

# ka ditshwantsho **Haemophilia**



**Tumello ya ho hatisa ho tswa ho;**  
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### **NTSHETSOPELE YA BOQAPI LE TEGENOLOJI**

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### **DIKANANELO**

Phatlalatso ena e hlahisitswe ya ba ya behwa tekong ke baithaopi lefatshe ka bophara. Boholo ba bona ke batho ba nang le boiphihlelo ho tsa haemophilia ka thuto kapa ka ho ba le lefu lena la haemophilia. Baithaopi ba mekgatlo ya haemophilia le baphekodi ba dinaha tse fetang 75 ba ile ba phalla ho thusa ka ditshwantsho tsa Haemophilia (HIP). Baithaopi babang hape ba ile ba lekola web program e ntjha, mme ba hlalosa botshepehi le bobebe ba ho sebedisa web program ena. Komiti ya WFH ya baaki le komiti ya physiotherapy, e ile ya itela ho lekola phatlalatso ena ya 1998 mme ya etsa ditlhahiso ka phatlalatso ena, Diteboho di iswa ho mokgatlo wa basebetsi HIP.

Ditsebi le barutehi ba baithaopi ba sebeditse ka boitelo dikgweding tsena tse (12) leshome le metso e mmedi ho etsa bonnete ba hore dikahare tsa mosebetsi ona di nepahetse, di baleha ha bobebe ebile di ka kgona ho sebediswa.



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Projeke ena mokgubu wa yona o ne o le “Bloemfontein Haemophilia Treatment Centre” e fumanehang Sepetlele sa Universitas. E kenyeditse Marius Coetzee, Essex Barrett, Claire Barrett, Precious Setlaba, Rosy Seakge, lelapa la ha Rankoe-Ningiza le ba bang ba bangata, haholoholo baoki.

Kgatiso ena e qadile ho hatiswa ka Senyesemane ke “WorldFederationofHemophilia”(WHF)mmeefetoletswe ka tumello. Kgatiso ya pele e kgonahaditswe ke dithuso hotswa ho Wyeth. WHF ha e ikarabelle phetolelong ena le diphoso tse ka bang teng phetolelong kapa mekgelo ho kgatiso ya pele ya Senyesemane.

Kgatiso ena ya sesotho e kgonahaditswe ke neo e tswang ho Bayer Schering Pharma, South Africa ntle le tebello ya letho ho tswa ho rona.

Kgatiso ena e kgonahaditswe ke neo e sa thibelwang ya ditjeho e tswang ho **Bayer Schering Pharma, South Africa.**

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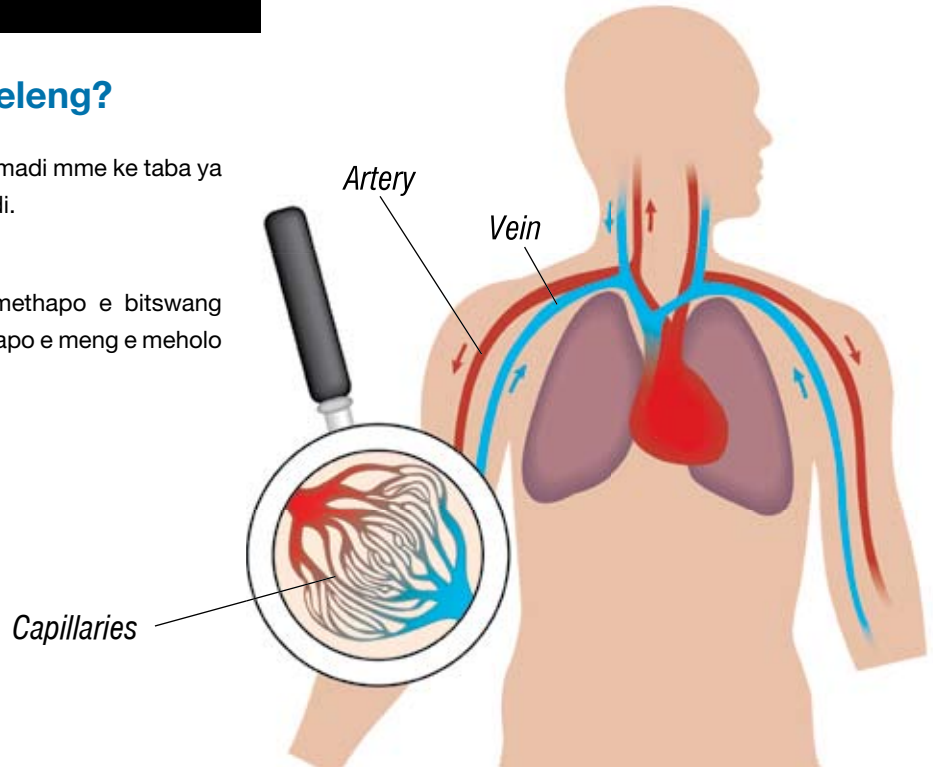
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## KAROLO YA 1: Selelekela ho haemophilia

### Madi a phalla jwang mmeleng?

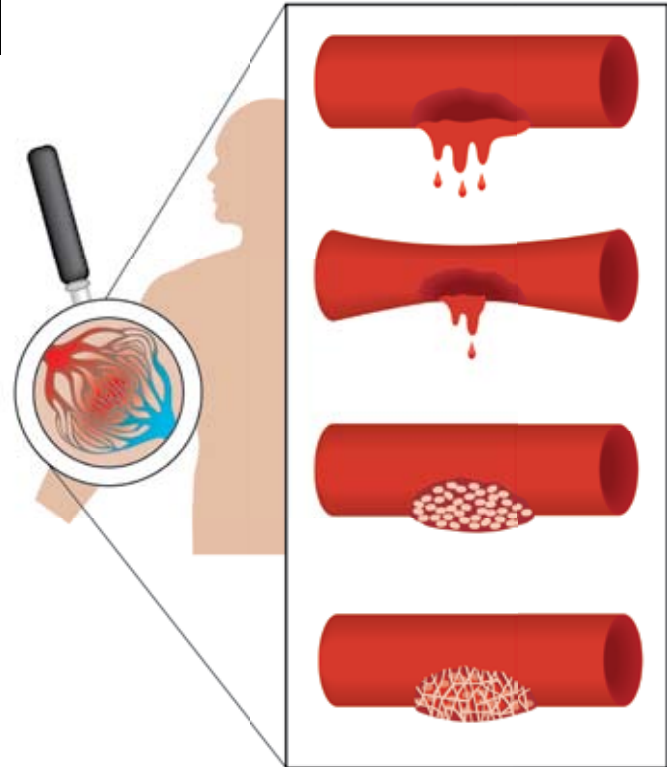
- Haemophilia ke bohloko ba ho tswa madi mme ke taba ya bohlokwa ho utlwisisa phallo ya madi.
- Pelo e pompa madi ho ya mmeleng.
- Madi a phalla le mmele ka hara methapo e bitswang **arteries, vein** le **dicapillaries**. Methapo e meng e meholo e meng e menyane.



## KAROLO YA 1: Selelekela ho haemophilia

### Ho tswa madi ho qala jwang?

- Ho tswa madi ho qala ha mothapo (capillary) o utlwa bohloko, mme madi ha a tswa, mothapo o a tiya ho thibela madi a mangata ho tswa.
- Dikarolo tse ding tsa madi tse bitswang diplatelets di etsa lehlwele ho kwala lesoba le mothapong.
- Ho tloha moo dikarolo tse ding tse fumanwang mading (clotting factors) di sebetsa mmoho ho matlafatsa lehlwele lena, mme madi a emisa ho tswa.



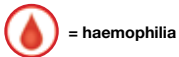


## KAROLO YA 1: Selelekela ho haemophilia

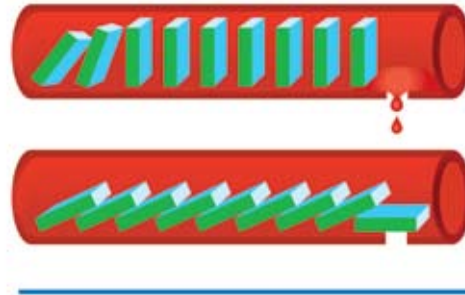
### Hobaneng batho ba nang le lefu lena la Haemophilia ba tswa madi nako e telele ho feta batho ba bang?

- Bathong ba tshwerweng ke Haemophilia, dikarolo tse ding tsa madi tse etsang mahlwele ha di yo, kapa ha di a lekana ho etsa lehlwele. Sena se thatafaletsa madi ho etsa lehlwele, mme madi a tswa nako e telele empa eseng kapele. Hobane ho na le dikarolo tse ngata mading tse etsang mahlwele, karolo enngwe le enngwe e bitswa ka ditlhaku tsa seroma.

