

Physical health symptoms among Ethiopian returnees who were trafficked aboard

Lemma Derseh Gezie (✉ lemmagezie@gmail.com)

University of Gondar <https://orcid.org/0000-0002-6418-7674>

Asmamaw Atinafu

Department of Health Systems and Policy, Institute of Public Health, College of Medicine and Health Sciences, University of Gondar

Research

Keywords: human trafficking, returnees, physical health symptoms, physical health problems, Ethiopia

Posted Date: March 25th, 2020

DOI: <https://doi.org/10.21203/rs.3.rs-18333/v1>

License: © ⓘ This work is licensed under a Creative Commons Attribution 4.0 International License.

[Read Full License](#)

Version of Record: A version of this preprint was published at International Journal of Migration, Health and Social Care on May 24th, 2021. See the published version at <https://doi.org/10.1108/IJMHS-05-2020-0051>.

Abstract

Background: There is a growing thought of considering human trafficking as a severe form of violence which usually results in various health outcomes including symptoms of physical health problems. Physical health symptoms could at least compromise victims' future quality of life and productivity, and to the worst, it might be life threatening to them. This study examined the magnitude of physical health symptoms during the trafficking period and compared it with that of the period prior to the trafficking condition.

Methods : A total of 1387 trafficking returnees from abroad via three trafficking corridors of Ethiopia were recruited consecutively. Among socio-demographic and other characteristics, data regarding physical health symptoms such as headaches, stomach pain, memory problems, back pain, tooth pain, injuries, vision problem, loss of appetite that were experienced during and prior to the trafficking period were collected. The proportions of physical health symptoms experienced during and prior to trafficking period were determined and compared using chi-square test.

Results: Among all participants, 598 (46.79%) of them experienced weight loss during the trafficking period while it was only 106 (8.28%) before the trafficking period. The 38.50% extra prevalence of the problem that was experienced during the trafficking period was statistically significant ($p < 0.0001$). Similar significant differences were observed for symptoms such as forgetfulness ($p < 0.0001$), stomachache ($p = 0.0039$), gynecological problems ($p = 0.041$), bone fracture ($p < 0.0001$), back pain ($p < 0.0001$), and wound ($p < 0.0001$); but not significantly different for symptoms such as skin disease (p -value = 0.1944), tooth pain (p -value = 0.6587), sight problem (p -value = 0.1306), and breathing problem (p -value = 0.3173).

Conclusions: Returnees experienced higher rate of physical health symptoms during the trafficking period than that of pre-departure period confirming that violence and subsequent health problems are signature features of human trafficking. These negative health outcomes need to be investigated using longitudinal studies so that the long-term effects of human trafficking and associated traumatic experiences could be fully understood among the returnees.

Background

Human trafficking is the recruitment, transfer and harboring of persons usually by means of a threat, use of force, coercion, or fraud for the purpose of exploitation (1). Globally, its magnitude is escalating overtime: the ILO estimated that 12.3 million people were victims of human trafficking in 2005; however, the estimate given by the same organization increased to 20.9 million in 2012 (2) and to 40.2 million in 2017 (3). In Ethiopia, recent estimates showed that about 1500 migrants are leaving the country legally each day and about two fold of this number are being either trafficked or smuggled each day (4).

There is a growing thought considering human trafficking as a severe form of violence (5) which could result in various sexual, physical, and mental health consequences and human right violations (6). Physical health negative outcomes may include symptoms such as headaches, stomach pain, memory problems, back pain, tooth pain, injuries, vision problem, loss of appetite, etc. Evidences from Ethiopian trafficked persons showed that considerable magnitudes of victims were experiencing physical and sexual violence (7, 8). Our previous assessment also showed that there were high rate of episodes of physical violence and magnitude of sexual violence at each stage of human trafficking (pre-departure, travel, exploitation, detention, and integration/reintegration stages) among Ethiopian returnees (9, 10). However, it is not clear whether these traumatic experiences were followed by the physical health symptoms that some of them were mentioned above. If there are such consequences, victims of trafficking should be provided with comprehensive reintegration and protective services from further complications, mainly medical treatment, in addition to the economic and legal assistance that they were getting rarely. Understanding the health outcomes may be helpful to design and implement healthcare interventions during the re-integration and possibly at the prior stages of the trafficking process; otherwise, the mere economic assistance of returnees by the government or stakeholders may not be sufficient for the rehabilitation of their health, and to add them into the productive group of the country.

