

KURERA

Guhindura Inkuru Isanzwe

2025



Dr. Christian Adetunji

KURERA

Guhindura Inkuru Isanzwe

Dr. Christian Adetunji

Uburenganzira bwo Gukoresha (Copyright) 2025 bwa
Christian Adetunji

Nta gice na kimwe cy'iki gitabo cyemerewe gusubirwamo cyangwa gukwirakwizwa hakoreshejwe uburyo ubwo ari bwo bwose, yaba ubwa mudasobwa cyangwa ubwa gakondo, harimo kugifotokopa, kugisubiramo amajwi, cyangwa kugishyira muri sisitemu ibika cyangwa ishakisha amakuru, keretse byemejwe n'umwanditsi mu nyandiko.

ISBN 978-978-2278-82-3

Aho mwabariza:

Christmat Consults, Ibadan

adetunjichristianm@gmail.com

+250 798 662 801

+254 741 515 617

+234 802 341 5352

URUTONDE RW'IBIRI MU GITABO

Intangiriro.....	vi
Igice Cya Mbere	
Kurera Umwana Ni Iki?.....	1
Igice Cya Kabiri	
Inshingano Zirenze Iz'umwimerere.....	8
Igice Cya Gatatu	
Kwirinda Gukosora Ibitagikosohwa.....	13
Igice Cya Kane	
Isuzuma Rishyingiye Ku Bitekerezo Bifite	
Ishingiro.....	20
Igice Cya Gatatu	
Inama Ku Babyeyi B'abagore Bashya.....	27
Igice Cya Gatandatu	
Ubushobozi Bw'amata Y'umubyeyi Mu Kurinda No	
Guteza Imbere Ubwuzima Bw'umwana.....	45
Igice Cya Karindwi	
Abana Bafite Ubwenge Mu By'amarangamutima.....	52
Igice Cya Munani	

Ingaruka Zishidikanywaho Ziterwa N’ubushyuhe.....	63
Igice Cya Cyenda	
Umwami, Umwamikazi Cyangwa Umukene: Ni Ababyeyi Babigena.....	70
Igice Cya Cumi	
Imimerere Itari Myiza Abana Barereram.....	78
Igice Cya Cumi Na Kimwe	
Ababyeyi, Ni Muhore Aho Mushyamiraniye.....	85
References	89

INTANGIRIRO

Kurera umwana byihariye ni uburyo bwuzuye kandi bwimbitse butangira mbere y’uko umwana asamwa, bukakomereza mu gihe cyo gutwita, kandi bukibandwaho cyane mu myaka ya mbere y’ubuzima bw’umwana. Kugira ngo iyi mitekerereze ijyane no kurera nk’uko bikwiye, tugomba no kuzirikana imibereho y’umugabo mbere y’uko umugore atwita—ikintu gikunze kwirengagizwa. Imyitwarire y’umugabo nk’imyaka ye, indyo, imihangayiko, gukoresha ibisindisha cyangwa ibiyobyabwenge, ndetse n’aho akorera cyangwa atura hashobora kugira ingaruka ku buzima bw’intanga ze. Ibi byose, hamwe n’uko amerewe mu mutima no mu bwonko, bishobora kugira ingaruka ku bushobozi bwo gusama no ku buzima bw’umwana uzavuka. Imirire mibi cyangwa itabi, urugero, bishobora gutera impinduka ku miterere y’uturemangingo tw’umugabo, tukazandurira ku mwana. Kugira ubushake bwo kuba umubyeyi nabyo bigira uruhare mu mibereho myiza y’umugore ndetse n’uburyo umugabo azitwara nk’umubyeyi mu gihe kizaza.

Kubera ko iki ari ikibazo gikomeye, nzakigarukaho kenshi muri iki gitabo, nizeye ko abagabo bazacyumva kandi bagafata iya mbere.

Ku rundi ruhande, imibereho y’umugore mu gihe atwite ni yo yagiye yitabwaho cyane kuva kera. Imirire ye, uruhare rwo kuruhuka bihagije, ndetse no kwirinda ibishobora kwangiza umubiri ni ingenzi cyane. Ndetse n’imibereho y’umugore mu byiyumvo no mu mutwe ni ngombwa kuko stress mu gihe atwite ishobora kugira ingaruka ku mikurire y’ubwonko bw’umwana. Kwipimisha no kugenzura uko inda itera nabyo ni ingenzi mu gukurikirana no gufasha umwana gukura neza akiri mu nda.

Inda niyo hantu ha mbere umwana abamo. Imibereho y’umugore haba ku mubiri no mu byiyumvo niyo ishyiraho ishusho y’ubwonko bw’umwana, ubudahangarwa bwe, n’imyitwarire ye y’igihe kizaza. Ni yo mpamvu umugabo agomba kumenya uburyo umubano we n’umugore ushobora kugira uruhare ku buzima bw’imbere mu nda y’umwana.

Byongeye kandi, imyaka ya mbere y’ubuzima bw’umwana—uhereye ku kuvuka kugeza ku myaka irindwi—ni igihe cy’ingenzi cyane ku mikurire y’ubwonko, gukomera mu mutima, ubumenyi bwo kubana n’abandi, n’ubuzima bwo mu gihe kirekire. Muri icyo gihe, abana bakeneye gukundwa no kurindwa n’ababita ho. Ibyo bimufasha kwiyumvamo umutekano, kugira ikizere no kwigirira icyizere, ndetse no kwiga kugenga amarangamutima yabo. Ababyeyi bagomba kurema ahantu harangwa n’urukundo, kwitabwaho, no guhabwa uburyo bwo kwiga no gukina mu mutekano. Bagomba kandi gutanga amasomo ajyanye n’imyaka y’umwana, kumwigisha ururimi, no kumuyobora bakoresheje uburyo bwiza bwo kumuhana aho gukoresha ibihano bikarishye. Iki gitabo kigaragaza ko uko umwana abayeho mu myaka ye ya mbere ari byo bizagena imiterere y’ubwonko bwe, imitekerereze ye, amarangamutima, n’imibanire ye n’abandi mu buzima bwe bwose.

IGICE CYA MBERE

KURERA UMWANA NI IKI?