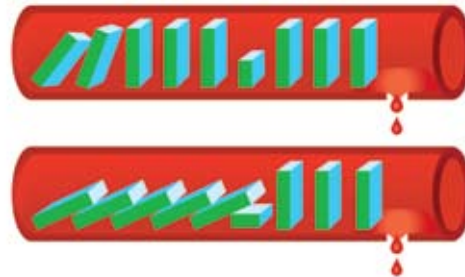
Mohlala : VIII = Robedi  
IX = Robong



### Normal clotting process



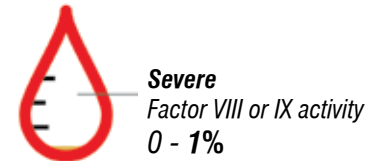
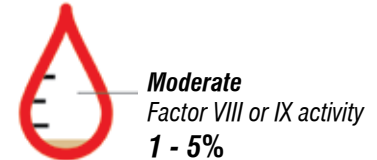
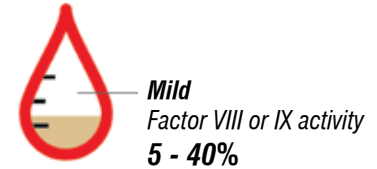
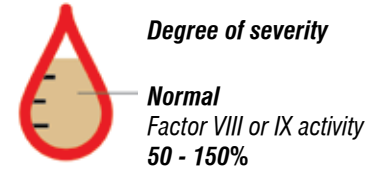
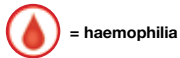
### Clotting in haemophilia



## KAROLO YA 1: Selekela ho haemophilia

### Ana Haemophilia kaofela e a tshwana?

- Batho bao factor VIII (robedi) ya bona eleng nyane mading ba na le **haemophilia A**.
- Batho ba nang le factor IX (nine) e nyane mading ba na le **haemophilia B**.
- Haemophilia e ka ba bobebe (mild) kapa ya ba mahareng, kapa ya ba matla (severe) ho ya ka boteng ba dikarolo tsa madi tse etsang mahlwele.




## KAROLO YA 1: Selelekela ho haemophilia

### Batho ba fumana jwang haemophilia?

- Batho ba hlaha ka haemophilia. Ha se bohloko bo tshwaetsanang.
- Haemophilia ke lefutso, ke hore e fetisetwa mothong ka madi a bitswang **digenes**.
- Digenes tse na ke tsona tse bontshang hore **dicells** tsa mmele di sebetsa jwang.
- Mohlala, moriri le mmala wa mahlo X = sex chromosome le gene ya haemophilia.



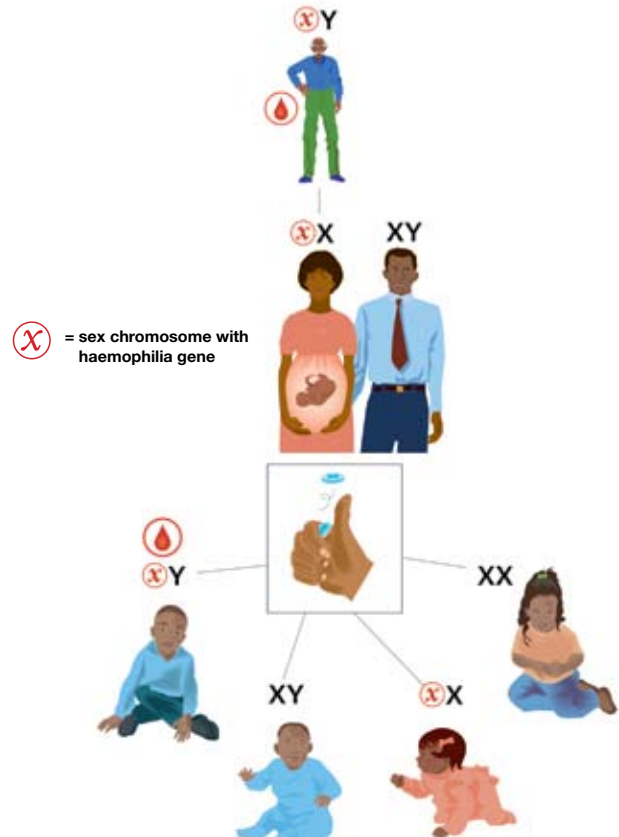
 = sex chromosome with haemophilia gene



# KAROLO YA 1: Selelekela ho haemophilia

## Monyetla wa hore lesea le ka fumana haemophilia ke ofe?

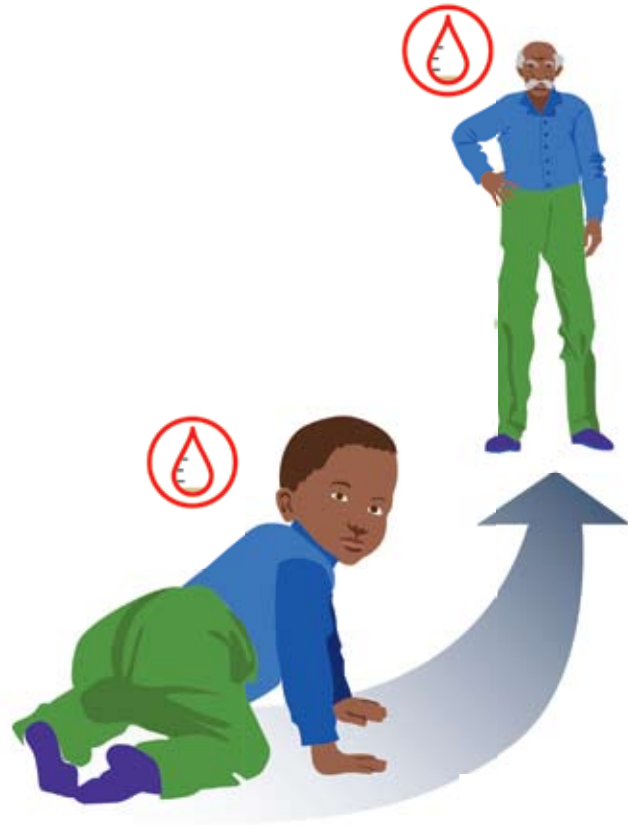
- Digene di fumanwa ho dichromosomes. Hona le **chromosomes** tse pedi (di bitswa **X** le **Y**) mme ke tsa botona kapa botshehadi.
- Basadi ba na le **X** tse pedi.
- Banna ba na le **X** e le nngwe le **Y** e le nngwe.
- Gene ya haemophilia e fumanwa ho **X** chromosome.
- Monna ya nang le haemophilia o fetisetsa gene ya haemophilia barading ba hae kaofela, e seng bareng ba hae. Baradi ba **bitswa bajari (carriers)** hobane ba jere gene ya haemophilia.
- Ha moradi (mojari) a ba le ngwana ho na le kgonahalo ya hore a ka e fetisetsa gene ena ngwaneng. Ha a fetisetsa gene moreng, mora o tla ba le haemophilia. Ha a e fetisetsa morading, moradi e tla ba mojari jwale ka mmae.
- Ka nako e nngwe ngwana o hlaha a na le haemophilia le ha mmae e se mojari. Ke hobane factor VIII kapa IX digene tsa teng di fetoha mmeleng wa ngwana. Masea a 1-3 ha a na batswadi ba nang le haemophilia.



## KAROLO YA 1: Selelekela ho haemophilia

### Ana haemophilia ke bohloko ba bophelo kaofela?

- Ha motho a hlahile a na le haemophilia, o tla ba le yona bophelo kaofela.
- Bongata ba factor VIII kapa IX bo dula bo tshwana bophelo ba hao kaofela.



## KAROLO YA 2:

Tekanyetso le taolo ya ho tswa ha madi

### Matshwao a tlwaelehileng a haemophilia ke afe?

- Ha o na le haemophilia o ka tswa madi kae kapa kae mmeleng, ka nako e nngwe o a bona madi ha a tswa, ka nako e nngwe ha o a bone.
- Motho a ka tswa madi ka mora kotsi kapa operation ka nako enngwe madi a tswe feela ntle le lebaka, mme a bitswa madi a tswang ka tshohanyetso (spontaneous bleeding).
- Ha se ha ngata masea a nang le haemophilia a tswang madi, empa a ka nna a tswa madi ha a bolotswa.
- Ha bana ba qala ho tsamaya ba ruruha ha bobebe. Hape ba tswa madi nako e telele hoba ba tswe kotsi haholoholo molomo le leleme.
- Ke ntho e tlwaelehileng hore bana ha ba hola ba tswe **madi ka ntle ho le baka (spontaneous bleeding)**, e ama haholo manonyeletso le mesifa.

