

Poster # 2529

Aging and health status in persons living with hemophilia and controls without a bleeding disorder.

Insights from the PROBE Study.

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Key takeaways

- Aging is associated with a steeper decrease in health status and quality of life in people with hemophilia than in people with no bleeding disorders.
- PROBE is more sensitive than EQ5D in measuring the association of aging for the specific domains measured in both these populations.

Background

People with hemophilia (PWH) have a life expectancy disadvantage as compared to the general population but little is known about the impact of aging on health status and health-related quality of life (HRQL).

Objective

To assess the characteristics of the association between aging, health status and HRQL in PWH and people with no bleeding disorders (PWNoBD).

Methods

A cross-sectional, multinational study was conducted as part of the Patient Reported Outcomes, Burdens and Experiences (PROBE) project.

PWH and PWNoBD were asked to complete the PROBE questionnaire. Measures of health status and HRQL were the PROBE score, the EQ-5D-5L utility index, and the EuroQol visual analog scale (EQ-VAS) of global health.

The association between these measures and the participants' age was explored using a multivariable model adjusting for sex (all) and disease severity (PWH only) and stratifying by country. Age was analyzed as a continuous variable.

Results: demographics

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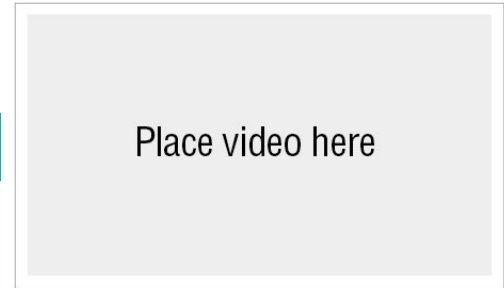
People with hemophilia (n = 1157)

Age category	18 – 44	45 – 64	65 – 74	≥ 75
n (%)	732 (63)	331 (29)	73 (6)	21 (2)
Male (%)	706 (96)	317 (96)	71 (97)	20 (95)
# of comorbidities [Median (range)]	1 (0 - 8)	1 (0 - 9)	1 (0 – 7)	1 (0 – 4)
Hemophilia severity				
Mild (%)	72 (10)	70 (21)	23 (32)	7 (33)
Moderate (%)	136 (19)	50 (15)	7 (10)	8 (38)
Severe (%)	524 (72)	211 (64)	43 (59)	6 (29)

People with no bleeding disorders (n = 690)

Age category	18 – 44	45 – 64	65 – 74	≥ 75
n (%)	335 (49)	272 (39)	71 (10)	12 (2)
Male (%)	144 (43)	116 (43)	36 (51)	4 (33)
# of comorbidities [Median (range)]	0 (0 - 6)	0 (0 - 6)	0 (0 - 5)	1.5 (0 - 3)

Results: health-related quality of life



People with hemophilia

Age category	18 – 44	45 – 64	65 – 74	≥ 75
PROBE score (n = 982) [median (Q1; Q3)]	0.76 (0.64; 0.85)	0.68 (0.57; 0.78)	0.71 (0.64; 0.80)	0.67 (0.52; 0.84)
EQ-5D (n = 1109) [median (Q1; Q3)]	0.82 (0.70; 0.92)	0.75 (0.62; 0.84)	0.76 (0.63; 0.88)	0.68 (0.52; 0.86)
VAS (n = 1228) [median (Q1; Q3)]	0.75 (0.60; 0.90)	0.70 (0.50; 0.80)	0.73 (0.60; 0.84)	0.62 (0.50; 0.80)

People with no bleeding disorders

Age category	18 – 44	45 – 64	65 – 74	≥ 75
PROBE score (n = 580) [median (Q1; Q3)]	0.92 (0.83; 0.98)	0.90 (0.79; 0.96)	0.86 (0.79; 0.93)	0.75 (0.69; 0.89)
EQ-5D (n = 666) [median (Q1; Q3)]	0.92 (0.83; 0.98)	0.94 (0.87; 1.00)	0.94 (0.83; 1.00)	0.84 (0.50; 1.00)
VAS (n = 675) [median (Q1; Q3)]	0.85 (0.75; 0.90)	0.80 (0.75; 0.90)	0.85 (0.80; 0.90)	0.80 (0.65; 0.88)



Q1: first quartile, Q3: third quartile; VAS: visual analogue scale.

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Results: health related quality of life

	PROBE Score n = 1562		EQ-5D utility index n = 1775		EQ VAS n = 1803	
	aMPD	95% CI	aMPD	95% CI	aMPD	95% CI
Age	-1.0	-1.7; -0.4	-0.2	-0.7; 0.4	0.0	-0.9; 0.9
Age*PWH	-1.5	-2.2; -0.8	-1.9	-2.6; -1.3	-3.0	-4.7; -1.4
Male sex	1.3	-1.4; 4.0	0.8	-0.9; 2.5	0.6	-1.8; 3.0
NoBD	Reference		Reference		Reference	
Mild	-2.8	-7.5; 1.8	4.0	-0.2; 8.1	8.5	0.0; 17.0
Moderate	-12.4	-16.7; -8.1	-2.9	-7.7; 2.0	0.1	-10.1; 10.4
Severe	-11.5	-15.8; -7.2	-4.9	-9.6; -0.2	-1.4	-9.4; 6.6
Constant	91.3	88.5; 94.0	57.5	54.7; 60.3	81.6	76.9; 86.4

aMPD: adjusted mean percentage difference; VAS: visual analogue scale; PWH: people with hemophilia; NoBD: No bleeding disorder.
The aMPD and 95% CI for age and age*PWH interaction is calculated for 10 years variations.

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Conclusions

- **Aging is associated with a steeper decrease in health status and quality of life in people with hemophilia than in people with no bleeding disorders.**
- **PROBE is more sensitive than EQ5D in measuring the association of aging for the specific domains measured in both these populations.**

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Did you take the survey?



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Thank you!