Kurera umwana ni igikorwa cyo kumurera no kumufasha gukura kuva akivuka kugeza akuze. Bivuga kumwitaho mu mubiri, mu bitekerezo, mu mibanire n’abandi no mu myigire kugira ngo azagire ubushobozi bwo kwigenga no kwitwara nk’umuntu w’umutwaro. Kurera neza bivuga guha umwana ibyangombwa nk’ibiryo, aho kuba, ubuvuzi n’uburezi; kumuha urukundo, kumutera inkunga no kumwemeza ko ari mu mutekano; kumwigisha indangagaciro, kumuha imbibi binyuze mu mahame yo kumuhana; kumufasha kwiga kubana n’abandi no kumubera icyitegererezo mu myitwarire no mu byemezo. Iki gice kibaza ikibazo cy’ingenzi: Ni ryari kandi gute inshingano zo kurera umwana zitangira? Abantu baravuga bati: *“Uko wimanikira ni ko uryamamo.”* Uko witwara igihe ufotowe ni ko uzagaragara ku ifoto. Muri ubwo buryo nyine, se w’umwana ashobora kumugiraho ingaruka akiri mu bitekerezo, ataranavuka.

Niba umugabo afite indwara atavuje cyangwa ubuzima bwe butanoze igihe ashyira umugore we inda, ntakwiye gutungurwa no kubona igihingwa yateye kitarera imbuto nziza. Ibisubizo biba bihwanye n’imbuto wateye.

Imibereho ya se ndetse n’aho atuye bishobora kugira ingaruka zikomeye ku buzima bw’intanga ngabo (sperme). Ibi bigira uruhare mu bushobozi bwo gusama, mu mikurire y’uturemangingo tw’umwana, ndetse no ku buzima bwe bw’ejo hazaza (Akhatova et al., 2025). Abagabo benshi ntibishimira kumva ko imibereho yabo n’imirire yabo ishobora kugira ingaruka ku bana babo binyuze mu kintu kitwa iraswa ry’uduce tw’uturemangingo (epigenetics), ariko ubushakashatsi burabigaragaza. Itabi, umubyibuho ukabije, stress ihoraho, n’ibintu byangiza mu bidukikije byongera ibyago byo kurwara indwara zitandukanye mu bana. Nzajya mbisubiramo kenshi muri iki gitabo: imyitwarire n’imibereho niyo mpamvu nyamukuru y’ibibazo byinshi by’ubuzima tubona uyu muni.

Abana b'abakiliya banjye benshi bagaragaza imyitwarire cyangwa imiterere ababyeyi babo batabisobanukiwe. Hari n'igihe ba se babyara bashidikanya niba abo bana ari ababo koko. Ibyo byatumye ntangira kwiga iki kibazo mu buryo bwimbitse. Nyuma yo gusesengura se ndetse n'umwana, hari igihe nabwiraga abagabo bamwe – nizeye neza – ko abo bana koko ari ababo ku buryo bw'amaraso. Epigenetics ni ishami ry'ubushakashatsi rigaragaza uburyo ibintu bitandukanye mu bidukikije bishobora kugira ingaruka ku mikorere y'uturemangingo, nubwo ubwoko bwatwo butahinduka. Transgenerational epigenetics yo ireba uburyo izo ngaruka zishobora no kuraga mu myaka ikurikiraho (Vassoler, 2025). Ni agahinda kubona ko abana, nubwo nta ruhare baba babifitemo, bashobora kuvukana ubumuga bwo guhangana na stress cyangwa guhindura imyitwarire bijyanye n'ibyo bagenewe.

Ubushakashatsi bwerekana ko imibereho ya se n'imirire ye bishobora kugira ingaruka ku buzima bw'umwana binyuze mu mpinduka ku ntanga, nka DNA methylation,

histone modification, n'ibijyanye na RNA expression.

Mubyeyi w'umugabo, ndakubaza:

- Ucigatira itabi?
- Unywa inzoga?
- Ufite umubyibuho ukabije?
- Uhorana stress?
- Ukora cyangwa utura ahantu hari ibintu byangiza ubuzima?

Ibi byose byongera ibyago by'indwara no kwangiza abana bawe wahawe n'Imana. Abo bana bashobora kwikorera umutwano utari uwabo, bawusangiye nawe mu buryo batazi.

Iyo mvuga ibintu bigira ingaruka ku buzima, ndavuga imirire yawe, imyitozo ngororangingo, ihura ryawe n'ibintu bibangamira imisemburo (EDCs), n'ikoreshwa ry'itabi. Ibi byose bifitanye isano n'indwara nka diyabete yo mu bwoko bwa kabiri, umubyibuho ukabije, indwara z'umutima na kanseri (Dias et al., 2012). Ubushakashatsi buherutse bwerekanye ko ibyo bibazo bishobora no kurasirwa ku bana bawe ndetse n'abuzukuru bawe

(Donkin & Barrès, 2018; Golding et al., 2023; Johannessen et al., 2020; Li et al., 2016; Manikkam et al., 2013; Nwaru et al., 2020; Tomar et al., 2024; Zhang et al., 2022).

Imibereho ya Se n’Ubuzima bw’Uturemangingo tw’Umwana

Imyitwarire ya se w’umwana ishobora kugira ingaruka ku turemangingo tw’umwana—nubwo idahindura ADN nyirizina. Ahubwo, imico y’umugabo igira uruhare ku buzima n’ubuziranenge bw’intanga ze, bikagira ingaruka ku mikurire y’umwana no ku buzima bwe bw’igihe kirekire. Izo mpinduka zitwa epigenetic changes—ni ukuvuga impinduka mu mikorere y’uturemangingo aho kuba mu ndangagaciro zawo.

Izo mpinduka zishobora guterwa n’imirire, stress, guhumeka imyuka mibi, n’itabi. Imyitwarire mibi nka ririya, inzoga nyinshi, cyangwa ubuzima bukikijwe n’imyuka ihumanya bishobora kwangiza intanga no

kugira ingaruka ku mwana. Ibi byongera ibyago byo kurwara cyangwa kugira ubumuga bw'imikurire.

Intanga zishobora no kwangirika. Imyitwarire mibi ishobora gutera oxidative stress na DNA fragmentation. Intanga zangiritse zishobora gutera gutakaza inda, ubumuga bw'ivuka, cyangwa indwara nka autisme ku mwana.

Hari n'igihe imyitwarire mibi ishobora gutera impinduka zidasanzwe mu turemangingo (mutations). Urugero, kuba umuntu ahorana mu mwuka wa toxines cyangwa ari hafi y'imirasire, bishobora gutuma habaho impinduka zishobora kurasirwa ku mwana binyuze mu ntanga. Nubwo izi mpinduka zidasenya ADN, zishobora guhindura uko turemangingo dukora.

