

# Hematology Utilization Group Studies

## Part VII (HUGS VII): Cost and Impact of Disease in Older Persons with Hemophilia



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# Background

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- ❑ Over the years, life expectancy for persons with hemophilia (PWH) has increased due to effective antiviral therapies (e.g. Human Immunodeficiency Virus (HIV), hepatitis C), availability of pathogen-safe factor concentrates and the institution of prophylaxis
- ❑ These improvements in care have created a cohort of older adults with hemophilia, but little is known about their age-related health problems
- ❑ We describe the impact of hemophilia on comorbidities, joint problems, healthcare utilization and health related quality of life (HRQoL) from the HUGS VII baseline data

# Methods

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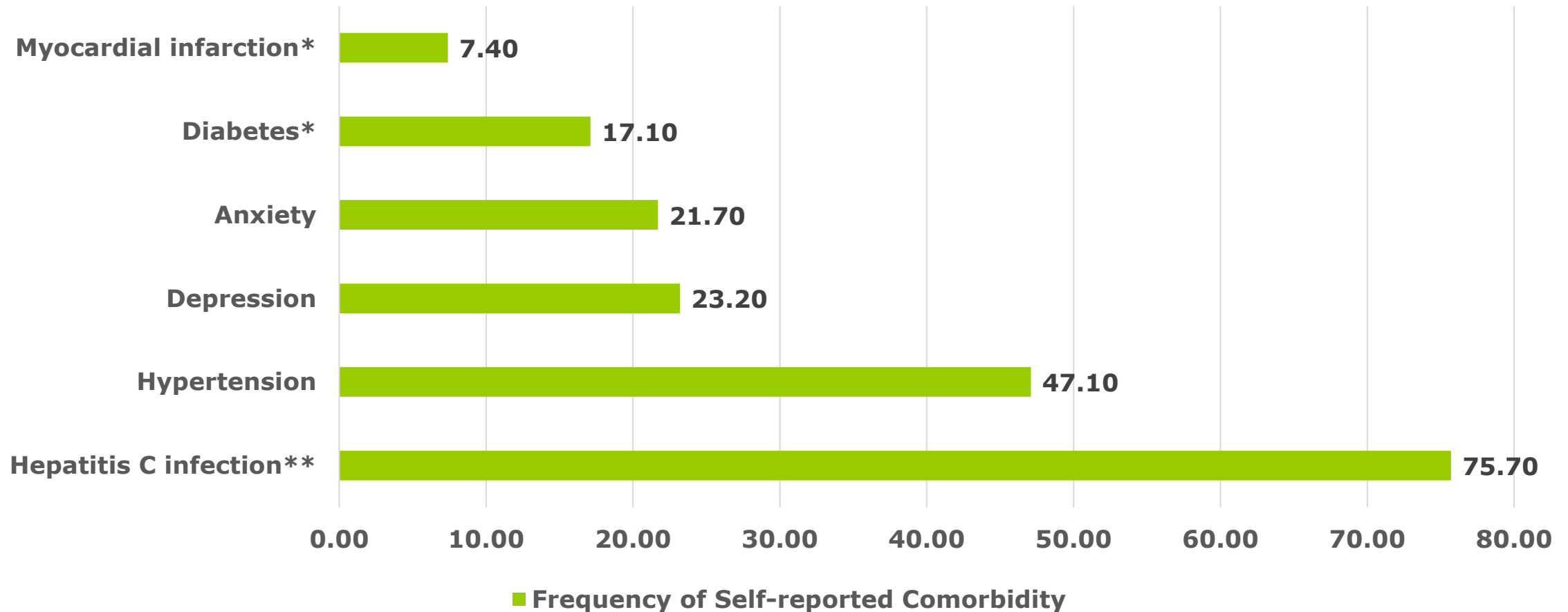
- ❑ Study included persons with hemophilia A or B age  $\geq 40$  years obtaining care from three US Hemophilia Treatment Centers (HTCs) from 2018 – 2020
- ❑ Participants completed a survey
  - Clinical and sociodemographic characteristics
  - Hemophilia treatment regimen
  - Pain, joint problems, other comorbidities
  - HRQoL using EQ-5D-3L
- ❑ Clinical chart reviews documented hemophilia severity and treatment regimen
- ❑ Compare participants' characteristics between two age groups: 40-49 years and  $\geq 50$  years

# Results: Participants Characteristics by Age Group

Variable	AGE			P VALUE*
	Total (N=70)	40-49 years (N=25, 35.7%)	≥50 years (N=45, 64.3%)	
Mean (SD) age	56.7 (11.0)	44.8 (2.8)	63.3 (7.8)	<0.0001
Employment				0.002
Employed	33 (47.1)	18 (72.0)	15 (33.3)	
Retired/Not employed	37 (52.9)	7 (28.0)	30 (66.7)	
Hemophilia severity				0.02
Mild/Moderate	41 (58.6)	10 (40)	31 (68.9)	
Severe	29 (41.4)	15 (60.0)	14 (31.1)	
Used prophylactic treatment	32 (47.1)	15 (62.5)	17 (38.6)	0.06
Used prophylactic treatment in severe hemophilia	25 (86.2)	13 (86.7)	12 (85.7)	0.94
Self-reported joint pain in mild/moderate hemophilia	33 (80.5)	7 (70.0)	26 (83.9)	0.38
ROM limitation in mild/moderate hemophilia	28 (70.0)	6 (60.0)	22 (73.3)	0.45
Hospital stays in the last six months	7 (10.3)	4 (16.7)	3 (6.8)	0.20
Emergency room visits in the last six months	7 (10.3)	5 (20.8)	2 (4.5)	0.03
Physical therapy sessions in the last six months	17 (25.0)	10 (41.7)	7 (15.9)	0.02
Covariates adjusted EQ-5D index**		0.87 (0.06)	0.79 (0.07)	0.09

Note: Data were presented as number (column percentage) for categorical variables, or mean (standard deviation) for continuous variables. Abbreviations: SD, standard deviation; ROM, range of motion. \* P values were calculated from chi-square tests for categorical variables and T-tests for continuous variables. \*\* Covariates include education, employment, marital status, used prophylactic treatment, hemophilia severity, self-reported joint problems.

# Results: Most Frequently Reported Comorbidities



Note: Self-reported comorbidities were measured by asking “Has a doctor ever told you that you have certain conditions?”

\*The older age group had significantly higher rates of self-reported myocardial infarction (11.6% vs. 0%,  $P=0.08$ ) and diabetes (24.4% vs. 4.0%,  $P=0.03$ ) than those 40-49. \*\* 79.3% of persons with infected hepatitis C had been treated and, 82.7% cleared the hepatitis C virus.

# Conclusions

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- ❑ Older persons with hemophilia are over-represented by individuals with mild/moderate disease, potentially due to premature death among those with severe disease
- ❑ Although this older group included a larger proportion of mild and mild disease than younger group with hemophilia, this subset presented prevalent comorbidities both of aging and of hemophilic arthropathy, despite lower rates of healthcare utilization and use of preventive therapies

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# Conflict of Interest

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