Research Article

Journal of Clinical Cases

Current Influx Of Ethiopian Migrants And Refugees In Eastern Sudan: A Rapid Health Assessment

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Received Date: 22 April 2024
Accepted Date: 04 May 2024
Published Date: 11 May 2024

Citation:
Abdalla Hassan Sharief. Current Influx Of Ethiopian Migrants And Refugees In Eastern Sudan: A Rapid Health Assessment. Journal Of Clinical Cases 2024.

1. Abstract

1.1. Introduction
Just over 50,000 Ethiopians have fled to Sudan to date, following escalating conflict in Ethiopia's Tigray region. UNHCR, the UN Refugee Agency, together with the Sudanese authorities, has moved some 14,000 refugees from Hamdayet and Abderafi border points to Um Rakuba camp, situated some 70 kilometres away from the Ethiopian border. Most of the refugees in the camp and those crossing into Sudan, many of them women and children, are desperate for food, shelter, clean water, sanitation and health care. The aim of this survey was to assess/monitor health status of Ethiopian migrants/ refugees in eastern Sudan and obtain reliable estimates on access to essential healthcare

1.2. Methods
Participants were generally interviewed, using Ethiopian interpreters when needed. Sera were collected for detection of hepatitis B virus (HBV) and finger prick blood was also taken for malaria and visceral leishmaniasis (VL) detection. Past VL infection was detected by leishmanin skin test (LST). Sputum samples were taken to be examined for tuberculosis infection. Stoll specimens were be examined for the presence of ova and parasites.

1.3. Results
This study reported considerable prevalence rates of Tb and HBV (12.1% and 7% respectively) according to the number of individuals recruited. We found a surprisingly high prevalence of previously undiagnosed malaria, tuberculosis, hepatitis B virus and intestinal parasites. Indeed, stool microscopy revealed a prevalence of S. mansoni of 4%. Other, less frequently diagnosed parasitic infections were giardiasis, H. nana infection, and strongyloidiasis.

1.4. Conclusion
Refugees bear a disproportionate burden of infectious diseases because of the circumstances under which they escaped to the Sudan. Initially screening of refugees for VL, TB, HBV and evaluation of stool samples for intestinal parasites identified infectious diseases with potential for long-term sequelae.

2. Keywords:
Infectious diseases, Ethiopian Refugees, Sudan, health assessment

Funding:
This study was funded by the EMRO/TDR/WHO project ID AP21-00140

3. Introduction

Due to the increased intensity, diversity, and duration of forced migration from conflict areas in northern Ethiopia, Sudan, is faced with the challenge of responding to the humanitarian needs of this population. One of these challenges is providing good access to basic-needs, basic health care services to those refugees who enter through the open borders between the two countries.Most of the refugees were relocated to Um Rakoba camp in Gedarif State, eastern Sudan. Reports from the area indicated that after a long journey, refugees suffer from fatigue of long journey the change in living conditions, the change in weather, and the change/lack of food to add to the trauma of having to escape their homes for fear of being killed. Some of the families have lost members and many children are unaccompanied by parents or relative adults. The majority of the inhabitants of remote areas in eastern region, especially patients who live in villages within the belt of VL or who complain of other illnesses, suffer from difficult access to healthcare centres for many reasons related to their frequent movement from one village to another in search of pasture for their livestock. Moreover, obstacles may also include bad weather, rainfall at most times of the year and poor alluvial clay roads making patients' movement and transport difficult, drugs are expensive and difficult to get

hold of; health facilities are sparse, poorly equipped and under staffed and also suboptimal number of health facilities offering diagnosis and treatment.