Ikindi kintu cy'ingenzi ni imyaka. Uko umugabo akura, ni ko ubuziranenge bw'intanga ze bushobora kugabanuka. Abagabo bakuze bafite ibyago byinshi byo gutanga intanga zifite impinduka mu turemangingo, bishobora gutera ibyago byinshi byo kuvukana autisme cyangwa schizophrenia.

Mu ncamake, nubwo imibereho ya se itahindura ADN y'umwana ubwayo, igira ingaruka ku buzima bw'intanga, bikagira uruhare mu mikurire no ku buzima bw'umwana mu gihe kirekire. Inkuru nziza ni uko guhindura imyitwarire—guhagarika itabi, kugabanya inzoga, kurya neza, kugabanya stress—bishobora kunoza ubuziranenge bw'intanga no kugabanya ibyago ku bana b'ejo hazaza.

IGICE CYA KABIRI**INSHINGANO ZIRENZE IZ'UMWIMERERE**

Papa, waba ukiri mu bitekerezo by'ikinyejana cya 19 wumva ko inshingano yawe ari ugutunga abana gusa? Kuba umubyeyi w'umugabo muri iki gihe bisaba byinshi kurushaho. Papa agomba kuboneka mu buryo bw'amarangamutima, akumva ibibazo n'ibyifuzo by'abana be, akabaha urukundo, gushimwa no kubatera inkunga. Agomba kandi kubaha umutekano w'umubiri binyuze mu biryo, aho kuba, n'imyambaro, ndetse no kubarinda ibyangiza n'ingaruka mbi zituruka hanze.

Kimwe mu nshingano gakondo z'umubyeyi w'umugabo ni ukubera abana icyitegererezo. Yitezweho kwerekana icyubahiro, gukiranuka no kugira umutima mwiza, no kwigisha guhangana na stress, amakimbirane no gucika intege. Uburyo yitwara mu rukundo, ku kazi no mu mico bimugiraho uruhare rukomeye. Papa wita ku bana agira uruhare mu buzima bwabo bwa buri muni—akabafasha mu masomo, imyitozo ngororamubiri, ibindi bikorwa

by'inyungu, no kumarana nabo umwanya w'agaciro. Niba azi gusoma no kwandika, ashobora no kubafasha mu masomo.

Umubyeyi w'umugabo w'umunyafurika akenshi agira uruhare rukomeye mu myitwarire no mu buyobozi. Ashyiraho imbibi zigaragara, yerekana ibyo yiteze kandi yigisha ingaruka z'ibyemezo bifashwe mu kuri no mu mucyo. Ashyikiriza abana indangagaciro nk'ubunyangamugayo, icyubahiro n'inshingano. Umubyeyi wize kandi ashishikariza abana kwigira no kwigirira icyizere abinyujije mu kubaha amahitamo ajyanye n'imyaka yabo, kubigisha gukemura ibibazo no kubaka imyitwarire irangwa n'ubwigenge n'inshingano. Afasha umugore mu kurera abana, bagafatanya nk'ikipe kugira ngo babere abana icyitegererezo cy'urugo ruzira amakimbirane.

Abagabo bitezweho kandi kuyobora mu bijyanye n'iyobokamana n'umuco. Bigisha abana babo imigenzo y'umuryango, indangagaciro n'umurage, babafasha gukura bafite imyitwarire myiza no gukomera ku mucu.

Uko abana bakura, inshingano z’umubyeyi w’umugabo zirahinduka, ariko urukundo rwe, kutagendera ku marangamutima n’inkunga bihoraho ni ryo shingiro ry’ububyeyi bufite ireme.

Na none kandi, inshingano za gakondo z’umubyeyi w’umugore zishingira ku muco, ku miterere ye bwite, n’ibikenewe mu muryango. Umubyeyi w’umugore atanga inkunga mu byikumvo binyuze mu rukundo, kwita ku bana no kubatera inkunga. Afasha abana be gukura mu by’amarangamutima, kandi ahora yiteguye kubumva no kubaba hafi. Yita kandi ku mirire, isuku, ubuvuzi no gutuma urugo ruba ahantu hizewe kandi hasukuye.

Ababyeyi b’abagore bitoza guha abana indangagaciro nk’ubwubahane, ubunyangamugayo n’impuhwe. Batera abana ikizere binyuze mu magambo n’ibikorwa byiza, bakabafasha kubaka ubushobozi bwo kugira imyanzuro myiza n’inshingano. Baba ku isonga mu gufasha umwana gukura mu bwenge—bamushishikariza kwiga, kumenya byinshi no kumwigisha ubuzima bw’imibanire n’ubushobozi bwo gufata ibyemezo.

Mama wanjye yanyigishije uko ukoreshwa igihano mu rukundo. Yari umuntu wuje urugwiro n’impuhwe, ariko unafite ihame ryo gushyiraho amategeko. Yafatanyaga urukundo no gushyiraho imbibi, yanyigishije kugenzura amarangamutima anyujije mu kumva ingaruka z’ibyo nakoze. Yari nyina nyakuri w’umunyafurika.

Abagore kandi bafasha abana mu gukura mu mibanire. Iyo batagize uruhare, abana benshi batagira icyizere cyo kugirana ubucuti cyangwa gukemura amakimbirane. Mama yigisha kwishyira mu mwanya w’abandi, gukorana n’abandi no gukemura ibibazo mu mahoro, byose abikora yita ku bumwe bw’umuryango n’imico yawo.

Nshimira abagore benshi bashishikariza abana kwigenga—bakabaha amahitamo ajyanye n’imyaka, bakabigisha inshingano no kubategura ku buzima bwo gukura. Abo babyeyi kandi basigira abana indangagaciro z’iyobokamana n’umuco, bigatuma urugo rwabo ruba ububiko bw’ubwenge.

Icyakora, nubwo izi nshingano za gakondo ari ingenzi, ababyeyi benshi muri iki gihe usanga bibagora

kuzigeraho, kabone nubwo baba babishaka. Ibi si amakosa yabo gusa. Ubukene n'ibikenewe byo muri iki gihe bituma ababyeyi benshi bashyira imbaraga mu kubona iby'ibanze gusa, ntibabashe kubona umwanya n'imbaraga zo kurera abana nk'“abami n'abamikazi” uko bikwiye.

