


Prevalence and Control of Chronic Diseases Among Torture Survivors at a New York City Program for Survivors

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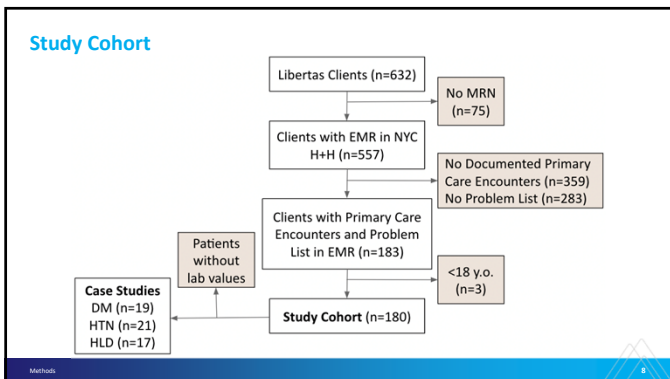
Background

Asylum-seeker – someone who has left their country and is seeking protection from persecution and serious human rights violations in another country, but whose request for sanctuary has yet to be processed

Background 2

1. Establish prevalence rates of diabetes (DM), hypertension (HTN), and hyperlipidemia (HLD) among Libertas clients
2. Analyze immigration status and torture history as predictors of chronic disease prevalence
3. Perform a preliminary analysis of longitudinal disease management as it relates to asylum-status

Methods



Prevalence of Chronic Conditions

Retrospective chart review

Age-adjustment of prevalence rates based on National Health Interview Survey (NHIS) 2022 report using the indirect method of standardization

95% confidence intervals and Z-scores were calculated

Methods

Predictors of Chronic Disease Prevalence

Retrospective chart review

Immigration status and torture history

Unadjusted and adjusted general logistic models

Methods

Case Series Analysis

Health metrics

Immigration status

Longitudinal change in health metrics by immigration status

Methods

Results

Table 1. Study cohort intake demographics

	Study Cohort (n = 180)
Age, median (IQR)	37 (29 - 45)
Gender, N (%)	
Male	87 (48.3)
Female	90 (50.0)
Non-conforming	3 (1.7)
Nationality, N (%)	
East Asia and Pacific	9 (5.0)
Europe and Central Asia	12 (6.7)
Latin America and Caribbean	73 (40.6)
Middle East and North Africa	6 (3.3)
North America	0 (0.0)
South Asia	30 (16.7)
Sub-Saharan Africa	50 (27.8)
Schooling Years in Origin Country, N (%)	
<1	7 (3.9)
1-4	8 (4.4)
5-8	24 (13.3)
9-12	50 (27.8)
13-16	49 (27.2)
>16	33 (18.3)
Missing	9 (5.0)
Years in US before intake, median (IQR)	2.3 (0.9 - 5.5)

Figure 1. Study cohort intake primary and secondary needs

Need Category	Primary (n, %)	Secondary (n, %)
Housing	0 (0.0%)	0 (0.0%)
Occupational/Educational	2 (1.1%)	14 (7.8%)
Interspersed/Social	2 (1.1%)	14 (7.8%)
Physical/Medical	20 (11.1%)	20 (11.1%)
Legal	20 (11.1%)	20 (11.1%)
Emotional/Psychological	40 (22.2%)	19 (10.6%)

Table 2. Healthcare utilization among Libertas clients in the NYC H+H EMR

	Libertas Clients with an EMR (n = 557)
Has a Primary Care Provider, N (%)	259 (46.5)
Receives Care at Elmhurst, N (%)	266 (47.8)
Utilizes any Health Care, N (%)	400 (71.8)
Utilizes Emergency/Urgent Care, N (%)	235 (58.8)