4. Methodology

4.1. Study Design

This study is designed as a population-based, cross-sectional survey study to assess health status of migrants/refugees and indentify obstacles to access to healthcare centres using established instruments. Due to the challenging research context, several methodological decisions had to be made with regard to questionnaire development, sampling, and data collection in order for the study to be feasible. Data was collected in the pre-designed questionnaires. Participants will generally be interviewed, using Ethiopian interpreters when needed, for their suffering during the journey from Ethiopia to Sudan. They will also be clinically interviewed for general health (using questionnaire) and examined for signs and symptoms of some communicable diseases. Urine samples were collected for detection of urine proteins, solutes, cells, casts, crystals, organisms. Stoll specimens will also be examined for the presence of ova and parasites. Blood samples were collected for detection of hepatitis B virus (HBV) and finger prick blood will also be taken for malaria (by microscopy) and visceral leishmaniasis (VL) detection by direct agglutination test (DAT). Past VL infection was detected by leishmanin skin test (LST). Sputum samples were taken to be examined for tuberculosis infection. Data was collected from children in a special questionnaire (Child health assessment questionnaire).

4.2. Study Area

Um Rakouba camp is located in Gallabat area in Gedarif State, eastern Sudan. The camp is some 70 kms away from the Sudanese-Ethiopian borders. Many thousands of Ethiopian refugees from Hamdayet and Abderafi border points arrive to Um Rakuba camp in carts, on tractors, in boats and by foot, and usually bring nothing more than the clothes they wear. Some have spent as much as two weeks walking towards safety, and most of that time without any food after having avoided villages occupied by militias or soldiers. They all recount horrifying stories of their route to exile: bodies in the streets, targeted executions and bombings. Most of the refugees in the camp and those crossing into Sudan are desperate for food, shelter, clean water, sanitation and health care, the agency has said, noting that many are women and children. Sudan has reopened the Um Rakouba camp – an abandoned refugee camp used in the 1980s during the war between Ethiopia and Eritrea. The camp can accommodate more than 10,000 people, but in contrast to what many of the refugees had expected upon their arrival, the camp lacked both shelter and sufficient water supplies. They also lack food. Aid groups are currently racing against time to help the refugees survive their new lives in exile.

4.3. Study Subjects

The target population of the study is defined as Ethiopian migrants and refugees living in Um Rakoba refugee resettlement camps in Gedarif State, eastern Sudan. The actual or approximate number of migrants and refugees was obtained from Al Galabat local authorities in Gedarif State, eastern Sudan.

4.4. Data Collection

Data were obtained from refugees using two data collection tools; 1) Adults assessment questionnaire, 2) Healthcare accessibility questionnaire. Data collection were carried out by trained field teams in a person-to-person approach, the interviewing/research team approached every selected individual in each camp. Every individual was seen on two subsequent days. Site coordinators were contacted on weekly basis to announce purpose and time of the research team visit. During data collection, all participants were approached personally by the field team and the purpose and nature of the study were explained to all of them, voluntary participation, confidential data handling, and anonymity of results both verbally and in writing. Literate migrants were handed with a questionnaire and information sheet in Ethiopian local language and the questionnaire and information were read to those who are illiterate. Literate participants have had the choice of returning the questionnaire in person to the field team via the coordinator. Field teams documented every contact with a potential participant, noting down, as required, reasons for exclusion from the study (e.g. illiteracy), reasons for refusal, language of distributed questionnaire, and sex of the individual. Participants were asked if they have any children under 18 years old living with them in the camp. They were given a proxy questionnaire for one of their children, to be completed on their behalf. Participants were asked to complete the questionnaire for only one child in order to retain feasibility of the approach, reduce the questionnaire burden for participants with many children, and thus ensure data quality.

4.5. Participants' Urinalysis Test

A suitable sample was obtained from a male simply by asking that the foreskin, if present, be pulled back, that the initial part of the stream was allowed to pass into the toilet, that the next ounce or two was collected, and that the last part of the stream be discarded with the first. In females, care was taken to separate the labia, and the urine is collected similarly. The samples were examined while fresh—indeed, while still warm—to give best results. A drop of this is placed on a slide, covered with a cover slip, and examined microscopically.

4.6. Stool Examination for Ova and Parasites:

5 - 10 mL liquid stool or 5–10 grams of fresh random formed stool or aspirated stool was collected in plastic, leak proof containers. As the specimens was collected onsite, they immediately transported to the laboratory. Ova and parasite were examined and the results were included in the participant data collection form.