IGICE CYA GATATU

KWIRINDA GUKOSORA IBITAGIKOSOHWA

Waba warigeze kwitegereza uko abahinzi bitegura neza mbere yo gutera imbuto? Bazi neza ko gutegura neza bituma babona umusaruro mwiza. Reka nkwibutse ibyo abahinzi bakora: Bahitamo imbuto zifite ireme, zitandura indwara kandi zijyanye n’ubutaka n’ikirere cyaho. Hari abazitera imiti irinda udukoko cyangwa indwara, abandi bazinika mu mazi kugira ngo zororoke vuba, bagerageza uko zitera, banatoranya izifite intege nke cyangwa zangiritse.

Abahinzi banategura ubutaka: bakuramo ibyatsi n’imyanda kugira ngo bagabanye indwara n’amarushanwa y’ibimera. Basonera ubutaka kugira ngo umwuka, amazi n’imizi bitemberemo neza. Bananira ubutaka kugira ngo amazi asakare kimwe, cyane cyane iyo bakoreshamo uburyo bwo kuhira. Mbere yo gutera, bagerageza ubutaka bagapima intungamubiri zabwo

kandi bagakoresha ifumbire ya kamere cyangwa imiti. Hari n'abashyiraho uburyo bwo kuhira cyangwa bagakoresha ibyatsi bikingira ubutaka kugira ngo amazi adatakara ndetse n'udukoko ntitwiyongere.

Kuki abahinzi bishyiraho izo mbaraga zose? Ni uko bazi ko gutegura neza bitanga umusaruro mwiza. Iyo babyirengagije, bashobora guhomba umusaruro, imyaka igapfa cyangwa bagahomba amafaranga. Ubutaka n'imbuta biteguye neza bitanga ibimera bikomeye kandi bizima. Gutegura neza bifasha kwirinda indwara n'udukoko, bikagabanya gukoresha imiti ihenze kandi bigatuma habaho kuzigama igihe n'amafaranga.

Nk'uko abahinzi bitegura mbere yo gutera, ababyeyi nabo bagomba kwitegura mbere yo kugira abana. Niba wifuza ko umwana wawe azaba "umwami cyangwa umwamikazi," ugomba kubanza gutunganya imibereho yawe, ubuzima bwo ku mubiri no mu mutwe, n'amarangamutima yawe mbere y'uko usama. Kwirengagiza ibi bishobora gutuma havuka ibibazo

bikomeye bisaba gukosorwa bikomeye nyuma yo kubyara.

Amakosa Atagikosoka

“Garbage in, garbage out.” Tekereza wasohoye impapuro 1,000 z’inyandiko irimo amakosa 15 utabonye. Ubu ufite amakosa 15,000 yo gukosora—kuri buri rupapuro. Ibyo ni ugupfusha ubusa igihe, imbaraga n’amafaranga. Ushobora gutekereza uko wakemura icyo kibazo, ariko buri buryo bufite ingaruka.

Uburyo bumwe ni ugukosora version ya mudasobwa ukongera gusohora izindi nshya, ukajugunya izambere. Uburyo ubwa kabiri ni ugukosora intoki—rupapuro ku rundi. Jye nigeze guhura n’iki kibazo mu 2007. Nari narangije gukosora igitabo cyanjye *Never Take Your Spouse for Granted* nsaba umunyamabanga wanjye gusohora kopi 1,000. Ariko yibagiwe gushyiramo impinduka zanyuma.

Igihe igitabo cyari cyatangiye gukwirakwizwa mu ma bookshop, umwe mu banyamakuru b'iyobokamana yakigaragarije kuri televiziyo. Ariko ubwo namenyaga amakosa, nahamagaje kopi zose. Naciye impapuro zo gukosora, nzishyira hejuru y'amakosa, nshyiraho n'ikimenyetso kinini ku rupapuro rwa mbere cyerekana kugabanuka kwa 40% no gusobanura ikibazo cyabaye mu icapiro.

Nubwo nyuma nabashije gushyira version ikosowe kuri mudasobwa, nahisemo kwemera amakosa mu ruhame. Muri ubwo buryo, tugomba kumenya ko uko twitegura mbere no mu gihe cyo gusama bigira ingaruka zikomeye ku buzima bw'abana bacu. Kandi kwitegura ni byiza kurusha gukosora.

Mwibuke kwirinda kurera abana bafite ibibazo bikomeye

Mbere yo gushaka, menya genotype n'itsinda ry'amaraso yawe. Mu mwuga wanjye wo gutanga inama,

nahuye n’abagabo benshi basezeyeye mu ngo zabo bitewe n’impamvu zitumvikana neza—nk’impagarara z’inda, ubumuga bw’abana cyangwa imyitwarire idasanzwe. Abagore bamwe babishyiraga ku marozi cyangwa ku mateka y’abo bashakanye, ariko nyuma y’imyaka, basobanukiwe ko byaturutse ku kutahuza kwa genotype cyangwa itsinda ry’amaraso. Benshi baravuze bati: *“Iyo mbimenya mbere...”*

Genotype z’ababyeyi n’amaraso bishobora kugira ingaruka ku buzima bw’umwana no kwerekana niba ababyeyi bahuje. Kugenzura compatibility y’amaraso, cyane cyane ku bijyanye n’icyitwa Rh factor, ni ingenzi cyane mu kwirinda indwara yitwa *Haemolytic Disease of the Newborn (HDN)*. Abashyingiranwa bagomba kugenzura genotype zabo, cyane cyane ku byago byo kwandura *sickle cell*.

Ibibazo by’imiterere y’uturemangingo cyangwa indwara zandurirwa mu muryango nabyo bishobora kuva ku babyeyi. Kugisha inama y’abahanga mu miterere (genetic counselling) birakenewe cyane ku

bashyingiranwa bafite amateka y'indwara mu miryango, abakekwaho gutwara udukoko cyangwa batari bahuje ku bijyanye na Rh factor.

Ingero zifatika:

- $O + O = O$ gusa
 - $A (AO) + B (BO) = A, B, AB, \text{cyangwa } O$
 - Umugore Rh^- + umugabo Rh^+ = umwana Rh^+ → HDN ishobora kuba ariko iraburizwamo n'urukingo rwa Rho(D)
-

Urutonde rw'ubushobozi bwo kubyara abana batanduye sickle cell:

- $AA + AA = 100\% AA$ (bizima)
- $AA + AS = 50\% AA, 50\% AS$ (bizima)
- $AS + AS = 25\% AA, 50\% AS, 25\% SS$ (biteye impungenge)
- $AS + SS = 50\% AS, 50\% SS$ (bikomeye cyane)
- $SS + SS = 100\% SS$ (bikabije cyane)

Uretse *sickle cell*, abana bashobora kuraga n'izindi ndwara nka *cystic fibrosis*, *Tay-Sachs* cyangwa *Down*

syndrome. Hari n'ingaruka zituruka ku miryango myinshi y'uturemangingo (*polygenic traits*)—nko kuba muremure, uruhu, ubwenge—bishobora guterwa n'uturemangingo twinshi no kuvangwa n'ibidukikije.