Therefore, to assess the excess of physical health symptoms experienced due to trafficking, the frequencies of each type of symptoms before and during the trafficking periods were determined and compared descriptively.

Methods

Study setting and period

The study was conducted in three border towns located in the three major human trafficking corridors of Ethiopia. The three border towns were Mettema-Yohannes, Moyale, and Galafi which were bordering Sudan, Kenya, and Djibouti, respectively. Mettema-Yohannes and Moyale are located in the Highway from Cairo to Cape-town in which it enters and leaves Ethiopia, respectively. On the other hand, Galafi is located bordering Djibouti in the Highway between the two countries (Figure 1). Victims of human trafficking who returned to Ethiopia either willingly or by deportation via the three border towns were involved in the study from May to October 2016. Trafficked persons who returned to Ethiopia via Bole International Airport, Bosaso, Humera, Gambella, or any route other than the three gates were not involved in the assessment. Therefore, participants were eligible for the study as far as they entered Ethiopia in those three gates irrespective of the way they left the country.

Study design

This is a cross-sectional study conducted to examine physical health symptoms among victims of human trafficking who returned home. Participants were intercepted and interviewed at their last stage of the trafficking process, the reintegration stage, just when they entered Ethiopia. During the interview, they were asked to recall retrospectively physical health symptoms they experienced during the two years before departure and at the time of the trafficking periods.

Population, sample size, and sampling procedure

The study population includes returnees from trafficking, and their status as “trafficked” was ascertained based on the definition of the United Nations (UN) 2000 protocol of human trafficking. Accordingly, if a returnee was a child (under eighteen years of age) at the time of departure and was exploited in practices such as forced labor and services, child soldiering (this was observed among returnees from Yemen), or sex work, then the child would be considered as trafficked irrespective of consent. On the other hand, if an adult migrant was initially recruited by deception, fraud, or coercion, and if there was any subsequent exploitation, such as labor or sexual exploitation or recruited into military force, then it would be considered as trafficked (1).

According to a pilot study conducted on 103 trafficked persons in Metemma-Yohannes, the victims of human trafficking were able to recall events and situations they experienced during the preceding two years. Therefore, Ethiopian migrants who left their origin during the past 3 to 24 months and returned via the three major trafficking corridors were included in the study.

The sample size of study was 1387 and these participants were what we used to answer another research question, mental health symptoms and associated factors (11). The adequacy of the sample to address the prevalence of physical health symptoms was checked assuming an expected proportion of 50%, a margin of error of 5%, and a 95% confidence level. To recruit victims of trafficking, first, three out of four border towns located in the major trafficking corridors in the country were selected randomly as a primary sampling unit, and this is the first stage of sampling process. Then the secondary sampling units were victims of trafficking who were returning home via those border towns. In this second stage, returnees who meet the UN 2000 definition of human trafficking were recruited concurrently and consecutively in the three towns until a sufficient sample size was met. All returnees through the three major trafficking corridors report to the Ethiopian emigration offices located in the respective border towns at which we intercepted and interviewed them in suitable places.

Variables of the study

The variables of interest for the current study were socio-demographic and economic characteristics (age, sex, marital status, educational level, residence, type of job at destination), pre-departure physical

violence, trafficking corridor, and physical health symptoms such as headaches, stomach pain, memory problems, back pain, tooth pain, injuries, vision problem, loss appetite, etc.

Age was categorized in a similar way to studies conducted across seven European countries on trafficker persons who came from most continents (12, 13). Marital status (12-14), educational level (15, 16), region, religion, and residence (15) were used by referring to literature or considering the context of the current study setting or participants. Pre-departure physical violence was measured by asking respondents to recall experiences of physical violence from childhood to the date of departure.