4.7. Serum Samples Collection:

Five mls of whole venous blood samples was collected from each blood donor under investigation into sterile containers without any additives. Serum was aseptically be separated after clot retraction by centrifugation at 2000 rpm for 5 minutes. Sera were then be stored at -4°C until testing.

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4.8. Detection Hepatitis B (HBV) Among Migrants:

HBaAg ELISA detection kit was used in this assay. All reagents and specimens were brought to room temperature before proceeding with the assay. When commencing the assay all specimens and controls were carefully be recorded on the sheet supplied with the kit. The required number of microtiter strips were selected and placed, firmly, on the holder. Extreme care was taken for proper heat transfer during the 80 minutes incubation at 37°C. The microtiter wells were placed on a wet humid towel or metal block in the incubator. Careful and repeated well washing was carried out. Each pipetting step was followed by gentle rocking of the plates to ensure thorough mixing without spilling the solutions. Air bubbles were removed prior to incubations as well as reading absorbance. Briefly, aliquots of 50 µl of negative control, positive control, sample and enzyme conjugate was pipetted into the assigned wells. The sample and enzyme conjugate were mixed well by gentle rocking for 20 seconds. The microtiter strips were covered with adhesive film or foil. The samples were incubated for 80 minutes at 37°C, and the contents of the wells were aspirated into 5% sodium hypochlorite solution. The wells were washed 5 times using 400 µl washing buffer. The remaining solutions were removed by tapping the plate upside down on tissue paper. Aliquots of 50 µl of substrate reagent A and substrate reagent B were dispensed into the wells, and all were mixed and incubated for 30 minutes at room temperature. Then aliquots of 100 µl `Stop solution (1.0 mol/1 sulphuric acid) was added into each well and mixed well. The absorbance was read at 450 nm against blank. The results were measured within 30 minutes after adding the stop solution.

4.9. Assessment of Tuberculosis (TB) Infection

Refugees ≥15 years of age and those <15 years of age with a history of, symptoms of, or possible exposure to TB was screened and sputum microscopy was performed to identify acid-fast bacilli. Participants were given wide mouth containers to collect 1-3 ml of sputum samples. Sputum sample was spread over the centre of the slide (size of smear about 20mm). Slides were heated, fixed and dried before being stained with carbol fuchsin . Slides were exposed to heat until vapour just begins to rise and the stain was washed off with clean water. Stained smears were covered with 3% acid alcohol for 2-5 minutes before being washed with clean water. Slides were stained with malachite green stain for 1-2 minutes. Washing was carried out and the slides were placed on draining rack to air dry. Slides were examined microscopically using 100 oil immersion objective.

4.10. Prevalence of Malaria Infection:

Blood samples were collected, at each visit, for parasitological and molecular evaluations. Finger prick blood samples were collected for thick and thin blood films and DNA extraction on No. 3 Whatman filter paper. Films were stained with 3% Giemsa and 100-oil immersion fields were examined microscopically by two independent technicians. Parasite densities were determined by counting parasites and 200 leucocytes assuming white blood cells count of 6,000/µl. Parasitaemia was graded as low (1-999µl), moderate (1000–9999/µl) and high (>10000/µl). Hemoglobin (Hb) was measured using a colorimetric method and Hb levels were defined as normal and anaemic (<11 g/dl).

4.11. Screening of Visceral Leishmaniasis (VL) Suspected cases:

All participants were clinically examined for VL infection. They were tested with leishmanin skin testing for detection of past VL infection. The suspected VL patients were characterized by signs/symptoms of the disease e.g. fever, enlargement of the spleen, enlargement of the liver, anaemia, PKDL. They were further be subjected to leishmanin skin testing (LST) to detect past VL infection and direct agglutination test (DAT) to detect current infection. DAT positive and LST negative individuals were subjected to lymph node aspiration for parasite detection to confirm the infection. The cases with confirmed diagnosis of VL were followed up for treatment

4.12. Leishmanin Skin Testing (LST)

The LST was carried out as described before (Zijlistra et al., 1991). The leishmanin antigen and diluent were administrated at a dose of 0.1 ml intradermally on the volar surface of the forearm using a 1 ml syringe. A distance of at least 3-10 cm was kept between injection sites. The test as read after 48 or 72 hours using the ballpoint pen method (Sokal, 1975). The presence of induration +/- erythema of >=5mm has considered a positive reaction (Manzur and, ul Bari, 2006).

