

# Managing teenagers and adolescents with haemophilia

September 2025

# Disclaimer

- The Factor Think Tank is an educational activity funded by Sobi™
- This document is intended as a resource supporting communication to engage discussion on the **need for a specific approach to managing teenagers and adolescents with haemophilia**
- Information presented herein is based on an article in *Journal of Clinical Medicine*,<sup>1</sup> and has been prepared by the authors, who are also experts in the Factor Think Tank, and supported by Sobi™
- This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) licence (<https://creativecommons.org/licenses/by/4.0/>)

# Teenagers and adolescents with hemophilia – need for a specific approach



NP-42066

Christoph Königs<sup>1</sup> | Jayashree Motwani<sup>2</sup> | Víctor Jiménez-Yuste<sup>3</sup> | Jan Blatný<sup>4</sup> |  
on behalf of the Factor Think Tank\*

<sup>1</sup>Goethe University, University Hospital, Department of Paediatrics and Adolescent Medicine, Clinical and Molecular Haemostasis, 60590 Frankfurt, Germany; <sup>2</sup>Department of Paediatric Haematology, Birmingham Children's Hospital, Birmingham, B4 6NH, UK; <sup>3</sup>Hematology Department, Hospital Universitario La Paz-IdiPaz, Autónoma University, 28046 Madrid, Spain; <sup>4</sup>Department of Paediatric Haematology and Biochemistry, University Hospital Brno and Masaryk University, 601 77 Brno, Czech Republic

\*All the members of the Factor Think Tank group are listed at [factorthinktank.com](http://factorthinktank.com).

# Managing haemophilia in adolescents

Adolescents (10–24 years) with haemophilia pose **unique management challenges** and are at high risk of complications due to **low adherence, psychological impact** of the disease and a **desire to fit in** with their peers



## Suggested solutions to management challenges in adolescents with haemophilia

### Prevention and management of bleeds



Individualisation and personalisation of prophylaxis



Educate on bleed recognition and the consequence of bleeds



Promote self-advocacy and self-care management

### Physical activity and health-related issues



Provide guidance and promote participation in physical activities



Provide psychosocial support on self-esteem and/or sexual activity concerns



Provide multidisciplinary care

### Treatment adherence



Aid the transition of shared decision making to adolescents from the parent/caregiver



Educate on how treatment choice can aid lifestyle during early adolescence



Provide support on barriers related to treatment adherence

### Comprehensive care and communication



Support in the transition to adult healthcare centres



Utilise digital technology to communicate with patients



Encourage face-to-face meetings and consider ways to promote these

# Challenges in managing adolescents

- Adolescent years (covering ages 10–24) are a challenging period of transition, especially for those with haemophilia<sup>1–4</sup>
- As well as changes to body composition and rapid growth, other changes, including lifestyle, can affect treatment expectations and therapeutic decisions<sup>1</sup>
- Adolescent patients can be at high risk of haemophilia-related complications due to:



Low adherence<sup>5,6</sup>



Psychosocial impact of the disease<sup>6</sup>



Desire to fit in with peers<sup>1</sup>



Perceived idea that treatment is no longer needed<sup>5,6</sup>

- HCPs must approach the management of adolescents with **specific considerations** and highlight the benefits of **continuing effective treatment** received during childhood, as appropriate<sup>1</sup>
- To best inform **shared decision making**, HCPs must appreciate the requirements of all adolescents affected by haemophilia, including individuals with **non-severe disease** and **girls/women**<sup>1</sup>

HCP, healthcare professional

1. Königs C, et al. J Clin Med. 2024;13:5121; 2. Brand B, et al. J Haematol. 2015;95(Suppl. 81):30–35; 3. Quon D, et al. Am J Hematol. 2015;90(Suppl. 2):S17–S22; 4. Young G. Haemophilia. 2012;18(Suppl. 5):27–32; 5. Hoefnagels JW, et al. Patient Prefer Adherence. 2020;14:163–71; 6. Lee Mortensen G, et al. Haemophilia. 2018;24:862–72.