Table 3. History of Torture

	Study Cohort (n = 170)
Age, N (%)	
<5 years old	2 (1.2)
5-17 years old	53 (31.2)
18-44 years old	106 (62.4)
45-64 years old	8 (4.7)
Reason for Torture, N (%)	
Ethnicity	10 (5.9)
Political	54 (31.8)
Religion	6 (3.5)
Social Group	87 (51.2)
Social Activism	3 (1.8)
Sociopolitical Activism	5 (2.9)
Other	2 (1.2)
Country, N (%)	
East Asia and Pacific	3 (1.8)
Europe and Central Asia	12 (7.1)
Latin America and Caribbean	70 (41.2)
Middle East and North Africa	6 (3.5)
South Asia	31 (18.2)
Sub-Saharan Africa	40 (23.5)

Figure 2. Study cohort immigration status (n = 149)

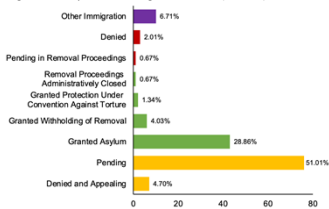


Table 4. Study cohort immigration wait times

	Median (IQR)
Years between Arrival in US and Decision Date (n=55)	4.23 (2.98 - 7.79)
Years between Application and Decision Date (n=20)	2.33 (1.45 - 3.66)

Table 5. Age-adjusted prevalence of chronic conditions in the Libertas study cohort compared to the general US population according to the 2022 National Health Interview Survey (NHIS)

	Prevalence Rate (per 1,000)		
	NHIS 2022	Libertas Age-adjusted	P-value
Prediabetes	167.09	196.56 [138.98, 254.14]	0.3173
Diabetes	106.54	386.21 [315.67, 456.75]	<0.01
Hypertension	367.15	431.94 [360.17, 503.71]	0.0703
Hyperlipidemia	315.50	438.55 [366.66, 510.44]	<0.01

Table 6. Predictors of Pre-diabetes and Diabetes (n = 170)

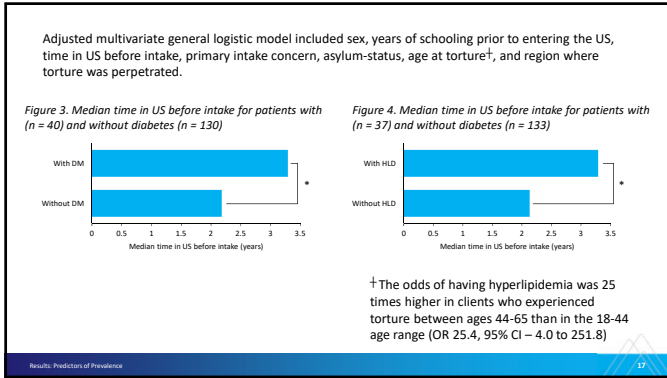
	Without DM (n = 130)	With DM (n = 40)	Unadjusted p-value	Adjusted p-value*
Time in US before intake (days), median (range)	794 (13-7980)	2200 (43-13200)	<0.01	<0.05
Asylum Status, N (%)				
Favorable	46 (35)	16 (40)	-	-
Unfavorable	3 (2)	1 (3)	0.97	ns
Pending	59 (45)	19 (48)	0.84	ns
Age at First Torture, N (%)				
<5 years old	2 (2)	0 (0)	0.99	ns
5-17 years old	37 (29)	16 (40)	0.11	ns
18-44 years old	86 (66)	20 (50)	-	-
45-64 years old	4 (3)	4 (10)	0.05	ns
Region of Torture, N (%)				
East Asia and Pacific	3 (2)	0 (0)	0.99	ns
Europe and Central Asia	12 (9)	0 (0)	0.99	ns
Latin America and Caribbean	54 (42)	16 (40)	-	-
Middle East and North Africa	4 (3)	2 (5)	0.57	ns
South Asia	20 (15)	11 (28)	0.19	ns
Sub-Saharan Africa	30 (23)	10 (25)	0.80	ns