4.13. Direct Agglutination Test (DAT):

Finger-prick blood was collected by penetrating the thumb of a left hand finger using a lancet, and a volume of about 0.25 ml of blood was collected on filter paper (Whatman No. 3), air-dried and processed in the same day. The Leishmania antigen was a fixed promastigotes that was commercially and the test was performed as described by Harith et al., (1988). Discs corresponding to 5 ,l of blood were punched out (using paper puncher) of the filter papers, each disc was placed in a separate V-shaped well of a 96-well microtiter plate, and normal saline was added for elution. The plates were left in the fridge overnight. Prior to testing, fresh normal saline containing 0.2% gelatine was prepared by heating; after cooling, 2-mercaptoethanol (0.1 M) was added. The solution (75 ,l aliquots) was transferred into V-shaped wells microtiter plate and 50 ,l of the elutes were added to each well, followed by 50 ,l of antigen. The plates were incubated overnight before been read against white background. Initially for screening purposes, serial dilutions were made from 1:200 to 1:3200. Negative control wells (antigen only on each plate) and known negative and positive controls were tested.

4.14. Data Analysis

Except for empty questionnaires, all returned questionnaires were included in the analysis irrespective of completeness. The recommendations of the American Association for Public Opinion Research (AAPOR) guided the calculation of response rate. The participation rate was calculated by comparing the total records included in the analysis with the total number of contacts eligible for inclusion. Descriptive statistics was used to analyze selected socio-demographic characteristics, mental and physical health status, and health care access, consisting of service utilization and unmet medical needs, of participating adults and their children. Point-prevalence

and 95% CI stratified by age, sex characteristics, and subjective social status was calculated for health status and health care access variables and plotted against the sample average of each outcome. Age of participants wwas calculated by subtracting the month of data collection by stated month and year of birth, and categorizing the result into 5-year age groups. For the children's questionnaire, Strengths and Difficulties Questionnaire (SDQ) score was categorized in "normal" (0–13), "borderline" (14-16), and "abnormal" (17–40) categories (Goodman, 1999). As the instrument is intended for children and adolescents aged 4–17, those outside this age group were excluded from the analysis. Microsoft Excel 15 was be used for data management and descriptive analysis of response rates, all other analyses were carried out using Epi Info version 7.2.4

5. Results

Ethiopian refugees in Um Rakouba camp, Gedarif State, eastern Sudan were recruited (sample size was determined to be 428 individuals). Ages of the recruited volunteers ranged between 1-72 years. Clinical interviews revealed that no healthcare facilities in the areas where they came from because of the civil war, and this resulted in deteriorating health conditions for most of them. The majority of refugees in Um Rakouba camp escaped from their villages near the Sudanese-Ethiopian border areas where many infectious diseases are exist e.g. schistosomiasis (SCH), soil-transmitted helminthes (STH) and visceral leishmaniasis (VL). The general situation in the camp in terms of housing and health is very bad, as the tents are too small for the number of individuals and families inside. The camp also lacks sanitary-equipped toilets and proper drainage. Specific Interviews indicated that Knowledge about WASH among refugees is extremely weak. Most selected refugees stated that there are several barriers and obstacles to access healthcare in the their origin area, including: severe weather conditions with intense rainfalls for more than six months annually, poor alluvial clay roads making movement and transport difficult as well as other transportation constraints; sparse health facilities that are poorly-equipped and under-staffed; and suboptimal numbers of health facilities offering diagnosis and treatment.

