results revealed that 33.7% of participants were satisfied with their general health (Excellent and Good), 46.6% chose the expression (Acceptable) and 19.7% were not satisfied (Poor and Very Poor). Rating of own health showed a highly statistically significant difference in correlation to the country of participant's origin and their length of stay in Egypt.

These results are supported by the same conclusion of in her study on Syrian refugees in Lebanon where she reported that 42.7% were satisfied, 39% were accepting and 17.7% were not satisfied. [13]

Analysis of the data uncovered the map of chronic diseases among study participants; Anaemia was the most common "120 cases, 37.5%" then Hypertension "19.1%" and Diabetes Mellitus "12.2%". Incidence of Hypertension, Incidence of Diabetes Mellitus and currently taking medications showed statistically significant differences concerning length of stay in Egypt, but there was no significant difference in incidence of Anaemia.

This map of diseases does not vary from the distribution of diseases in the MENA region. Chronic diseases which came on top of the list are widespread in the region due to genetic predisposition, habits and risky lifestyles. The study's results at the same time differ from results related to Syrian refugees in Lebanon where Anaemia was 27.5%, Hypertension was 12.2% and Diabetes Mellitus was 3.1% [2,3,13,14]

Diagnosis and treatment of hypertension and diabetes are more accurate and well tolerated in stable health systems and

stable circumstances. It also related to the stress of the new life in a new country so it correlated with the length of stay in the study's results. Anaemia has two points; bad nutritional conditions and deprivation during long-term migration trips and also genetic diseases of blood cell formation and functioning.

Participants had been found non-smoking in 85.3% of cases while 14.7% were currently smoking, 42.6% of them had been increased smoking rate from that in their country of origin. 'Currently smoking' is not related to the period of stay in Egypt.

These results are in accordance with results that found high percentages of women saying they never smoke cigarettes (80%) or water pipes (85.5). She found (15.3%) smoking cigarettes every day, (4.7%) smoking cigarettes some days (10.2%) smoking water pipes every day and (4.2%) smoking water pipes some days. [13]

Conclusion and Recommendation:

The current study revealed that there was a statistically significant difference in the length of stay in Egypt as regards refugee women's rating of overall health. Also, the highest percentage of participants who stayed in Egypt for less than three years never suffered from Hypertension, Diabetes Mellitus or Anaemia.

The study also showed that there was a statistically significant difference in the length of stay in Egypt as regards taking medications but a non-significant difference had been observed in in length of stay in Egypt regarding smoking status

The current study showed the urgent need for increasing budget and efforts in this field UHCR, Universities and research centers should pay attention to refugee studies and extend the scope to the economic, health and social sectors. Medical teams need to know more about migration, rights, vulnerability and how to deal with barriers and cultures.

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