Mu iyanama y'imiterere (genetic counselling), dukoresha amateka y'imiryango n'amashusho y'amasano (genograms) kugira ngo dufashe abashyingiranwa kumva ibyago bashobora kuraga abana babo. Kwitegura, ndongera, ni ingenzi cyane kurusha gukosora.

IGICE CYA KANE

ISUZUMA RISHYINGIYE KU BITEKEREZO BIFITE

ISHINGIRO

Wigeze wibaza impamvu se w’umwana ukiri muto ashobora kubyara umwana ufite ubumuga bwo mu mikurire y’ubwonko (neurodevelopmental disorders)? Ukuri ni uko n’abasore bashobora kubyara abana bafite bene ibi bibazo kubera ihuriro ry’imiterere y’uturemangingo, ibidukikije n’imibereho.

Bimwe mu bibazo by’ubwonko nk’Autisme (ASD) cyangwa intege nke mu mitekerereze (intellectual disabilities) bishobora kuragwa. Niba umugabo atwaye impinduka z’uturemangingo (mutations) zidasanzwe, ashobora kuzisigasira mu mwana. Hari n’ubundi buryo izi mpinduka zishobora kubaho (de novo mutations), ni ukuvuga ko zibaho ubwazo mu ntanga cyangwa mu gihe inda ikivuka n’iyo nta mateka y’indwara mu muryango ahari.

Ikizwi nk’icyongera ibyago ni imyaka y’umugabo— akenshi yabarwa guhera ku myaka 40 kuzamura. Uko

umugabo akura, intanga ze zishobora gutwara impinduka nyinshi kubera ihindagurika ry'uturemangingo n'impinduka zishingiye kuri epigenetics. Ibi bigira ingaruka ku mikurire y'uturemangingo tw'umwana bikongera ibyago by'indwara zitandukanye.

Ariko n'abagabo bakiri bato bashobora kugira uruhare mu buzima bw'umwana binyuze ku myitwarire mibi cyangwa kwanduzwa n'ibidukikije. Urugero, umugabo wahuye n'uburozi bwo mu buhinzi, ibyuma biremereye cyangwa imirasire ishobora kwangiza uturemangingo tw'intanga. Imirire mibi mbere yo gusama nayo yangiza intanga ikagira ingaruka ku mikurire y'ubwonko bw'umwana.

Imyitwarire nko kunywa itabi, inzoga cyangwa ibiyobyabwenge igabanya ubuziranenge bw'intanga, bityo ikongera ibyago byo kugira abana bafite ubumuga bw'imikurire. Niba se w'umwana afite indwara zandurira mu mibonano mpuzabitsina, bishobora no kugira uruhare ku bibazo by'ubwonko umwana yavukana.

Uko umugabo akomeza gukura, intanga ze zikomeza kwiyongera (division), ibyo bikongera ibyago

by'impinduka mu turemangingo (DNA mutations). Indwara nka autisme, schizophrenia na bipolar disorder byose bifitanye isano n'imyaka myinshi ya se. Nubwo imyaka myinshi ya nyina isanzwe ihuzwa n'indwara z'imyirondoro nk'iyi bita *Down syndrome*, ubushakashatsi bushya bwerekana ko n'abagabo bakuze bashobora kugira uruhare mu gutera indwara nka *Klinefelter syndrome (XXY)* na *Noonan syndrome*.

Ubushakashatsi bugaragaza kandi ko se ushaje ashobora kubyara abana bafite ADHD, ubumuga bwo kwiga n'autisme, ndetse n'ibyago byinshi byo gutakaza inda kubera kwangirika kwa DNA y'intanga. Harimo no kongera ibyago byo kuvuka imburagihe, uburemere buke bw'umwana, kanseri y'abana, ubumuga bw'umutima n'indi ndwara nka diyabete.

Ese se w'umwana niwe wenyine ugira uruhare?

Oya rwose. Nubwo ubuzima bwa se ari ingenzi cyane, kwita ku buzima bw'umugore utwite nabyo bigira uruhare rukomeye ku mikurire y'ubwonko bw'umwana.

Ibibazo nk'indwara zifata umugore utwite, stress, imirire mibi cyangwa ibibazo mu gihe cyo kubyara (nko kubura umwuka cyangwa kuvuka imburagihe) bishobora gutera ubumuga bw'imikurire y'ubwonko. Kurera bitangirira ku bantu bombi, si umwe gusa.

Inkuru nziza ni uko hari uburyo bwo kugabanya ibyo byago.

Abagabo bose bashobora kurinda ubuzima bw'intanga zabo binyuze muri ibi bikurikira:

- Kurya indyo irimo antioxidants nyinshi
- Gukora imyitozo ngororamubiri kenshi
- Kwirinda kunywa itabi, inzoga n'ibiyobyabwenge
- Gusuzuma imiterere y'uturemangingo no kugisha inama mbere yo kubyara, cyane cyane ku bageze mu zabukuru

Hari n'abagabo bamwe bahitamo kubika intanga zabo bakiri bato kugira ngo bazazikoreshe mu gihe kizaza. Nubwo atari ngombwa kuri bose, ni amahitamo ku bafite impungenge.

Ubusobanuro buhumuye

Bamwe mu bagabo bakiri bato bansanga bafite abana bafite autisme (ASD) bafite impungenge. Bambaza bati: *“Ese umugore wanjye yaba yaramuciye inyuma agasambana n’umusaza?”* Mbahakanira ntashidikanya. Umugabo muto n’umugore muto bashobora kubyara umwana ufite autisme. ASD ni indwara igoye kumva, ikomoka ku mpamvu nyinshi—zishingiye ku turemangingo no ku bidukikije. Nubwo ishobora kuragwa, ishobora no kuboneka mu miryango nta mateka y’iyo ndwara bafite.

Ibintu nk’imyaka y’ababyeyi, ihura n’uburozi cyangwa ibibazo mu gihe cyo gutwita bishobora kongera ibyago, ariko siyo ntandaro nyamukuru. Ntibivuga ko ababyeyi bakiri bato batabyara abana bafite ASD.