Furthermore, recurrent floods, droughts, storms, migration, seasonal mobility, pastoralism, climate change, armed conflicts and the wide range of endemic, epidemic and epizootic diseases in addition to individual knowledge and practices are important barriers. Recruited refugees were examined for previous infection with Leishmania doovani parasites using leishmanin skin test (LST). 39 (9.1%) of them showed indurarion ≥5mm, 314 (73.3%) had reactions <5mm, and the rest 75 (17%) had no LST induration. Direct agglutination test (DAT) was used to detect the current L.donovani infection. 14 (3.2%) have had anti-leishmanial antibody titers ≥3200 and they were referred to Prof. El-Hassan Centre for Infectious Diseases (5 Km distance a part from the camp) for further clinical examinations and diagnosis. Lymph node aspirates were taken from all suspected patients for microscopy. L.donovani amastigotes were detected in 2 cases (see Table 1). Patients were subjected to treatment (Paromomycin (PM) plus sodium stibogluconate (SSG) combination (PM , 15 mg/kg/day and SSG, 20 mg/kg/day for 17 days))at the camp clinic and followed up until they were completely recovered. Malaria infection has been detected in 194 (45.3%) individuals. Of them, 18% were 2-4 years old, 38% were 5-17 years old and 44% were 18 years old or older (see Table 1). Of the 224 febrile patients tested by RDT, 163 (72.7%) were positive for Plasmodium falciparum malaria parasites whilst of the 220 tested by microscopy, 128 (58.1%) were positive for P. falciparum; one patient had a mixed P. falciparum and P. vivax infection. Because the majority of infections were P. falciparum, the rest of the analysis is done on this species only.

Total number		Positive (≥5 mm) LST induration percent	Positive (≥3200) DAT Percent	VLconfirmed positive patients percent	Positive malaria patients percent
Gender					
Female	276	65.2	2.1	0	22.8
Male	152	13.8	5.2	1.3	86.1
Age group					
≤ 2 years	39	0	2.5	0	0
2–7 years	14	57.1	14.2	0	56
≥18 years	375	8.2	2.9	0.5	44

Table1: Refugee health assessment form results for leishmnin skin test (LST), direct agglutination test (DAT), and malaria for refugees in Um Rakouba camp, Gedarif State, eastern Sudan during 2021-2022 (N = 428)

Testing TB infection among refugees showed that no refugee had a Class A TB condition, and 52 refugees (12.1%) were Class B (11 Class B1, 38 Class B2, and 3 Class B3). Of 376 refugees without TB class conditions, 348 (92.5%) had tuberculin skin response of 5 mm induration, 61 (16%) a response of 5–9 mm, and 83 (22%) a response of ≥10 mm induration. 12% of refugees with Class B TB conditions who received a tuberculin skin test had a response of 5 mm induration, 2% a response of 5–9 mm, and 71% a response of ≥10 mm. The prevalence of positive skin test responses differed significantly by gender (p0.001), age group (p0.001). The prevalence of positive skin test responses was higher in men and adults; 87% of refugees ≥18 years of age had a positive tuberculin skin test compared with 12% of those refugees below 18 years (p0.001). 389 refugees were tested for HBsAg, 34 (7%) of them had a positive test result. The proportion with a positive HBsAg test differed significantly by gender (p=0.005), age group (p=0.00v5 (see Table 2). Of those refugees who were HBsAg-negative (394), 173 were tested for HBsAb and 80 for HBcAb; some refugees were tested for only one antibody and some for both. A positive result occurred in 61 refugees (35.2%) tested for HBsAb and in 58 refugees (33.5%) tested for HBcAb. Of 54 HbsAg-negative refugees tested for both HBsAb and HBcAb, 31 (57.4%) were negative on both tests; 16 (29%) were positive on both; 6 (11%) were only HBsAb-positive; and 4 (7.4%) were HBcAb-positive only. Of 177 (41.3%) refugees with results of stool ova and parasite examinations, 14 (8%) were reported with trichuriasis, 11 (6.2%)

with giardiasis, 5 (2.8%) with schistosomiasis, 7 (4%) with hookworm, 6 (3.3%) with amebiasis, 2 (1%) with ascariasis. In total, 51 (28%) refugees were reported with one or more of these parasitic infections. The prevalence of infection with one or more of these six parasites varied by gender (p=0.046) and age group (p0.001), (see Table2). The prevalence was higher in males, and in children or adolescents; 67% of refugees >18 years of age had a positive test for one or more of these eight parasites, compared with 41% of refugees ≥18 years (p>0.001).