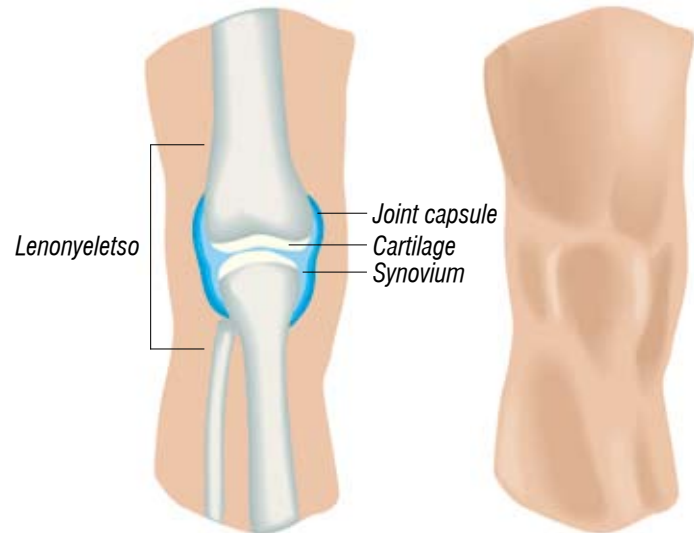


## KAROLO YA 2:

### Tekanyetso le taolo ya ho tswa ha madi

## Ke eng se bakang hore manonyeletso a tswa madi?

- **Lenonyeletso** ke moo masapo a mabedi a kopanang, mme a kwahetswe ke lefufuru, e leng **cartilage**.
- Masapo a kopantswe, kapa a tshwerwe ke kgaketla ya **lenonyeletso (joint capsule)**. Bokahare ba kgaketla ena bo bitswa **synovium** e nang le methapo e menyenyane ya madi mme synovium ena e etsa lero le thellang le mafura ho etsa hore lenonyeletso le kobehe ha bobebe.
- Ha methapo ena e menyane e tswa kotsi e tswa madi hangata ntle ho lebaka, haholo ho batho ba tshwerweng ke haemophilia e matla (severe). Ho batho ba sa tshwarwang ke hemophillia madi a emisa kapele. Empa ho haemophilia madi a tswelapele ho tswa, mme hona ho etsa hore lenonyeletso le ruruhe le be bohloko.

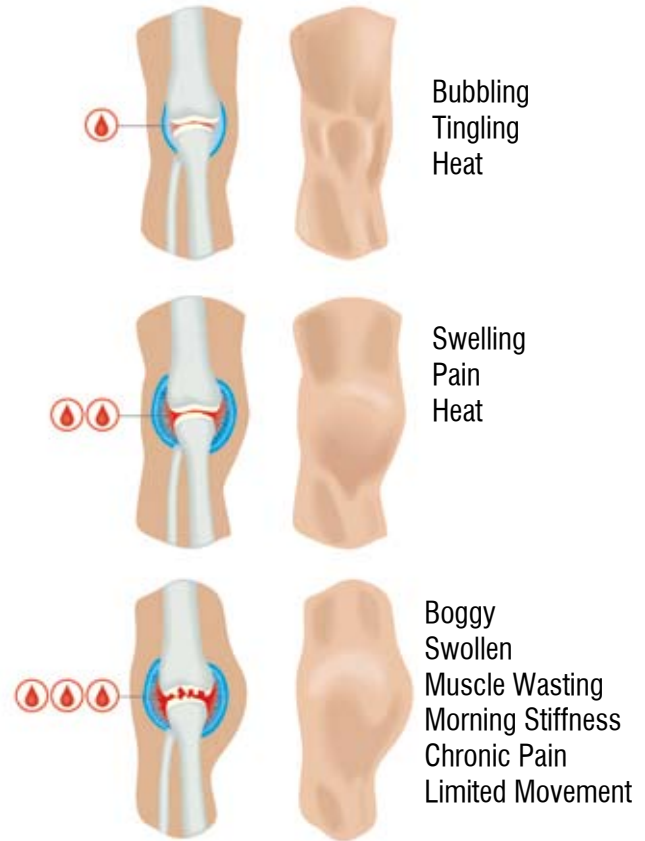


## KAROLO YA 2:

Tekanyetso le taolo ya ho tswa ha madi

### Ho etsahala eng ha lenonyeletso (joint) le tswa madi?

- Motho ya tshwerweng ke haemophilia o a tseba ha a tswa madi lenonyeletsong (joints) hobane le ba botsikinyane mme le tjhese.
- Ha madi ana a tla ka hara kgaketlane (capsule) lenonyeletso le ba bohloko mme ho ba thata ho le isa kwana le kwana (move).
- Ha motho a sa fumane pheko kगतello e etswang ke ho ruruha e emisa ho tswa ha madi. Ka mora nako dikarolo tse ikgethileng tsa madi di tlosa madi a setseng ka hara lenonyeletso.





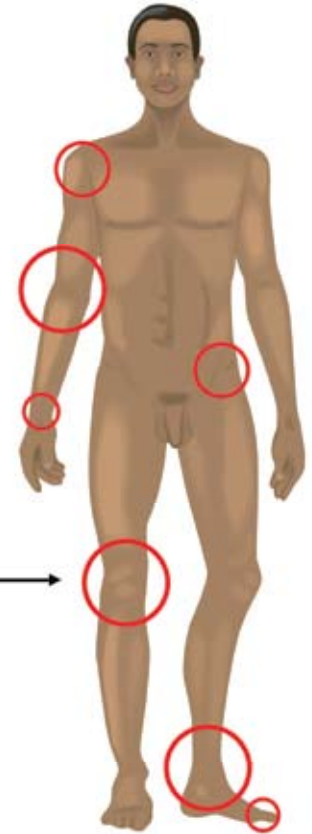
## KAROLO YA 2:

Tekanyetso le taolo ya ho tswa ha madi



### Ke manonyeletso afe a atisang ho tswa madi?

- Manonyeletso a atisang ho tswa madi ke leqaqailana, lengwele le setsu.
- A mang a ka nnang a tswa madi ke menwana ya maoto, lehetla le diqholo.
- Menwana ya matsoho ha se hangata e tswang madi kante le ha e ka tswa kotsi.



## KAROLO YA 2:

Tekanyetso le taolo ya ho tswa ha madi



### Ditlamorao tsa ho tswa madi manonyeletsong ke dife?

- Ho tswa madi kgafetsa ho etsa hore synovium e ruruhe mme e tswa madi ha bobebe.
- Madi a mang a salla ka hara lenonyeletso, mme synovium ha e sa kgona ho hlahisa lero lane le thellang le mafura e be, lenonyeletso ha le sa kgona ho tsikinyeha (move).
- Sena se senya lefufuru le kwahetseng dintlha tsa masapo. Lenonyeletso le ba bohloko mme le hloke botsitso.
- Mesifa e potapotileng lenonyeletso le yona e a fokola mme lenonyeletso le hloke botsitso haholo.



## KAROLO YA 2:

Tekanyetso le taolo ya ho tswa ha madi



### Ke eng se etsang mesifa e tswa madi?

- Mesifa e tswa madi ha methapo e menyane e tswile kotsi.
- Ka nako enngwe sesosa ha se tsejwe mme ho tswa madi ho ka ba teng ntle le lebaka.

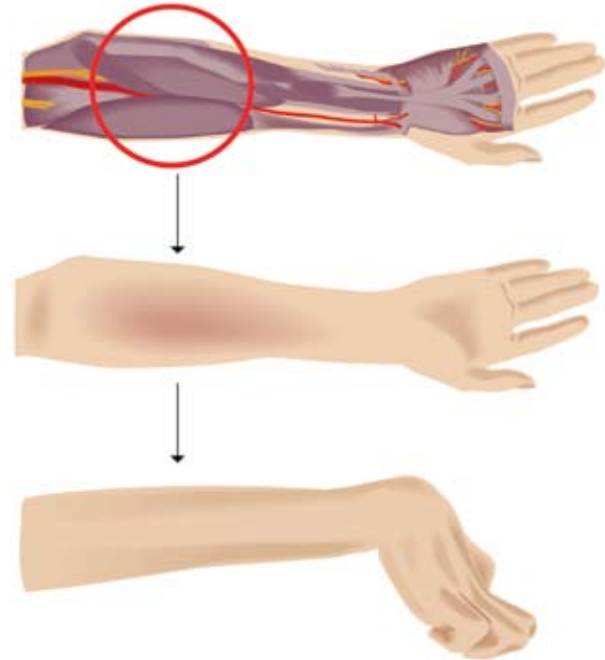


## KAROLO YA 2:

Tekanyetso le taolo ya ho tswa ha madi

### Ho etsahala eng ha mosifa o tswa madi?

- Ha madi a tswa mosifa o ba thata le ho ba bohloko.
- Ho tswa madi ho baka ho ruhua ho tjhesang mme ho bohloko ha motho a tshwara. Ho ka nna ha ba le leqeba ha madi a le pela letlalo.
- Ha madi a tswa mesifeng e ka hare, ho ruhua ha yona ho hatella **methapo ya kutlo** le **methapo ya madi**, mme ho ba botsikinyane, ho shwe bohatsu.
- Mesifa e a tiya ho itshireletsa, hona ho bitswa **muscle spasm**. Ke ka hoo manonyeletso a sa sebetseng hantle.