Data collection tools and procedures

After a structured questionnaire was drafted in English and translated to Amharic, a pilot study was conducted in Metemma Yohannes using face to face interviews to assess the feasibility of the study and the questionnaire prepared. One hundred ninety-six returnees were involved in this small-scale assessment, and 103 of them were trafficked persons and eligible for this particular pilot study. In accordance with the findings of the pilot study, modifications were made to the questionnaire before the start of the actual study.

Four data collectors were assigned to Metemma Yohannes and two each to Moyale and Galafi towns. The data collectors, half of whom were female, were given a two-day training including a practice with the questionnaire to help them to become familiar with it. Each victim of trafficking was interviewed separately by a data collector of the same sex. The data collectors chose suitable places to conduct the interviews where participants would be encouraged to respond freely, including places near the waiting rooms of each immigration office or the hotels they booked. In situations where respondents and interviewers could not speak a common language, interpreters were employed. The principal investigator and field supervisors closely supervised the data collection.

Data Processing and Analysis

The filled questionnaire was checked manually for completeness. Data were coded and entered into Epi Info version 7 statistical packages and then exported to Stata version 14 for further analysis. Descriptive and summary statistics about symptoms of physical violence before and during trafficking were presented using tables. Chi-square tests were employed to see whether there was significant difference between the magnitude of physical health problems experienced during the two years preceding date of departure as well as the trafficking periods.

The test was considered statistically significant if its p-value was less than 0.05. In all the analyses, we assumed that the data missing mechanism was non-informative. The rationale of this assumption was that the main reasons for the nonresponse were circumstances prevailed at the time of data collection that influenced returnees not to give their interview; however, there is no basis to assume that the missing of data was related to the values of observed or unobserved study variables.

Results

Background characteristics

Among all trafficked persons approached, the study included 1387 victims that gave us a response rate of 90.95%. Slightly more than half, i.e. 716 (51.62%) of the participants were males. The average age of the returnees at the time of departure was 22.14 years. The returnees were in conditions of trafficking for 3 to 24 months with mean \pm standard deviation of 13.2 ± 6.2 months. Six hundred six (43.69%) victims experienced physical violence before departure from home. For 977(70.44%) of the victims, both parents were alive; however, for 233(16.80%) only mother, for 108(7.79), only father, and for 69(4.97) returnees both mother and father were not alive at the time of departure.

Majority or 808 (58.26%) of the returnees were trafficked via Metemma Yohannes, 354(25.52) via Galafi, 197 (14.20) via Moyale, and 28(2.02) via other gates. After departure, 810(58.40%) of returnees were detained abroad. Five hundred seven (36.55%) were exploited in housework, 379(27.33%) in agriculture or animal farming, and 246(17.74) in manufacturing and services (Table 1).

Physical health symptoms

Among 1278 victims of trafficking, 598 (46.79%) of them experienced weight loss during the trafficking period while it was only 106 (8.28%) before the trafficking period. The 38.50% extra prevalence of the problem that was experienced during the trafficking period was statistically significant ($p < 0.0001$). Similarly, higher proportion of symptoms during trafficking and significant differences with that of the pre-trafficking period were observed for symptoms such as forgetfulness (p -value < 0.0001), headache, stomachache (p -value = 0.0039), gynecological problems (p -value = 0.041), urinary tract infections (p -value < 0.0330), bone fracture (p -value < 0.0001), back pain (p -value < 0.0001), wound (p -value < 0.0001), and hearing problems (p -value = 0.0003). However, the magnitudes of the problems were not found to be significantly different for symptoms such as skin disease (p -value = 0.1944), tooth pain (p -value = 0.6587), sight problem (p -value = 0.1306), and breathing problem (p -value = 0.3173) (Table 2).