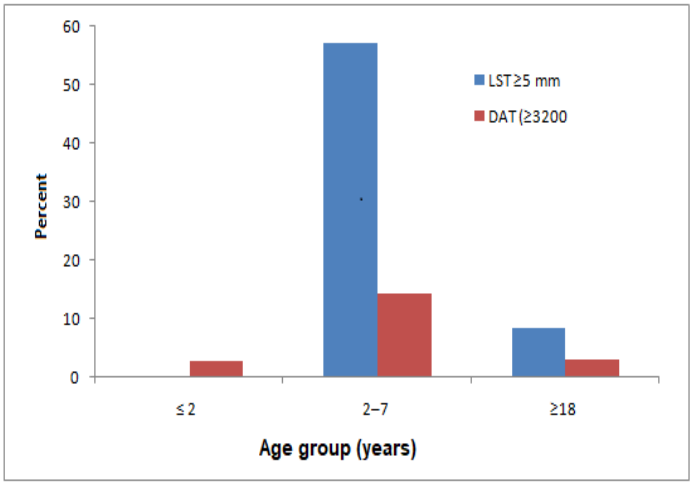
Total number		Total number	Positive (≥10 mm) tuberculin skin test	Positive hepatitis B surface antigen	Parasitic infection
		Tested+ve for TB	Percent	Percent	Percent
Gender					
Female	276	32	54.9	2.5	11.1
Male	152	39	45	5.3	16.9
Age group					
≤ 2 years	39	0	0	0	25.9
2–7 years	14	9	12	7	41.3
≥18 years	375	62	87	27	32.8

Table2: Refugee health assessment form results for tuberculin skin testing, hepatitis B virus screening, and stool parasitic examination for refugees in Um Rakouba camp, Gedarif State, eastern Sudan during 2021-2022 (N = 428)

6. Discussion

In the last two years, an increasing number of refugees from Ethiopia have entered to Sudan and the majority are resettled in a refugees camp in Gedarif state, eastern Sudan. This cross-sectional study conducted in Sudan screened 428 Ethiopian refugees (total number in the camp is about 14000 individuals) for a suite of some infectious diseases. We found a surprisingly high prevalence of previously undiagnosed malaria, tuberculosis, hepatitis B virus and intestinal parasites. Indeed, stool microscopy revealed a prevalence of S. mansoni of 4%. Other, less frequently diagnosed parasitic infections were giardiasis, H. nana infection, and strongyloidiasis. Based on our findings and given the potential serious consequences of untreated schistosomiasis, routine screening of refugees from Ethiopia for schistosomiasis and other intestinal worms should be considered. How do our data compare to previous studies? Despite high numbers of refugees arriving from Eritrea, data on their health status are scarce. There are several studies reporting on infectious diseases in refugees in general. However, most included a very small share of individuals coming from Ethiopia. This study reported considerable prevalence rates of Tb and HBV (12.1% and 7% respectively) according to the number of individuals recruited. Such infections are mostly believed to be common among migrants and refugees (Chen et al.,2018; Proença et al., 2020). The increased risk that refugees and have for infection with specific diseases can largely be attributed to poor living conditions during and after migration. Few studies analysed data taking into account the reason of migration, the importance of which is illustrated by the possible association found between refugee status and HBV infection and the stronger evidence against such association to HCV (Rossi et al., 2012, Greenaway et al., 2015). Most studies presented analysis accounting for world region of origin or did not consider ethnicity at all. While world region is preferable to the latter, this will still likely represent an extremely heterogeneous group in both risk epidemiology, reason for migration, and health knowledge.