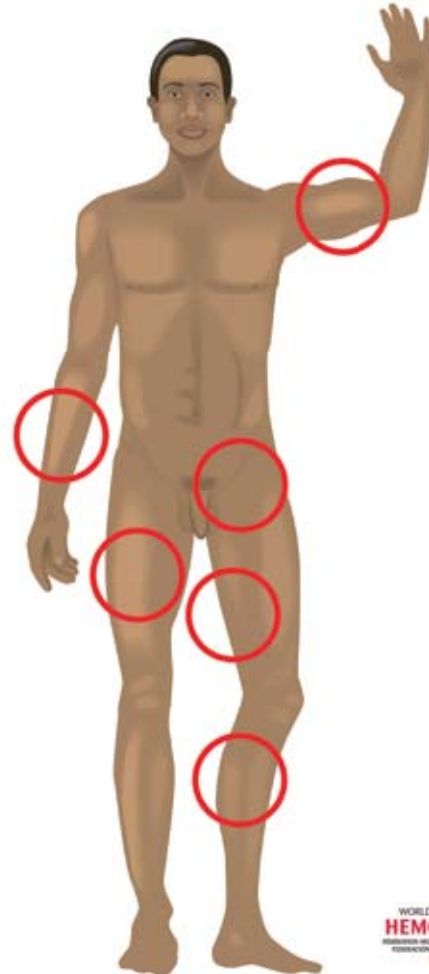


## KAROLO YA 2:

Tekanyetso le taolo ya ho tswa ha madi

### Ke mesifa efe e atisang ho tswa madi?

- Ke **tlhafu, serope** le **dipotomanehadi**.
- Madi a atisa ho tswa karolong e ka hare ho qholo le **mesifeng ya letsoho**, mme madi ana a ka hatella methapo ya kutlo le methapo ya madi, e bake kgolofalo.
- Letsoho ha le atise ho tswa madi kantle le ha le tswile kotsi.

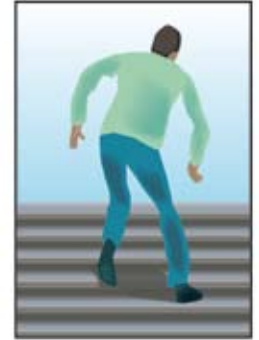


## KAROLO YA 2:

Tekanyetso le taolo ya ho tswa ha madi

### Ditlamorao tsa ho tswa madi mesifeng ke dife?

- Ka mora ho tswa madi Kgafetsa, mesifa e ka fokola, ya lemala e be eba mekgutshwanyane ho feta e phetseng hantle (ka nako tse ding e dule e le jwalo ho ya ho ile), ebe ha e sa kgona ho sireletsa manonyeletso.
- Manonyeletso a ka hodimo le a ka tlase ho mesifa ha a sa kgona ho tsamaiswa hantle. A tswa madi ha ngata.
- Ha methapo-kutlo e lemetse haholo nakong eo mesifa e tswang madi, mesifa e a fokola kapa e holofale.
- Ha manonyeletso a senyehile, mesifa le methapo-kutlo di ama tsela eo motho a dulang, a emang, le ho tsamaya ka yona.

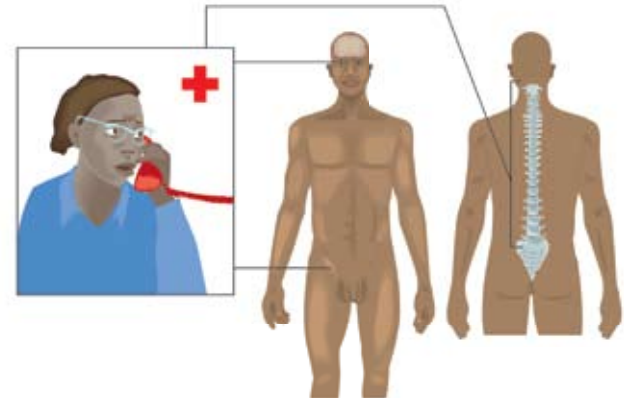
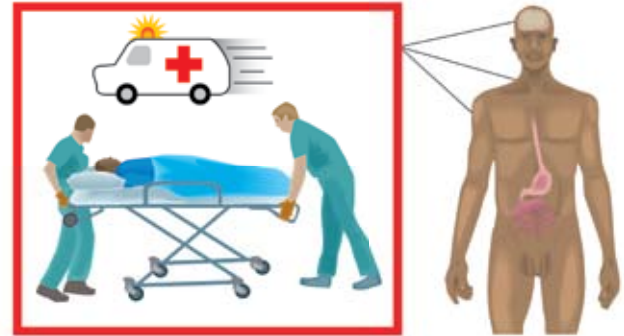


## KAROLO YA 2:

### Tekanyetso le taolo ya ho tswa ha madi

## Ke ho tswa madi hofe ho kotsi kapa ho behang bophelo tsietsing?

- Madi a tswang hloohong (a bakwang ke ho tswa kotsi) ke ona lebaka le leholo le bakang mafu haholo baneng. Madi a tswang ka hloohong a ka baka hlooho e bohloko, ho feroha sebete, ho hlatsa, ho hloka boroko, ho kopana hlooho, ho fokola, ho akgeha le ho ya le maididi.
- Madi a tswang qoqothong a ka bakwa ke tshwaetso, operation kapa ente ya ngaka ya meno. Madi ana a baka ho ruuha le bothata ba ho kwenya le ho phefumoloha.
- Ho tswa madi a mangata ho beha bophelo kotsing. Sena ha se atise ho etsahala ho di haemophilia kantle le ha ho na le kotsi kapa mahloko a mang.
- Ho tswa madi ka nako e nngwe ho ka ba kotsi, empa ho ke ke ha beha bophelo ba motho tsietsieng jwale ka ho tswa madi mahlong le mokokotlong.
- Ha ngata moroto wa dihaemophilia o na le madi empa hona ha ho kotsi.

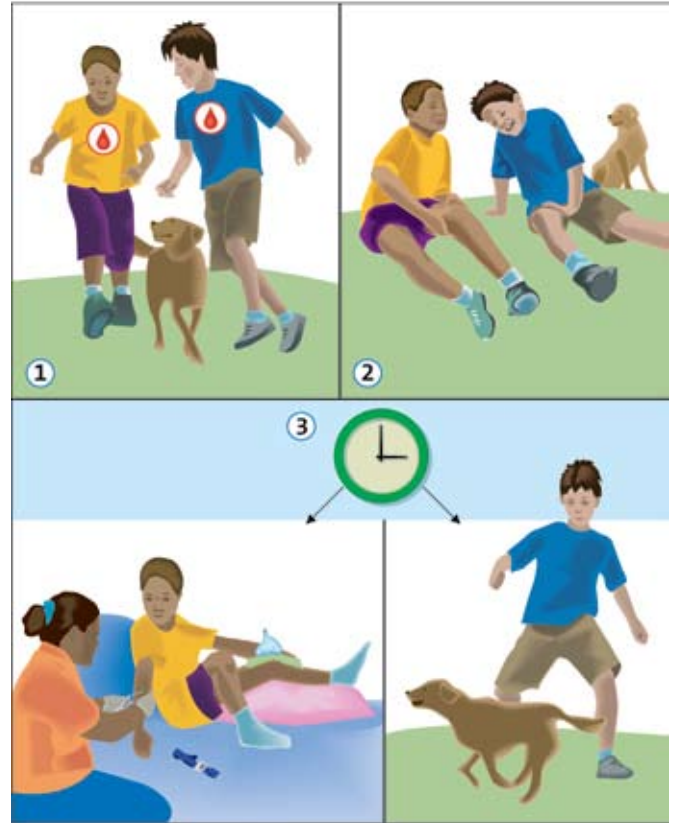


## KAROLO YA 3: Kalafo ya ho Tswa Madi

### Hobaneng ho tswa madi ho lokela ho thibelwa hore pholo e potlakiswe le ho thibela ho holofala?

(Part A)

- Ho tswa madi ho lokela ho thibelwa hore pholo e potlakiswe le ho thibela ho holofala.
- Ha o sa tsebe pheko, se ka ema! Potlakela ngakeng.