# Prevention and management of bleeds

Changes in body composition due to rapid growth, and changes in lifestyle may impact treatment choice<sup>1</sup>



**Personalised prophylactic regimen**, considering personal goals and lifestyle<sup>1,2</sup>

Due to treatment effectiveness, bleed symptoms may be unfamiliar for many adolescents<sup>1,3,4,5</sup>



**Regular education on bleed recognition and early treatment**, with awareness on changes during adolescence and impact on bleed management<sup>1,4</sup>

Adolescents start to self manage their condition and rely less on parent/caregiver support<sup>6,7</sup>



**Educate and train adolescents on self-care management** and encourage their **increased involvement** in haemophilia over time<sup>1,2</sup>

# Treatment adherence

Low adherence due to self-management concerns increases the risk of bleeding, joint damage and pain<sup>1-4</sup>



Lack of experience of treatment benefits can lead to questioning the necessity of prophylaxis<sup>3,5</sup>



Desire to fit in with peers can result in neglecting long-term health goals<sup>6</sup>



Discussion on personal goals and benefits of treatment **beyond bleed protection**<sup>7</sup>

Education on prophylactic treatments **before puberty** and **adapting treatment** to their evolving lifestyle<sup>7,8</sup>

Transition to **shared decision making** with adolescents rather than parents/caregivers<sup>7</sup>

1. Richter D, et al. In: Proceedings of the Annual Meeting of the Society of Thrombosis and Hemostasis (GTH), Basel, Switzerland, 16 February 2017; 2. Srivastava A, et al. Haemophilia. 2020;26:1–158; 3. Hoefnagels JW, et al. Patient Prefer Adherence. 2020;14:163–71; 4. McLaughlin JM, et al. Haemophilia. 2014;20:506–12; 5. Young G. Haemophilia. 2012;18(Suppl. 5):27–32; 6. Russo K. J Health Serv Psychol. 2022;48:6978; 7. Königs C, et al. J Clin Med. 2024;13:5121; 8. Pertrini P, et al. Haemophilia. 2009;15:15–9.

# Joint health and physical activity

Even few joint bleeds can lead to synovitis and arthropathy, which may require lifelong treatment<sup>1,2</sup>



**Musculoskeletal ultrasound** can detect joint damage and **early changes** reinforcing the value of **early prophylaxis**<sup>1,3–5</sup>

Regular exercise contributes to healthier joints, better QoL and reduces the risk of bleeds<sup>6–9</sup>



Highlight benefits of physical activity and promote **participation**<sup>1</sup>

Due to parental or other restrictions, participation is often limited to **non-contact sports**<sup>1,7,10,11</sup>



**Physiotherapists** can provide guidance on **physical activity-related queries** and the **preparation** required to **avoid injuries**<sup>1</sup>

QoL, quality of life.

1. Königs C, et al. J Clin Med. 2024;13:5121; 2. Rodriguez-Merchan EC, et al. Haemophilia. 2011;17:1–23; 3. Manco-Johnson MJ, et al. Blood. 2018;129:2368–74; 4. Oldenburg J, et al. Haemophilia. 2015;21:171–9; 5. Mancuso ME, et al. Haemophilia. 2023;29:619–28; 6. Fromme A, et al. Haemophilia. 2007;13:323–27; 7. Srivastava A, et al. Haemophilia. 2020;26:1–158; 8. Tiktinsky R, et al. Haemophilia 2002;8:22–7; 9. Harris S, Boggio LN. Haemophilia 2006;12:237–40; 10. Moretti L, et al. Current Trends Children. 2021;8:1064; 11. Schoenmakers MA, et al. Haemophilia 2001;7:293–8.