Discussion

Because of the underground nature of the process of human trafficking, there was limited evidence on the health consequences of the condition. To contribute on the field, the current study examined the magnitude of symptoms of physical health problems before and during trafficking periods and compared the magnitudes of each problem during the two conditions. Accordingly, several symptoms of physical health problems, namely, weight loss, forgetfulness, headache, stomachache, gynecological problems, urinary tract infections, bone fracture, back pain, wound, and hearing problems were significantly higher during the trafficking period than that of the two years period before departure. However, the study couldn't reveal a significant difference for symptoms such as skin disease, tooth pain, sight problem, and breathing problems during the two periods.

The duration (exposure time) in which the physical symptoms were assessed is almost two fold for pre-departure period (2 years) when compared to the average of trafficking periods for all participants (13.6 months). However, still the magnitudes of some of the physical health symptoms experienced during the trafficking period were significantly higher than that of the pre-departure period as mentioned above. This strengthens the conclusion that human trafficking is a risky condition to develop health symptom including physical health problems. Though other authors didn't compare the physical health symptoms during trafficking and trafficking free times, they reported high magnitude of symptoms such as headache, forgetfulness, stomachache, gynecological problem, back pain, tooth pain and sight problem (12, 17, 18) but lower magnitude of weight loss (17, 18). A comparable magnitude of hearing problem, urinary tract infection, and weight loss were reported by other studies (12, 17). These variations may be due to differences in socio-demographic characteristics as some of these studies focused only, for example, on women (12, 17) who are more vulnerable to violence (16, 18) which usually ends up with physical health problem (16). The difference in length of the exposure time of trafficking may also be another reason, as the longer the duration of stay in trafficking situation, the higher will be the likelihood of developing health symptoms.

Our study published elsewhere indicated that physical violence experienced during trafficking was significantly associated with sexual violence in the same period (9), and this may show that females might have been abused forcibly involving physical violence until the perpetrator have control over them for sexual abuse. As a result, they may develop negative sexual or reproductive health outcomes such as unwanted pregnancy, abortion, HIV/STIs in addition to other health consequences. All these conditions imply that healthcare services may be required for victims of trafficking starting from the date of departure. Unfortunately, it is difficult for them to get access to such services because they may be illegal emigrants, or they are in the control of others or there may be language and other socio-cultural barriers as well as a possibility of stigmatization. The identification of potential victims of trafficking and their health problems could also be another challenge for health professionals (19, 20). If they don't get proper healthcare treatment, their future quality of life may deteriorate that could again create an extra burden to the current public health programs as it may facilitate the spread of some communicable diseases acquired out of their localities.

Limitation Of The Study

Because most data were collected retrospectively, there might be recall bias. Of course, from the pilot study we understood that victims recall every event they experienced during trafficking. They were narrating their experiences without any difficulty to recall about the time, place and condition when the event was occurring. As the study included only returnees who were trafficked, the findings might not be generalizable to Ethiopians who were outside the country and were in trafficking situation. However, we assume that our results are informative and valid with respect to the general population of returnees who experienced trafficking.

Conclusions

Returnees experienced higher rate of physical health symptoms during trafficking than the pre-departure period confirming that violence and subsequent health problems are typical features of human trafficking. The negative health outcomes need to be investigated using longitudinal studies so that the long-term effects of human trafficking and associated traumatic experiences could be fully understood among the returnees.

Abbreviations

CI – Confidence Interval

DAAD – German Academic Exchange Service

HIV – Human Immune-deficiency Syndrome

IRB – Institutional Review Board

UN – United Nations

WHO – World Health Organization

Declarations

Ethics approval and consent to participate

We followed the world health organization (WHO) ethics protocol recommended to interview trafficked women and ensured that all the field workers were sensitive to the needs, privacy and fears of participants, and not to re-traumatize them during the interviews (21). These achievements were started by fulfilling the administrative requirements of different institutions. In this regard, the research was approved by the Institutional Review Board of the University of Gondar. Permissions to interview returnees from abroad were obtained from the headquarter of Ethiopian Immigration and Nationality Affairs in Addis Ababa and Immigration centers located in the three border towns. Permissions were also obtained

from district and local officials to collect qualitative data from interviewees or discussants at different trafficking-stricken communities. A written consent form explaining the aim, subject matter, and the voluntary nature of participation was read for each adult participant before they signed it. For children under 18, an assent form was prepared and read to get their consent. Moreover, consent to interview each child was also obtained from the respective border Immigration centers as the government was the only available guardian to minors who were still too far from their families. After getting all these permissions, care was taken not to harm or re-traumatize them and to address all other ethical concerns sensitively. Data obtained from participants were kept anonymous and confidential. No financial incentive was given to participants for their participation.