Figure 1: Previous history and current situation of VL among refugees at different ages



Several studies report higher HIV, HBV, HCV and syphilis infection rates in sub-Saharan African migrants. For example, Russo and colleagues conducted a survey among asylum seekers in Italy, including 99 immigrants originating from Africa, 60 (61%) of whom were from Eritrea. The overall prevalence of syphilis, HIV, HCV and HBV was 6.1, 5.2, 2.3 and 11.3%, respectively (Russo et al. 2016). A review reports a pooled HCV prevalence of 4.4% among migrants from sub-Saharan Africa (Greenaway et al. 2015). Among serum samples collected in Libya, HIV prevalence was 2.2% among Eritreans, 1.1% were HCV/HIV co-infected (Daw et al. 2016). There are only few studies investigating intestinal parasitic infections among immigrants arriving in Europe. Among 1930 immigrants from sub-Saharan Africa in Spain, 14.4% had schistosomiasis, as revealed by microscopy. In general, Infectious diseases are among the significant health issues faced in the population of asylum seekers and refugees. The risk of transmission to the autochthonous population is very low, though outbreaks in the refugee population should be considered due to poor living conditions and suboptimal vaccination, not least among children.

Figure 2: Distribution (percentage) of screened infections among refugees in gender basis

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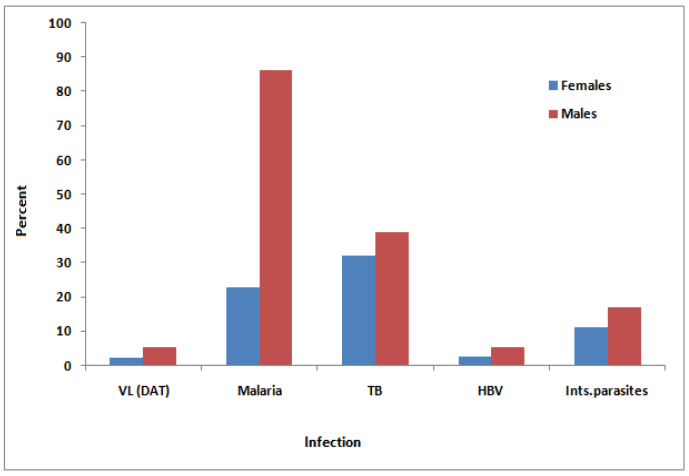

7. Conclusion

Interviews on general health of the recruited migrants/refugees conferred a clear on their need to an immediate and long-term healthcare and treatment and this because of many reasons e.g. fatigue of walked long distances from their home areas in Ethiopia until they reached and relocated in the camp in Sudan. Reasons also may include the change in living conditions, the change in weather, and he lack of food to add to the trauma of having to escape their homes for fear of being killed. Refugees bear a disproportionate burden of infectious diseases because of the circumstances under which they escaped to the Sudan. Initially screening of refugees for VL, TB, HBV and evaluation of stool samples for intestinal parasites identified infectious diseases with potential for long-term sequelae. Additional testing can be based on clinical signs and symptoms. Future challenges include developing national standardized screening for refugees that is cost-effective, logistically manageable, and applicable to other immigrant groups; collecting and evaluating evidence upon which screening recommendations are based; and developing innovative methods for screening for infectious diseases and immunity to vaccine-preventable diseases.

8. Recommendations

Addressing a refugee's health needs also does not end with the initial screening process. Complete and appropriate follow-up of clinical conditions identified during this evaluation are essential. Screening programs are most valuable if adequate facilities for follow-up diagnosis and medical treatment are available, and if subsequent interventions resulting from this screening might prevent or change the natural history of the disease under consideration. Refugees may face a number of barriers to receiving appropriate health care, including language, social, and cultural differences. They may also face economic barriers. WASH interventions in refugee camps are crucial to meet basic needs and improve safe access to water of sufficient quality and quantity. Refugee Medical Assistance, a specialized and federally authorized program, can help cover the refugee's health care costs after arrival. Meeting the diverse needs of refugees and other immigrants requires strong partnerships and coordination between public health agencies, health plans and other health care providers, employers, voluntary agencies facilitating resettlement, community agencies representing immigrant populations, and other organizations. The need for strong leadership and participation from the public sector underscores the need for adequate resources to support public health departments in the initial evaluation and follow-up of these new arrivals, as well as the need for experienced and culturally competent health care providers. Refugees remind us that, ultimately, our health as a society is only as good as that provided to those most recently arrived among us.

Acknowledgement:

This investigation received financial support from EMRO/TDR/WHO, Grant number AP21-00140.

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