## KAROLO YA 3: Kalafo ya ho Tswa Madi

### Hobaneng ho tswa madi ho lokela ho thibelwa kapele? (Part B)

- Ha o dieha ho fumana pheko, madi a tswa nako e telele, mme o hloka pheko e ngata.

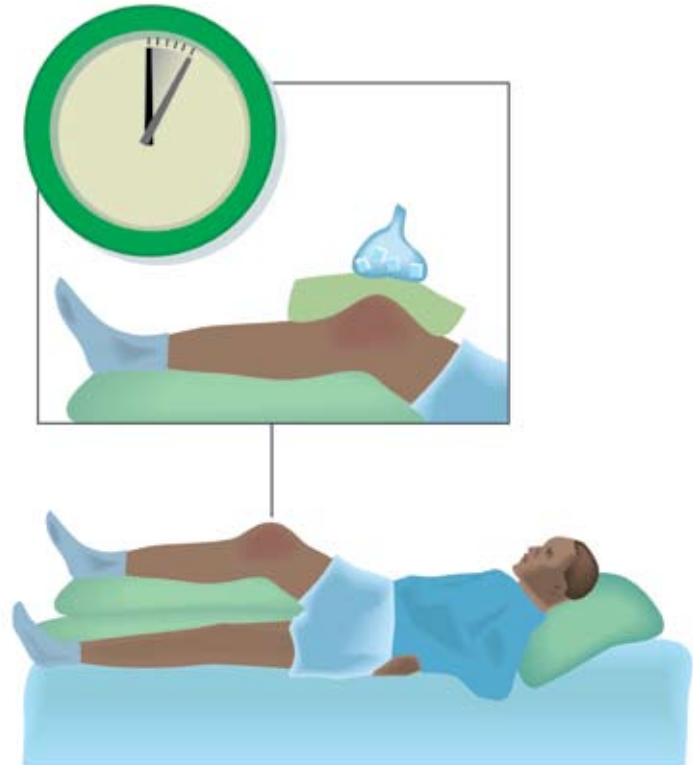


## KAROLO YA 3:

### Kalafo ya ho Tswa Madi

## Ho tswa madi ho ka phekolwa jwang ho sebediswa thuso ya pele (first aid)?

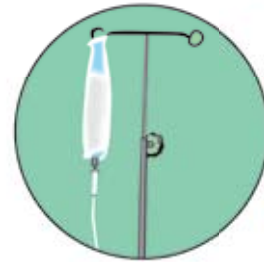
- Etsa thuso ya pele ka potlako ho fokotsa bongata ba madi a tswang le tshenyho. Etsa sena leha o tlo fa pheko. Mohlala factor replacement.
- **PHOMOTSO:** Beha leoto kapa letsoho hodima mosamo, sling kapa bandage. Seke wa tsikinya kapa wa tsamaya ka leoto le tswang madi.
- **LEQHWA:** Phuthela leqhwa ka thaole e mongobo ebe o e beha hodima moo madi a tswang. Ka mora metsotso e mehlano e tlose sebaka se ka etsang metsotso e 10. Phetha sena ha feela lenonyeletso le sa tjhesa. Sena se ka fokotsa ho opa le ho tswa madi.
- **KGATELLO:** Phuthela manonyeletso ka tensor bandage kapa kousu ya rekere. Sena se ka thusa ho fokotsa madi le ho tshehetsa lenonyeletso. Sebedisa kgateello ka hloko ha mosifa o tswa madi ha eba ho na le pelaelo ya hore mothapo kutlo o utlwile bohloko.
- **PHAHAMISO (ELEVATION):** Phahamisa sebaka se tswang madi, se be bophahamo bo ka hodima pelo. Sena se ka fokotsa tahlehelo ya madi.



## KAROLO YA 3: Kalafo ya ho Tswa Madi

### Ho tswa madi ho ka fokotswa kapa ho ka phekolwa jwang ka ho fa factor replacement therapy?

- Haemophilia e ka phekolwa ka ho fa ente ya karolo e etsang mahlwele (factor) e siyo mading ka ho enta ka mothapong. Karolo ena e ke ke ya nowa.
- Karolo ena e fumanwa dihlahisweng tse ngata, tse ka reng **cryoprecipitate** le **factor concentrate**. **Ditlamorao** tsa dihlahiswa tsena di tshwanetse ho elwa hloko.
- Batho ba nang le **haemophilia e bobebe**, ke hore haemophilia A, (kapa von Willebrand disease) ba ka phekolwa ka moriana o bitswang **desmopressin (DDAVP)**.
- E ka fuwa ka ho entwa ka hara mothapo, ka tlasa letlalo kapa ka seperei sa dinko.
- Pheko ena e lokela ho phethaphetwa.



## KAROLO YA 3: Kalafo ya ho Tswa Madi

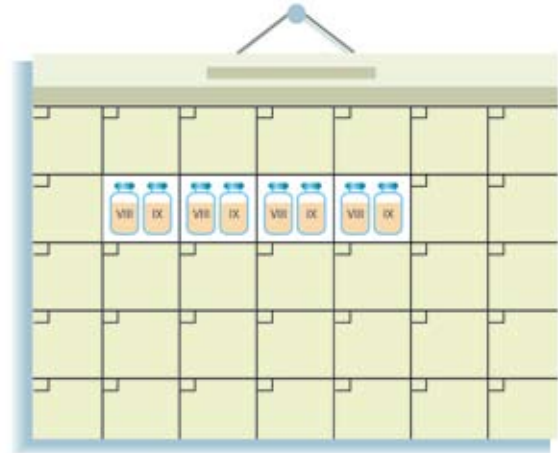
### Ke pheko efe hape e ka thusang?

Pheko tse ding tse kareng tse na di ka thusa:

- Moriana wa mahlaba.
- **Anti-inflammatory:** Meriana ena e fokotsa ho ruuha.
- Meriana e meng kapa factor replacement le ho phetha-phetwa ha factor VIII kapa IX.

Mosidili a ka (physiotherapist):

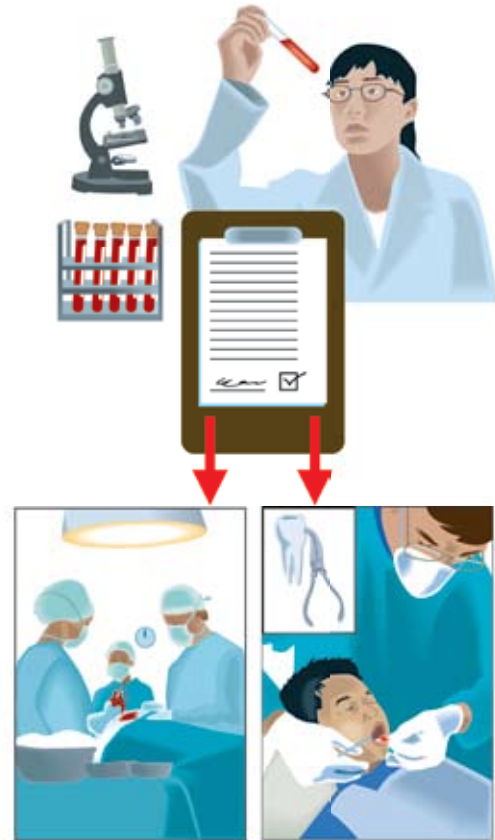
- fana ka keletso ho matlafatsa mesifa le ho busetsa lenonyeletso boemong ba lona.
- bolela hore motho a ka kgutlela mosebetsing.
- sireletsa manonyeletso.