Consent for Publication

Not applicable

Availability of data and materials

All relevant data are within the manuscript. The data upon which these findings were developed can also be available upon request.

Competing interests

The authors declare that they have no competing interests

Funding

University of Gondar funded the data collection of the current study, and German Academic Exchange Service (DAAD) funded the analysis of data and writing the manuscript.

Authors' contributions

LD conceptualized the study, designed the methods of analysis, analyzed the data, and drafted the manuscript; AA contributed in the formulation of methods and analysis of the data, and reviewing and edition of the manuscript.

Acknowledgments

The study was funded by the German Academic Exchange Service (DAAD) and University of Gondar; we acknowledge the support of these organizations. Special gratitude is offered to the staffs of Central

Statistical Agency of Ethiopia especially Mr. Yeshambel Workie, a senior statistician at Gondar branch, Mr. Berhanu Tezera, head of Hawassa branch, and Mr. Lake Endaylalu, head of Asaeta branch for their facilitation and assistance in the provision of experienced data collectors.

Authors' Information

LD: Department of Epidemiology and Biostatistics, Institute of Public Health, College of medicine and Health Sciences, University of Gondar, Ethiopia

AA: Department of Health Systems and Policy, Institute of Public Health, College of medicine and Health Sciences, University of Gondar, Ethiopia

References

1. United Nations. Protocol to Prevent, Suppress, and Punish Trafficking in Persons, Especially Women and Children, Supplementing the United Nations Convention Against Transnational Organized Crime. Geneva: United. Available from: Nationswww.unodc.org/documents/treaties/UNTOC/Publications/TOC%20Convention/TOCebook-e.pdf 2000.
2. ILO. Global Estimate of Forced Labour: Results and Methodology; June 2012. Available from: file:///C:/Users/Admin/Downloads/index.htm.
3. Organization IL. Global estimates of modern slavery: Forced labour and forced marriage. ILO Geneva, Switzerland; 2017.
4. U.S. Office to Monitor and Combat Trafficking in Persons. 2014 Trafficking in Persons Report on Ethiopia; 2014. Available from: <http://www.refworld.org/docid/53aab9fc12.html>.
5. Todres J. Moving upstream: the merits of a public health law approach to human trafficking. Georgia State University College of Law. Legal Studies Research Paper; . 2011;89:447.
6. Cwikel J, Chudakov B, Paikin M, Agmon K, Belmaker R. Trafficked female sex workers awaiting deportation: comparison with brothel workers. Archives of women's mental health. 2004;7(4):243-9.
7. Beck DC, Choi KR, Munro-Kramer ML, Lori JR. Human trafficking in Ethiopia: a scoping review to identify gaps in service delivery, research, and policy. Trauma, Violence, & Abuse. 2017;18(5):532-43.