Rero, reka ngire icyo mvuga kigabanya ubwoba. Muri iki gihe, hari abagore bakiri bato bashyingirwa abasaza bakabyarana nabo. Ibyo birashoboka rwose. Ariko hari abasaza bagira impungenge ko abana babo bazavukana ibibazo by’ubuzima. Nubwo ibyago bimwe byiyongera

n’imyaka, biracyashoboka ko umugabo mukuru ashobora kubyara umwana muzima.

Itandukaniro n’abagore ni uko abagabo bakomeza gukora intanga mu buzima bwabo bwose. Ariko, ubuziranenge bw’intanga buragabanuka uko imyaka ihita. Umugabo ukuze ashobora kugira:

- Intanga nkeya
- Intanga zidatembera neza
- Kwiyongera kwa DNA yangiritse

Ibi ntibivuga ko kutabyara cyangwa kugira umwana urwaye ari byo byanze bikunze bizaba. Niba umugabo afite ubuzima bwiza muri rusange, ashobora kubyara umwana muzima nta nkomyi.

Ese abasaza bakora iki?

Nubwo ibyago bihari, birashobora gucungwa. Niba uri umugabo ukuze ushaka kubyara umwana muzima, dore inama:

- Jya ubaho ubuzima buzima: urye neza, ukore imyitozo kandi usinzire bihagije

- Irinde uburozi: ntunywe itabi cyangwa ibiyobyabwenge
- Gabanya inzoga: kunywa birenze bigira ingaruka ku ntanga
- Gira umutekano w'amarangamutima: stress ihoraho yangiza ubuzima no kororoka
- Fata ibirinda intanga: Vitamine C, E na zinc bigabanya kwangirika kwa DNA y'intanga

Gukurikiza izi nama byongera amahirwe yo kubyara abana bazima—even mu zabukuru. Ariko hejuru ya byose, jya ujya mu buganga kugisha inama z'uturemangingo no gukora isuzuma ryo gusama kugira ngo umenye ibishobora gukoma mu nkokora.

IGICE CYA GATANU

INAMA KU BABYEYI B'ABAGORE BASHYA

Kurera umwana bwa mbere nk'umubyeyi mushya biragoye. Nubwo ntari umugore, uko twitaye ku bana bacu byatumye numva meze nk'umubyeyi igihe nareraga uruhinja rw'amezi atandatu muri 2005 hamwe n'abavandimwe be babiri bakuru, ndetse no mu mwuga wanjye wo gufasha abagore benshi bakibyara. Nk'umutoza wita ku buzima bwo kwiyitaho, inama yanjye igufi kuri wowe ni iyi: witondere kwiyitaho. Ibi si ubwikunde. Fata igihe gihagije cyo kuruhuka. Sinzira igihe umwana asinziriye. Rya indyo yuzuye kandi unywe amazi ahagije. Emeza ubufasha butangwa n'umuryango cyangwa inshuti; ntukibwire ko byose ugomba kubikorera wenyine. Kwirinda kwihindura umuntu ushaka gukora ibintu byose neza ku buryo butagira inenge ni ingenzi. Ndifuzza kandi kugusaba ko wakwizera uburyo wumva ibintu. Nta buryo bumwe bukwiye bose mu kurera, bityo gerageza kwizera ibitekerezo byawe. Jya ubirebera mu

mucyo, wifashishe ubushishozi. Ibi bizagufasha kwirinda guhangayikishwa n'inama zinyuranye zidahuye. Nubwo abantu benshi bashobora kuguhitiramo ibyo gukora, kora ibikwiriye wowe n'umwana wawe hashingiwe ku mucu wawe no ku mutekano.

Nubwo bamwe mu babyeyi bashya b'inkumi baba bahugiye mu gukora gahunda ikomeye, inama yanjye ni ukugira uburyo bworoshye bwo kubaho. Ndasobanukiwe ko abana bakunda gukura bafite gahunda zihamye; ariko gerageza kudahangayikishwa n'amategeko akomeye y'amasaha n'icyo gukora. Ahubwo, tega amatwi ibimenyetso umwana wawe akwereka bijyanye no kurya, gusinzira no kuruhuka. Igihe nk'iki kirashimisha.

Ku bijyanye no kurya, haba binyuze mu konka cyangwa kuvangira umwana ifu, icy'ingenzi ni uko umwana ahabwa intungamubiri. Ntukigereranye n'abandi ku bijyanye no konsa; buri muntu afite uburyo bwe. Twayoboye ubuzima bwo kurera umwana wacu wa mbere ubwo jye n'umugore wanjye twatangiraga amasomo ya master. Nta nkunga twari dufite; nti

twashoboraga gukodesha umukozi wo mu rugo cyangwa umunyamabanga. Nari mfite inshingano zo gusiba amasomo kugira ngo mbe hafi y'umwana mugihe umugore wanjye yitabiraga amasomo ye ya veterinary medicine—ari na porogaramu ikomeye cyane. Yakuragaho amata akayashyira mu icupa, nanjye nkayashyushya igihe umwana yari abikeneye. Nize no kumukurutira nyuma yo kumunyweshya amata kugira ngo agabanye umwuka mu nda n'imisonga. Nibuka icyo gihe nk'igihe cy'agaciro kuri jye.

Mu gusoza, ndashaka kugusaba gushyira imbere guhanga umubano wihariye n'umwana wawe no kumworohereza. Gukoranaho uruhu ku ruhu bifasha kubaka ubusabane bukomeye kandi bigafasha kugenzura ubushyuhe bw'umubiri bw'umwana. Gupfunyika umwana mu gitambaro gifite ubushyuhe nabyo bifasha kugira ibitotsi byiza. Nubwo hari abagore bifashisha telefone cyangwa radiyo mu kuruhura abana babo, inama yanjye ni ukubagenda buhoro cyangwa kubaririmbira.

Kurera Abana Bato (Imyaka 1–3)

Abana bari hagati y’imyaka 1 na 3 bashobora kuba abanezereza ariko rimwe na rimwe bakagorana. Gukurikiza gahunda ihamye, gushyiraho amategeko asobanutse, gushimira imyitwarire myiza, kuyobya ibitekerezo bibi, guhana mu buryo butababaza, guteza imbere kwigenga, kwigisha kugenzura amarangamutima, kwihangana ku byiyumviro bikabije (tantrums), kugabanya igihe bakoresha ku bikoreho by’ikoranabuhanga, no kubereka urukundo rutagira inshingano—byose ni uburyo bukora neza.