## KAROLO YA 3: Kalafo ya ho Tswa Madi

### Dithibela (inhibitors) ke eng di ka phekolwa jwang?

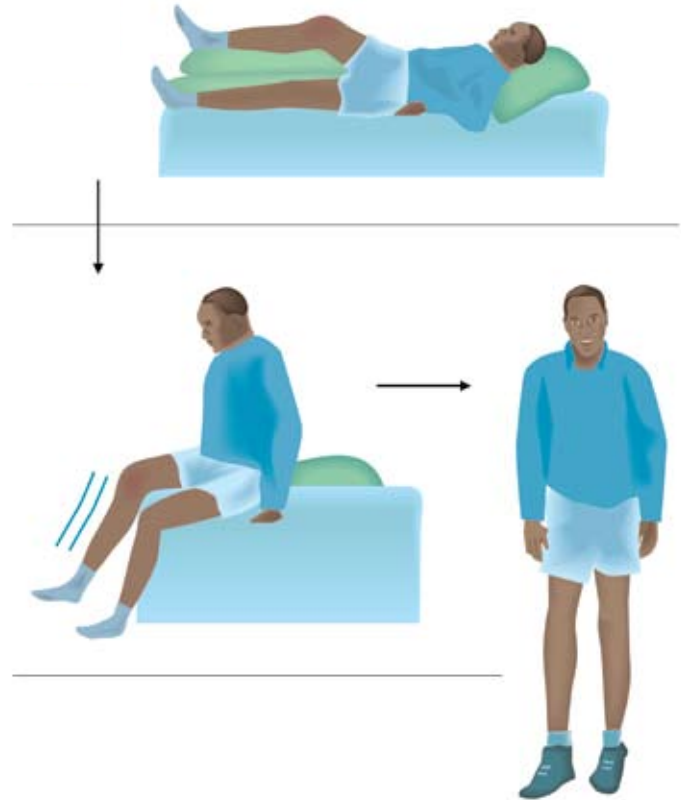
- **Dithibela (inhibitors)** ke diantibodies (proteins) tse etswang ke mmele ho lwantsha dintho tseo e seng karolo ya mmele (foreign bodies).
- Motho wa haemophilia a ka ba le dithibela tse lwantshang protein ena e phekong. Ha dithibela tsena di le matla moriana o ka nna wa se sebetse hantle, wa se be le molemo.
- Ha se hangata dithibela tsena di bang teng. Di fumanwa hangata ho batho ba haemophilia.
- Basebeletsi ba bophelo bo botle ba lokela ho etsa diteko tsa dithibela tsena pele ho operation le operation ya meno.
- Ho na le dipheko tse kgethehileng tse sebetsanang le dithibela tsena.



## KAROLO YA 3: Kalafo ya ho Tswa Madi

### Matshwao a hore ho tswa madi ho emisitse ke a feng?

- Ho kgona ho sebedisa mosifa kapa lenonyeletso hantle.
- Mosifa o boela o ba le matla.



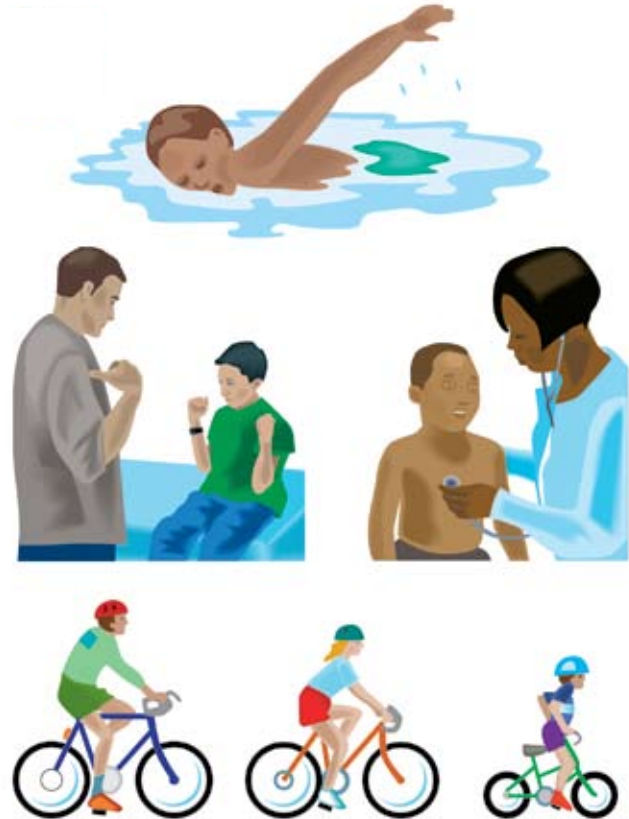
## KAROLO YA 4:

Ho dula o phela hantle le ho qoba ho tswa madi

### Ke eng se ka etswang ho dula o phela hantle?

Thuso ya bongaka ke karolo e nngwe ya bophelo bo botle, batho ba tshwerweng ke haemophilia ba tshwanetse:

- Ho ikwetlisa ba dule ba shahlile.
- Ba itshireletse ha ba nka karolo dipapading kapa mesebetsing.
- Ba hlahlojwe manonyeletso le mesifa kgafetsa.
- Ba fumane diente tse kang hepatitis A le B ho ba sireletsa.
- Ba se none. Batho ba haemophilia ba sa ikwetliseng ba a nona. Ba tshwanetse ho hlokomela boima ba mmele ya bona, hobane ba tla imela manonyeletso haholo-holo ba nang le ramatiki.



## KAROLO YA 4:

Ho dula o phela hantle le ho qoba ho tswa madi

### Hobaneng tlhokomelo ya meno e le ntho ya bohlokwa?

- Meno a phetseng hantle le marenene a phetseng hantle a fokotsa tlhokeho ya ho phekolwa ha haemophilia.
- Ho dula o hlokometse meno ho phemisa diente le dioperation.
- Ho hlokomela meno ho kenyeletsa ho hlatswa meno, ho ntsha dijo pakeng tsa meno le ho ya ngakeng.





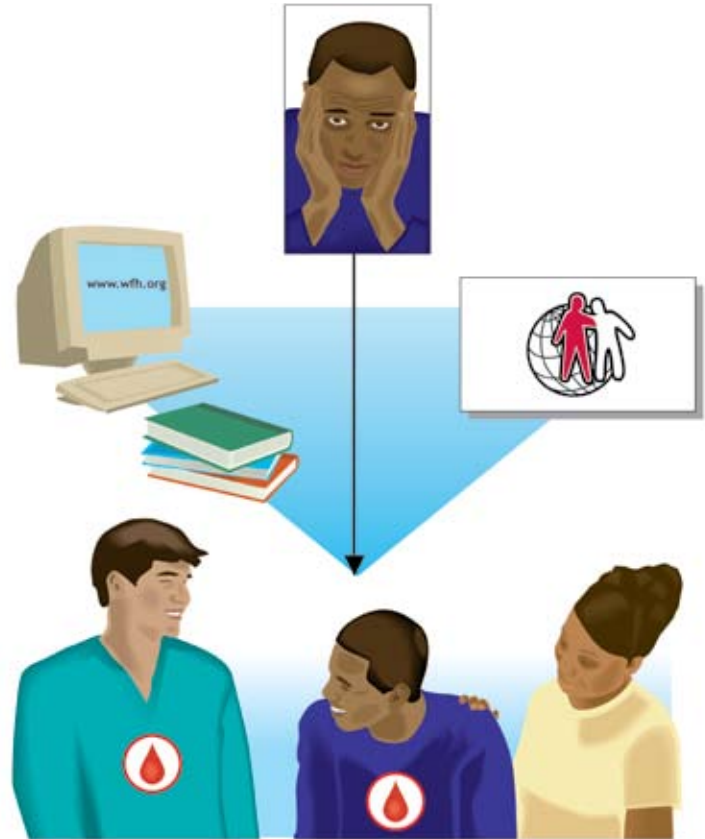
## KAROLO YA 4:

Ho dula o phela hantle le ho qoba ho tswa madi

### Hobaneng bophelo bo botle ba maikutlo e le ntho ya bohlokwa?

Ho ba le haemophilia ho baka kгатello e kgolo ya maikutlo mme hona ho ka ba le tshwaetso e kgolo ho ba lelapa le ho motho wa haemophilia. Sena se ka qojwa ka:

- Ho ithuta haholo ka haemophilia. Tsebo e thusa motho ka boyena.
- Ho kopana le batho ba nang le haemophilia. Ho arolelana tsebo ho a thusa.
- Hoba leloko la mokgatlo wa haemophilia.



## KAROLO YA 4:

Ho dula o phela hantle le ho qoba ho tswa madi

### Ho etsahala eng ha operation e hlokahala?

Pele ho operation, operation ya meno kapa sepeiti sa meno, basebetsi ba bophelo bo botle ba lokela ho:

- Ba le pheko e lekanang ho thibela ho tswa madi haholo pele operation e qala mme hona ho etsa hore mokudi a fole kapele.
- Etsa diteko tsa dithibela (inhibitors).
- Nahana ka meriana e meng e ka potlakisang ho fola e kang dibolayamahlaba. **Antifibrinolytics** e ka sebediswa ho fedisa mahlwele mmeleng.