8. Endeshaw Y, Gebeyehu M, Reta B. Assessment of Trafficking in Women and Children in and from Ethiopia: IOM, International Organization for Migration; 2006.
9. Lemma DG, Alemayehu WY, Yigzaw KG. HSexual violence at each stage of human-trafficking cycle and associated factors: a retrospective cohort study on Ethiopian female returnees via three major trafficking corridors *bmjopen*. 2018;024515-2018. Accepted for publication
10. Lemma DG, Alemayehu Worku Y, Yigzaw Kebede G. High prevalence of physical violence at each stage of the human trafficking process among Ethiopian returnees was associated with smuggling status and history of detention. 2019;Submitted to archives of public health (AOPH-D-19-00175) for publication.
11. Gezie LD, Yalew AW, Gete YK, Azale T, Brand T, Zeeb H. Socio-economic, trafficking exposures and mental health symptoms of human trafficking returnees in Ethiopia: using a generalized structural equation modelling. *International journal of mental health systems*. 2018;12(1):62.
12. Zimmerman C, Hossain M, Yun K, Gajdadziew V, Guzun N, Tchomarova M, et al. The health of trafficked women: a survey of women entering posttrafficking services in Europe. *American journal of public health*. 2008;98(1):55-9.
13. Hossain M, Zimmerman C, Abas M, Light M, Watts C. The relationship of trauma to mental disorders among trafficked and sexually exploited girls and women. *American journal of public health*. 2010;100(12):2442-9.
14. Tsutsumi A, Izutsu T, Poudyal AK, Kato S, Marui E. Mental health of female survivors of human trafficking in Nepal. *Social Science & Medicine*. 2008;66(8):1841-7.
15. Habtamu K, Minaye A, Zeleke WA. Prevalence and associated factors of common mental disorders among Ethiopian migrant returnees from the Middle East and South Africa. *BMC psychiatry*. 2017;17(1):144.
16. Kiss L, Pocock NS, Naisanguansri V, Suos S, Dickson B, Thuy D, et al. Health of men, women, and children in post-trafficking services in Cambodia, Thailand, and Vietnam: an observational cross-sectional study. *The Lancet Global Health*. 2015;3(3):e154-e61.
17. Oram S, Ostrovschi NV, Gorceag VI, Hotineanu MA, Gorceag L, Trigub C, et al. Physical health symptoms reported by trafficked women receiving post-trafficking support in Moldova: prevalence, severity and associated factors. *BMC women's health*. 2012;12(1):20.
18. Oram S, Abas M, Bick D, Boyle A, French R, Jakobowitz S, et al. Human trafficking and health: a survey of male and female survivors in England. *American journal of public health*. 2016;106(6):1073-8.
19. Hemmings S, Jakobowitz S, Abas M, Bick D, Howard LM, Stanley N, et al. Responding to the health needs of survivors of human trafficking: a systematic review. *BMC health services research*. 2016;16(1):320.
20. CdeBaca L, Sigmon JN. Combating trafficking in persons: a call to action for global health professionals. *Global Health: Science and Practice*. 2014;2(3):261-7.

21. Zimmerman C, Watts C. WHO Ethical and Safety Recommendations for Interviewing Trafficked Women. Geneva: World Health Organization 2003.

Tables

Table 1: Background characteristics of trafficking returnees to Ethiopia, 2016

Characteristics	Number (%)
Background characteristics	
Age (at departure)	
14-17	84 (6.06)
18-20	420 (30.28)
21-25	695 (50.11)
26-49	188 (13.55)
Sex	
Male	716 (51.62)
Female	671 (48.38)
Parents alive at the time of departure	
Both alive	977 (70.44)
Only mother	233 (16.80)
Only father	108 (7.79)
Both not alive	69 (4.97)
Pre-departure physical violence	
Yes	606 (43.69)
No	781 (56.31)
Trafficking (exit) corridor	
Metemma Yohannes	808 (58.26)
Galafi	354 (25.52)
Moyale	197 (14.20)
Other gates	28 (2.02)
Planned destination	
Sudan ^c	473 (34.10)
Middle East	552 (39.80)
South Africa	205 (14.78)
Europe	146 (10.53)
Others (mainly Kenya and Djibouti)	11 (0.79)

Type of job at destination	
Manufacturing and services	246 (17.74)
Housemaid	507 (36.55)
Agriculture/animal farming	379 (27.33)
Did not start working	206 (14.85)
Others (mining, guard, driver, etc.)	49 (3.53)
History of detention (by foreign agents)	
Detained	810 (58.40)
Not detained	577 (41.60)

Table 2: Physical health symptoms during and prior to trafficking period among Ethiopian returnees from abroad, 2016