Gahunda zihamye zituma umwana w’uruhinja yumva atekanye, naho amategeko agomba kuba magufi kandi yumvikana. Gutanga ibihembo byiza no gukora ibikorwa bisimbura ibibi bifasha kwirinda imyitwarire itifuzwa. Guteza imbere ubwigenge no kwiyitaho bifasha kubaka icyizere. Kwigisha abana b’uruhinja kugenzura amarangamutima no kwihangana bifasha kumva no gusubiza ku byo bakeneye.

Kurera Abana mu Muryango Utagira Ibitereko Byiza

Kurera abana mu muryango cyangwa ahantu hari umwuka mubi biragoye, ariko hari uburyo bwo gutuma biyumva batekanye, bashyigikiwe, kandi bafite imbaraga zo kwihangana. Ibyo birimo gushyira imbere umutekano w'umubiri n'uw'amarangamutima, kubaka umubano ukomeye, guteza imbere kwihangana no kwiyubakira ikizere, kurinda ubuzima bwo mu mutwe, kubigisha uburyo bwo gukemura amakimbirane, gushishikariza kwiga no kwihugura, no kubahuza n'abandi mu muryango mugari.

Iyo ababyeyi batunganya ahantu hatekanye, bigisha kwitwararika ku bintu biri imbere yabo, kandi bakagabanya uko abana bahura n'urugomo, bashobora kububakira urugo ruhamye rufasha abana kugira amarangamutima adahungabana n'ubushobozi bwo guhangana n'ibibazo. Gutanga urugero rwiza no kumenya ibimenyetso by'ihungabana nabyo bifasha abana kumenya kwitwara no kugira ejo hazaza heza.

Kwirinda kurera abana nk’uko indege ya kajugujugu igenda hejuru yabo (helicopter parenting) mu gace karimo akaga ni ibintu bigoye. Akenshi, ababyeyi baba bashaka kurengera abana cyane mu gihe hari urugomo, ubukene, cyangwa umutekano muke. Ariko, kubarengera cyane bishobora kubangamira ubushobozi bwabo bwo kwihangana, kwigenga no gukemura ibibazo. Ni ngombwa kubahuza n’ubuzima nyakuri ariko ukanabarinda.

“Daddy, reba, reba!” — ayo niyo magambo umukobwa wanjye wari ufite imyaka ibiri gusa yavugaga, yerekeza urutoki hasi. Iyo narebye, nasanze hari abana bato bateraga amabuye kuri we. Twabaga mu nzu y’amagorofa, aho imiryango y’imbere yabaga ifunze, ariko umuryango ujyana kuri balconi wabaga ufunze ku buryo hadukamo umwuka. Niho yari ahagaze yegamiye ku byuma ubwo abo bana bamuteraga amabuye.

Uko Wabwira Abana Ibijyanye n’Umutekano

Tanga amakuru ku byago, usobanure ingorane zishobora kubaho, ukine nabo uburyo bwo kwitwara mu ngorane, kandi ushyireho amategeko ajyanye n’imyaka yabo. Shishikariza abana kwigenga buhoro buhoro— ubemerere gufata ibyemezo no gukemura ibibazo byoroheje ubwabo.

Fasha abana kugira imbaraga mu mutima binyuze mu myitozo yo gukemura amakimbirane, gushaka inama ku bantu bizewe, no kwitabira siporo. Kura ubushobozi bwo gutekereza neza no gukemura ibibazo ubabaza ibibazo bifunguye, ubigisha gupima ingaruka. Kurinda abana ntibivuze kubagenga, ahubwo ni ukubashyiriraho umurongo bamenya ko bashobora kubaho batekanye.

Kugenzura aho Kuba Kugenzura Buri Kantu

Tegura itsinda ry’abantu bizewe abana bashobora kwishingikirizaho. Uko bagaragaza gukura mu bwenge no

mu nshingano, jya ubaha ubwisanzure bujyanye. Koresha ikoranabuhanga mu buryo butabangamira kandi ubabere urugero rwiza mu kwihanganira ibibazo no gukemura amakimbirane mu buryo butuje kandi bwubaka.

Intego ni ukurinda abana ariko utabangamiye ubushobozi bwabo bwo gufata ibyemezo, kwihindura, no gutera imbere mu bibazo. Ingimbi n’abangavu bo mu bice bikakaye bahura n’imbogamizi zihariye—nko gushorwa mu ngeso mbi, urugomo, n’ubuzima budafite amahirwe. Kugira ngo babashe kwinjira mu buzima bw’abantu bakuru:

- Batoze ubwigenge butekanye
- Bagereranye uburinzi n’ubwisanzure
- Bashishikarizwe gufata ibyemezo byiza
- Bagire uburyo bwo kuganira n’ababyeyi budafite urubanza
- Bigishwe ubumenyi ngiro n’uburyo bwo kubaho neza
- Bafashwe kugira abantu bafite aho babarizwa

- Bigishwe kwirinda igitutu cy'inshuti no kwirinda kwinjira mu matsinda y'urugomo

Gutoza Ubwigenge Bufite Ubwenge

Reka abana bajye bafata ibyemezo byinshi ariko ubasobanurire ingaruka zabyo. Abahungu bashishikarizwe gukorana ubushishozi, kwimenya no kwirinda, naho abakobwa bigishwe kwihagararaho.

Ihanganire amakosa yabo, ntubakurikire ku kantu kose. Batoze gufata ibyemezo binyuze mu bibazo bifatika, kubazwa inshingano no gupima ingaruka. Gira ibiganiro bifunguye utabacira urubanza, ubashyigikire mu kugaragaza amarangamutima yabo batiriwe bashaka gushimisha abandi.

Shyigikira imibanire myiza, ubahuze n'abatoza beza, ubafashe kumenya aho babarizwa, no kubamenyesha abantu batekanye. Ibyo byose bizabafasha gukura bafite ubumenyi ngiro n'ubushobozi bwo gutekereza neza no kwifatira ibyemezo.

Kurera mu Isi y'iki gihe mu Mico Itandukanye

Kurera muri iki gihe bijyana n'amahirwe n'ibibazo. Ababyeyi bahura n'imbogamizi z'igihe cy'ikoranabuhanga aho bagomba guhuza igihe abana bamara kuri ecran, imbuga nkoranyambaga, n'umutekano kuri murandasi n'ibikorwa byo mu buzima busanzwe. Ababyeyi b'iki gihe barushaho kwitabira no kugira uruhare rugaragara mu buzima bw'abana babo, bashyira imbere ubwenge bw'amarangamutima n'impuhwe.