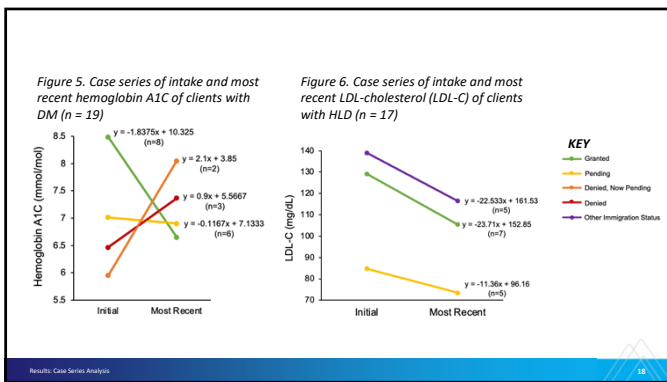
Unadjusted and adjusted p-values were derived from general logistic models.
*The adjusted multivariate general logistic model included the characteristics shown in this table along with age, years of schooling prior to entering the US, and primary intake concern.
Percentages do not add up to 100% because missing values are not shown.

Table 7. Predictors of Hyperlipidemia (n = 170)

	Without HLD (n = 133)	With HLD (n = 37)	Unadjusted p-value	Adjusted p-value*
Time in US before intake (days), median (range)	775 (13-13200)	2400 (43-9310)	<0.05	<0.05
Asylum Status, N (%)				
Favorable	44 (33)	18 (49)	-	-
Unfavorable	4 (3)	0 (0)	ns	ns
Pending	64 (48)	14 (38)	ns	ns
Age at First Torture, N (%)				
<5 years old	2 (2)	0 (0)	ns	ns
5-17 years old	40 (30)	13 (35)	ns	ns
18-44 years old	88 (66)	18 (49)	-	-
45-64 years old	2 (2)	6 (16)	<0.01	<0.01
Region of Torture, N (%)				
East Asia and Pacific	2 (2)	1 (3)	ns	ns
Europe and Central Asia	11 (8)	1 (3)	ns	ns
Latin America and Caribbean	54 (41)	16 (43)	-	-
Middle East and North Africa	5 (4)	1 (3)	ns	ns
South Asia	23 (17)	8 (22)	ns	ns
Sub-Saharan Africa	31 (23)	9 (24)	ns	ns

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Conclusions

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Libertas Client Characteristics

- Libertas clients are **young** and come from **diverse countries and backgrounds**
- At intake, the highest self-reported need was **emotional/psychological**
- **53.5%** of clients who have an EMR do not have a primary care provider
- Most clients in the study cohort **experienced torture** between the ages of **18-44** in **Latin America and Caribbean**
- Most clients have **pending immigration cases (51%)** with a median wait time of **over 2 years** between application submission and case decision

Background

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Prevalence of Chronic Conditions

Age-adjusted prevalence rates (cases per 1,000 people) of diabetes (386 vs 107) and hyperlipidemia (439 vs 316) were significantly higher in the Libertas study cohort compared to the general US population.

Results

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Predictors of Chronic Disease Prevalence

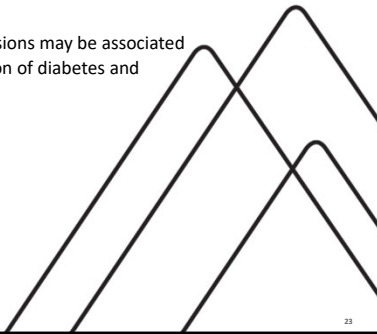
Time in the United States before intake at Libertas was an independent predictor of pre-diabetes/diabetes and hyperlipidemia. Additionally, experiencing torture at an older age (45-64 years vs 18-44 years) was significantly associated with hyperlipidemia.

Results


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Case Series


More favorable asylum case decisions may be associated with improved disease progression of diabetes and hyperlipidemia.



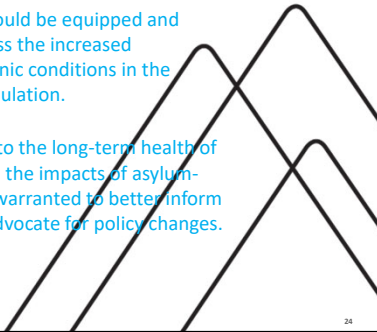
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Health systems should be equipped and prepared to address the increased prevalence of chronic conditions in the asylum-seeker population.




Further research into the long-term health of asylum-seekers and the impacts of asylum-status on health is warranted to better inform medical care and advocate for policy changes.



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Questions?



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Thank you

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