Characteristics	Number (percent)		Proportion Difference (After - Before)	P-value for the difference
	Before* departure	After departure		
Weight loss (n=1278)	106(8.29)	598 (46.79)	0.3850	< 0.0001
Forgetfulness (n=1306)	15(1.14)	288(22.05)	0.2090	< 0.0001
Headache (n=1282)	46(3.59)	522(40.72)	0.3713	< 0.0001
Skin disease (n=1339)	17(1.27)	25(1.87)	0.0060	0.1944
Stomachache (n=1340)	39(2.91)	68(5.07)	0.0216	0.0039
Gynecological problem (n=665)	12(1.80)	23(3.46)	0.0165	0.041
Urinary tract infection (n=1382)	11(0.80)	21(15.20)	0.080	0.0330
Bone fracture (n=1373)	10(0.73)	64(4.66)	0.040	< 0.0001
Back pain (n=1382)	17(1.24)	220(16.03)	0.1480	< 0.0001
Tooth pain (n=1362)	45(3.30)	49(3.60)	0.0029	0.6587
Wounded (n=1374)	57(4.18)	141(10.26)	0.0611	< 0.0001
Sight problem (1367)	16(1.17)	24(1.76)	0.0058	0.1306
Hearing problem (n=1362)	33(2.42)	65(4.77)	0.0235	0.0003
Breathing problem (n=1374)	13(0.95)	18(1.31)	0.0036	0.3173

*Before departure covers the preceding two years before the person started leaving home due to trafficking.

Figures

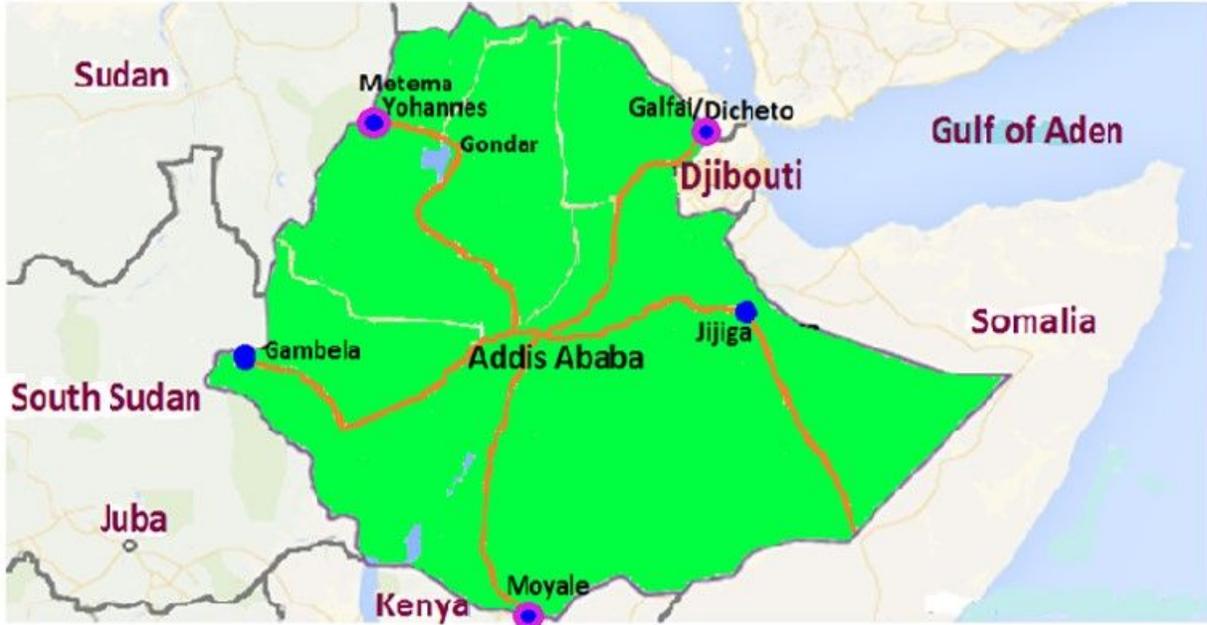


Figure 1

Major human trafficking corridors and border towns in Ethiopia