## KAROLO YA 4:

Ho dula o phela hantle le ho qoba ho tswa madi

### Ho ka etsahalang ha meriana kapa diente di hlokahala?

#### Tseo o lokelang ho di etsa ke tsena:

- Hlahloba meriana kaofela le mosebeletsi wa bophelo bo botle wa haemophilia.
- Boloka mme o sebedise meriana le dipheko ho ya ka ditaelo.
- Beha meriana kaofela moo bana ba sa e fihleleng.

#### Tseo o sa lokelang ho di etsa:

- O se ke wa nwa ASA (aspirin) ho bolaya mahlaba.
- O se ke wa nwa meriana ya nonsteroidal anti-inflammatory (NSAIDs) ntle le tumello ya ngaka.
- O se ke wa hlaba sepeiti. Ha ente e hlokahala, e fuwe ka tlasa letlalo.



## KAROLO YA 4:

Ho dula o phela hantle le ho qoba ho tswa madi

### Ke afe matshwao a ho hanwa ke pheko?

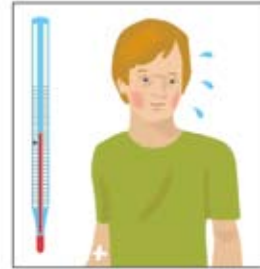
Matshwao a ho hanwa ke pheko ke ana:

- Motjheso (fever).
- Ho thotomela.
- Makgopo letlalong.

Hangata ditla-morao tsa ho hanwa di bobebe, di kokobetswa ke di-antihistamines (hangata meriana ena ke dipilisi)

Thuso ya bongaka e hlokahala kapele ha:

- O na le bothata ba ho hema.
- O na le sefuba se tlaellaneng (tight feeling).



## KAROLO YA 4:

Ho dula o phela hantle le ho qoba ho tswa madi

### Boitsebiso ba bongaka ke bofe?

- Motho wa haemophilia o lokela ho ba le boitsebiso ka bophelo ba hae. Mofuta wa haemophilia, pheko e hloka halang le meriana e hananang le mmele wa hae.
- Karete e amohelehang lefatshe ka bophara e fumaneha mahala ho mokgatlo wa lefatshe wa haemophilia. Boitsebiso bo bong bo bitswang Medic-Alert le Talisman bo a rekiswa dinaheng tse ding.



## KAROLO YA 4:

Ho dula o phela hantle le ho qoba ho tswa madi

### Batho ba ka fumana thuso kapa keletso ka haemophilia kae?

Thuso le keletso di fumanwa ho:

- Basebetsi ba bophelo bo botle ba haemophilia.
- Mekgato ya haemophilia (e hlahang WFH web site).
- Batho ba bang ba nang le haemophilia le malapa a bona (ka dikopano kapa mehala ya thuso).
- Phatlalatso ka haemophilia.



## TATELLO:

### Phekolo ya lapeng le venepuncture

## Phekolo ya lapeng ke eng?

- Phekolo ya lapeng ke ho fa karolo ya madi e etsang mahlwele mothapong o se sepetelele o le hae. Motho wa haemophilia a ka ipha pheko hae, sekolong, mosebetsing le kae kapa kae.
- Ngola fatshe ka nako tsohle ha o fumane pheko.
- Motho wa haemophilia le lelapa la hae ba arolelana boikarabelo le basebeletsi ba bophelo bo botle ba haemophilia.
- Ho ipha pheko hae ha ho bolele hore motho wa haemophilia ha a hloke ngaka.



## TATELLO:

### Phekolo ya lapeng le venepuncture

## Venepuncture ke eng?

- Venepuncture ke ho kenya nale ka hara mothapo. Hona ho etswa ha o nka madi kapa ba o fa sepeiti.
- Mothapo o bonahalang kapa wa utluwa ha bonolo ke ona o ka sebediswang ho fana ka sepeiti. Methapo e bobebe ho ka sebediswa ke e ka hodima letsoho kapa ka hare ho setsu.
- Masea a ka tswa madi a mangata ha a peitwa molaleng kapa bokahareng ba serope. Methapo ena e sebediswa ke dingaka ha di nka madi. Methapo emeng e ka sebediswa maseeng a haemophilia ho nka madi kapa ho o fa meriana.





## TATELLO:

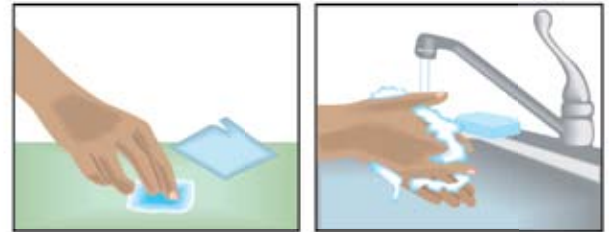
### Phekolo ya lapeng le venepuncture

## O lokisetsa jwang ho fana ka pheko?

Pele o tshwara disebediswa hlapa matsoho hantle ka sesepa le metsi. Hlwekisa moo o tlo sebeletsa teng ka sebolaya dikokwanahloko. Tshela kopi e tletseng ya chlorine bleach ka hara 1/2 litre ya metsi. Etsa bonnete ba hore bleach ha se ya kgale.

Dinitho tse hlokalalang:

- moo o tshelang disebediswa tse bohale (sharps container)
- masela a hlwekisang a sebediswang hanngwe feela (disposable wipes)
- alcohol wipe
- bandage
- cotton balls
- tape
- tourniquet
- nale (butterfly needle)
- sepeiti (syringe)
- transfer needle/filter needle
- factor concentrate
- latex gloves
- diluent (metsi a senang dikokwanahloko) a tswang le concentrate (sterile water)

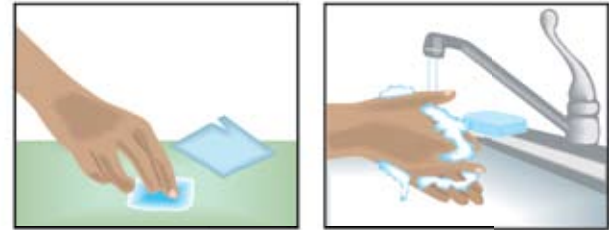


## TATELLO:

Phekolo ya lapeng le venepuncture

### O ka thibela tshwaetso (infection) kapa mahloko jwang ha o fa sepeiti?

- Ela hloko ha o tshwara disebediswa tse fang moriana. Boloka matsoho le disebediswa di hlwekile. Bathusi ba hlape matsoho, ba kenye digloves.
- Ela hloko hore menwana e seke ya tshwara metsu ya dinale, dintho tse bohale le melomo ya dibotlolo, dipeiti le mekotlana. Dintho tse na di lokela ho dula di hlwekile.
- Meriana e se ke ya bulwa, ya bolokwa hore e fuwe ha morao.
- Lahlela dinale le dipeiti ka hara lekolokoti la teng (sharps container).
- Hlwekisa moo o sebeleditseng teng ka sebolaya-dikokwanahloko, ho ya ka ditaello tsa haemophilia health care worker.
- Etsa hore dintho tse sebedisitsweng ha o fa sepeiti di lahlwa ka hloko ho ya ka ba lefapha la tikoloho. Batla boeletsu ho ba haemophilia centre kapa tleiniki.



## TATELLO:

### Phekolo ya lapeng le venepuncture

## O fa jwang pheko? (Karolo ya A)

- Etsa bonnete ba hore matsoho a hlwekile.
- Latela ditaello tsa mosebeletsi wa tsa bophelo ka hloko.
- Sebedisa moriana o hlapolotsweng kaofela. O se ke wa arola moriana hore o tlo fa o setseng ha mamorao.
- Karolo ya madi e etsang mahlwele e a fela ha e hlapollotswe, mme ho feta moo e ka nna ya baka mahloko.

1



2



3



4



## TATELLO:

Phekolo ya lapeng le venepuncture

### O ka fa pheko jwang? (Karolo ya B)

- Latela melao ya tsa bophelo bo botle ka hloko.
- Hopola, hang ha o qeta, mme nale e tswile ka mothapong, hatella moo nale e neng e kene teng nako ya metsotso e mehlano.

5



6



7



8



# MEHLODI E MENG

Dihlaloso

## **Antifibrinolytic**

Moriana o ka thusang ho emisa tlhoko ya mahlwele le o ka thusang ho phakisetsa ho fola ka mora ho tswa ha madi.