# Other health-related issues

Bleeding episodes can impact school attendance and social situations<sup>1</sup>



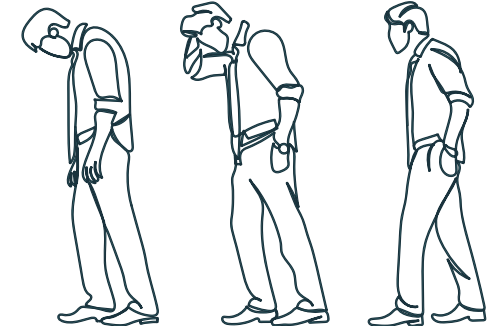
Support adolescents to **overcome barriers to treatment adherence**, engage with treatment and learn to manage their condition **independently**<sup>1,2</sup>

Concerns about sexual desirability and performance; some noted muscle and joint bleeding due to physical exertion<sup>3-5</sup>



**Open conversations** about strategies to overcome **musculoskeletal complications** and **address psychosocial concerns**<sup>1,3-5</sup>

Some report lower self-esteem than healthy individuals<sup>1,6</sup>



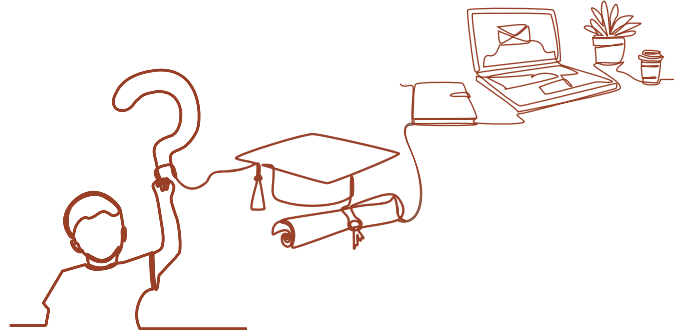
**Psychosocial support**, via psychologists/social workers, **peer support** and **empowerment to self-manage**<sup>1,2,6,7</sup>

# Comprehensive care and communication

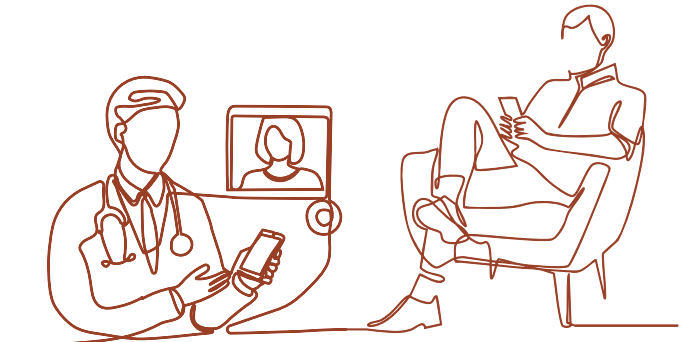
Some may feel uncertain around the transition to adult healthcare and feel lost in the switch<sup>1–4</sup>



Concerns about future life and career due to perceived and imposed barriers<sup>2</sup>



Many may prefer information via a website or app than in-person communication alone<sup>1,6</sup>



**Close cooperation** between **paediatric and adult healthcare centres** can ensure a smooth transition<sup>5</sup>

**Social law counselling, interview training** and **online resources** can help patients prepare for the future<sup>1,2</sup>

HCPs can leverage **online resources** and **use the latest technologies (florio HAEMO, WAPPS-Hemo)** to complement **face-to-face meetings**<sup>1,7,8</sup>

HCP, healthcare professional; WAPPS, Web-Accessible Population Pharmacokinetic Service-Hemophilia.

1. Königs C, et al. J Clin Med. 2024;13:5121; 2. Bidlingmaier, C et al. Haemostaseologie. 2020;40:97–104; 3. Gray WN, et al. J Pediatr Psychol. 2018;43:488–502; 4. Brand B, et al. Eur J Haematol. 2015;95:30–35; 5. Quon D, et al. Am J Hematol. 2015;90:S17–S22; 6. Low JK, et al. JMIR Mhealth Uhealth. 2019;7:e12042; 7. Zapotocka E, et al. Res Pract Thromb Haemost. 2022;6:e12685; 8. Iorio A, et al. JMIR Res Protoc. 2016;5:e239.