## **Antihistamine**

Moriana o ka fokotsang kapa wa qoba diallergy.

## **Anti-inflammatory**

Moriana o ka fokotsang, kapa wa thibela ho opa, ho retela le ho ruruha ho bakwang ke ditlamorao, tsa lekgopho, kotsi kapa tshwaetso.

## **Carrier**

Motho ya nang le gene e bakang mokgelo, hangata motho enwa ha a bontshe bokudi.

## **Cartilage**

Bokahodimo bo kwahetseng dintlha tsa masapo a manonyeletso.

## **Cell**

Karolwana e nyane ka ho fetisisa e phelang lefatsheng. Mmele wa motho o na le “dicell” tse ngatangata ruri.

## **Chromosome**

Kgwelenyana e tshesane ya diprotein le DNA e mahareng a dicell tsa batho, diphoofolo le dimela. Chromosome tse pedi (X le Y) ke tsona tse laolang bong ba motho. Ba batshehadi ba na le chromosomes tse pedi tsa X (XX = ngwanana). Ba batona ba na le e le nngwe ya X le e le nngwe ya Y (XY = moshemane).

## **Clotting factor**

Dikarolwana tse ngata tse tholwang ho plasma tse sebedisanang ho bopa lehlwele ho emisa ho tswa ha madi.

## **Cryoprecipitate**

Sehlahiswa sa kalafo se entsweng ka plasma. Se na le diprotein tse kang factor VIII le ya Von Willebrand factor feela eseng ya IX. Se fepelwa mothapong nakwana e teletsana.

# MEHLODI E MENG

Dihlaloso

## **DDAVP kapa desmopressin**

Mofuta wa moriana o eketsang factor VIII ya motho mading, feela ha o a etswa ka madi. O ka sebediswa ho alafa haemophilia e seng matla ya A le mofuta e meng ya lefu la Von Willebrand.

## **Factor concentrate**

Mofuta wa kalafo o nkang sebaka sa factor VIII kapa IX ka ho entelwa mothapong. E ka etswa ka plasma, ya omiswa e be phofo. E qhibidiswa pele e entelwa. Sheba recombinant ho fumana tlhaloso e nngwe ya factor concentrate.

## **Gene**

Digene di tsamaisa melaetsa e bolellang dicell tsa mmele hore na di sebetse jwang. Mohlala di ka laola mmala wa moriri le mahlo. Haemophilia e neheletsana ka digene tsa motho.

## **Haemophilia A**

Lefu la ho tswa madi moo factor VIII e hlokehang mading a motho kapa moo e leng nyane haholo.

## **Haemophilia B**

Lefu la ho tswa madi moo factor IX e hlokehang mading a motho kapa moo e leng nyane haholo.

## **Haemophilia e mahareng**

Lefu le bakwang ke factor VIII kapa IX e boemong ba 1% ho isa ho 5% ya boemo bo tlwaelehileng mading.

## **Haemophilia e matla**

Lefu le bakwang ke factor VIII kapa IX e fokolang haholo, hangata boemong bo ka tlaase ho 1% ya boemo bo tlwaelehileng mading.

## **Haemophilia e tlaase**

Lefu le bakwang ke factor VIII kapa IX e boemong ba 5% ho isa ho 40% ya boemo bo tlwaelehileng mading.

## **Haemophilia**

Lentswe le hlalosa lefu la ho tswa madi moo factor VIII kapa factor IX mading a motho e leng siyo kapa e leng nyane.

# MEHLODI E MENG

Dihlaloso

## **Haemophilic arthritis**

Ho ruruha ha manonyeletso, ha ngata ho bohloko ka lebaka la ho tswa madi hangata. Cartilage e manonyeletsong e a thubeha mme lesapo le a kumeha. Ka nako e nngwe lenonyeletso le sitwa ho tsamaiswa.

## **Infusion**

Ho entela sehlahiswa sa kalafo mothapong.

## **Inhibitor**

Dithibela tse boptjwang ke mmele ho lwantshana le tseo di bonang e le matswantle empa e le tsona tse thibelang madi ho bopa mahlwele.

## **IX (robong)**

Palo ya Seroma e bolelang "9" (robong). Clotting factor tse mading di rehwa ka palo ya Seroma.

## **Joint capsule**

Karolo e tshwarang masapo a kopane lenonyeletsong (moo masapo a mabedi a kopaneng).

## **Kgatello**

Ho hatella sebaka se tswang madi ho bolela ho tiisa ka kausu e sarollohang kapa bantisi ho fokotsa ho ruruha.

## **Lehlwele**

Madi a matenya a ipopang ka boona ho thusa ho emisa ho tswa madi.

## **Lenonyeletso**

Sebaka seo masapo a mabedi a kopanang.

## **Mesifa ya noka**

Mesifa e mmedi e pela tshwelesa e thusang ho tsamaisa lenonyeletso la noka le mokokotlo.

## **Mothapo (artery)**

Mothapo o moholo wa madi o phallisang madi ho tloha pelong ho ya mmeleng. Mmele o na le methapo e mengata.

# MEHLODI E MENG

Dihlaloso

## **Mothapo (vein)**

Mothapo o isang madi pelong ho tloha mmeleng. Mmele o na le methapo e mengata.

## **Mothatswana (capillary)**

Methapo yohle e menyane haholo e rarahaneng ho tsamaisa madi mmeleng. Mmele o na le methatswana e mengatahadi.

## **Nerve**

Dikgwelenyana tse ehlwang tse lebisang melaetsa, esita le ya bohloko hohle mmeleng.

## **NSAIDs kapa non-steroidal anti-inflammatory drug**

Moriana o kang ibuprofen o fokatsang bohloko kapa feberu (motjheso) empa o se na disteroid.

## **Phahamiso**

Thusong ya pele, phahamiso ke ho phahamisa setho se tswileng kotsi hodimo ho feta pelo. Hona ho thusa ho emisa ho tswa madi le ho ruruha.

## **Phekolo ya lapeng**

Ho entela moriana wa kalafo thoko ho sepetlele, hangata ka lapeng.

## **Phinahano ya mosifa**

Ho tiya ho bohloko hwa mosifa ho sa kgoneng ho laolwa ke motho.

## **Plasma**

Karolo ya madi e nang le fibrin le clotting factors (tse thusang ho etsa mahlwele).

## **Platelets**

Dicell tsa madi tse bopang mokwallo masobeng a methapo le methatswana.



# MEHLODI E MENG

Dihlaloso

## **Recombinant**

Mofuta wa factor concentrate o etswang laboratoring eseng ho tswa mading a motho. Diprotein tsa recombinant di etsisa mefuta e meng ya diprotein tse fumanwang ho plasma ya madi.

## **Sehlapolli**

Mokedikedi o tswakwang le phofjwana ya factor concentrate. Sehlahiswa se felletseng se entelwa ho alafa ho tswa ha madi.

## **Sephaka (forearm)**

Karolo ya letsoho pakeng tsa setsu le seatla, karolo e atisang ho tswa madi.

## **Sephaka (se ka hodimo)**

Karolo ya letsoho pakeng tsa lehetla le setsu, eleng karolo e atisang ho tswa madi.

## **Serope**

Karolo ya leoto pakeng tsa qholo le lengole, eleng karolo e atisang ho tswa madi.

## **Spontaneous bleeding**

Ho tswamadi ho etsahalang ntle le lebaka le hlokomelehang (eseng ka mora kotsi kapa operation).

## **Synovium**

Lelwapi le kwahelang senoko sa lenonyeletso, le entswe ka dicell tse boreledi tse mokedikedi tse thusang lenonyeletso ho tsamaya ha bonolo.

## **Tlhafu**

Karolo ya leoto e pakeng tsa lengole le leqaqailana.

## **MEHLODI E MENG**

Dihlaloso

### **Venepuncture**

Hona ho ka etswa ho nka madi kapa ho entela madi mothapong.

### **VIII (robedi)**

Palo ya Seroma e bolelang “8” (robedi). Clotting factor tse mading di rehwa ka palo ya Seroma.





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Hemophilia 2005**

WFH e kgothaletsa ho ajwa ha diphatlalatso tsa thuto ke mekgatlo e sa ithuseng ya haemophilia. Hore o fumane tumello ya ho e ngola, ho hatisa le ho phatlalatsa, ka kopo ikopanye le Communication Department atereseng ena:

**World Federation of Hemophilia**  
1425 René Lévesque Boulevard West -  
Suite 1010  
Montréal, Québec 3HG 1T7 Canada  
E-mail: [wfh@wfh.org](mailto:wfh@wfh.org)  
Web site: [www.wfh.org](http://www.wfh.org)