Kunga ubumwe hagati y'akazi no kwita ku bana bitera ibibazo by'uburinganire hagati y'akazi n'ubuzima bwite. Ubukangurambaga ku buzima bwo mu mutwe buragenda bwiyongera, ariko umunaniro w'ishuri n'ingaruka z'imbuga nkoranyambaga bishobora kugira ingaruka ku buzima bwo mu mutwe bw'abana.

Imiterere y'imiryango irahinduka, aho hari ubwiyongere bw'imiryango ivanze n'abagabo bagenda bagira uruhare

runini mu kwita ku bana. Umwihariko wo gushaka kuba ababyeyi beza kurusha abandi nawo uranengwa kuko ushyira igitutu gikabije ku babyeyi bitewe n'ibipimo bidashoboka n'amakuru menshi cyane atangwa ku mbuga nkoranyambaga.

Kugira aho umuntu ahurira n'indi mico n'uburyo butandukanye bwo kurera byatumye habaho gutekereza byagutse no kwihanganira ibitandukanye. Ababyeyi n'abana bashobora kumva bananiwe bitewe n'igitutu cy'amasomo menshi n'ibikorwa by'inyongera.

Imyitwarire yo kurera itandukana bitewe n'amateka, imyemerere, imico y'abantu n'ubukungu.

- Imico y'Iburengerazuba (nk'i Burayi na Amerika) ishyira imbere ubwigenge, kwivuga, imyitwarire myiza n'amasomo atangizwa n'umwana, imiryango migufi n'itangira vuba rya gahunda zo kurera.
- Imibereho y'Aziza y'Iburasirazuba, irimo Ubushinwa, Ubuyapani na Koreya y'Epfo, iha

agaciro imyitwarire, kubaha abakuru no gutsinda mu myigire.

- Imico y’Abanyafurika iha agaciro umuryango mugari, uruhare rw’abavandimwe n’imyitwarire ishingiyeye ku rukundo ariko inigisha.
- Imico yo mu Burasirazuba bwo Hagati irangwa n’imiryango ifitanye isano ya hafi, ibarizwa mu nzu imwe, yibanda ku myigishirize y’imico, iyobokamana n’indangagaciro.
- Abasangwabutaka (Indigenous) bo bareze abana mu buryo bukwiye, batabaye babagoteje cyangwa bababwiriza cyane.

Irinde Kuba Umubyeyi Wameze nka Electric Eel

Kurera nk’electric eel (inzoka itanga amashanyarazi) bivuga imyitwarire idahwitse, irimo gukabya, cyangwa iteye ubwoba—nk’uko iyo nzoka itungurana mu myitwarire yayo. Uzi ko electric eel itanga amashanyarazi

atunguranye, igira imyitwarire itunguranye kandi ishobora kuba iteye inkeke.

Niba uri umubyeyi ushobora gutungurwa no gusohora amarangamutima cyangwa ibihano bikabije mu gihe cyose, ugomba kwibaza niba utagomba kugisha inama kugira ngo usobanukirwe impamvu n'inkomoko yabyo.

Kutagira umurongo uhamye—aho uba utuje mu kanya kamwe ukaba inabi mu kanya gukurikiyeho—bishobora kugaragaza ko hari ibitekerezo, amarangamutima, imyitwarire cyangwa amateka bikugiraho ingaruka.

Nahuye n'ababyeyi bakoresha uburyo "butunguranye" mu guhana cyangwa kuyobora abana, nko gukoresha amagambo akarishye, gutera ubwoba, kugenda babacunga bucece, cyangwa kubakoresha amarangamutima—maze nsanga akenshi baragize ubwana bubi cyangwa barahuye n'ihungabana.

Rero, niba ubona ko abana bawe bagufiteho ubwoba buhoraho, aho bumva ko bagomba kuba maso igihe cyose bategereje "umuhondo"—ushobora kuba uri

gushyira ishingiro ku kintu kizatuma barwara ibikomere bizamara ubuzima bwabo bwose.

Ibikwiye Kwirindwa mu Gihe Cyo Gutwita

Mu gihe cyo gutwita, mbona abagore benshi bishora mu bintu bibashyira mu kaga. Rimwe na rimwe nibaza niba basobanukiwe uburyo imyitwarire yabo ishobora kugira ingaruka ku mwana utaravuka ndetse no ku buzima bwabo ubwabo. Kugira ngo arinde ubuzima bwe n’ubw’umwana uri gukura mu nda, umugore ugitwite agomba kwirinda ibikorwa n’imyitwarire imwe n’imwe.

Urugero, sintegereje kubona umugore utwite ari ahantu hafite umwuka wanduye cyane, nko hafi y’inganda cyangwa ku mihanda irimo imodoka nyinshi. Bagomba kumenya ko kuba ahantu harangwa n’umwuka wanduye bifitanye isano no kubyara hakiri kare, umwana uvuka apima bike, ndetse no guhungabana mu mikurire bitewe n’ibinyabutabire byangiza baba bahumeka.

Muri ubwo buryo nyine, abagore bagomba kwirinda kujya ahantu hashobora kubamo imirasire (nk'ibyumba byifashishwa mu gufotora X-ray) batarinze umubiri wabo, kuko imirasire ishobora gutera ibibazo bikomeye mu mikurire y'umwana, cyane cyane mu gihembwe cya mbere cy'inda.

Ndemera ko umugore utwite agomba gukora, ariko ahantu hateraniye abantu benshi kandi hadasukuye—nko ku isoko rihora ririmo umwanda cyangwa indwara—agomba kuhatinya. Turabizi ko ahantu nk'aho hari ibyago byinshi byo kwandura indwara nka grippe, COVID-19 n'indwara zitera kubera ibiryo byanduye—zose zigira ingaruka mbi ku myitwarire y'inda.

Nanone, umugore utwite ushobora gusura ahantu hahanamye cyane—nk'imisozi cyangwa uturere turi ku butumburuke burenze urugero—ashobora guhura n'ikibazo cyo kubura umwuka uhagije. Ibi bishobora kugira ingaruka ku mubyeyi ndetse n'umwana, bikaba byatera gukura kw'umwana ku buryo budahagije cyangwa ibibazo by'umuvuduko w'amaraso.

Itabi, Inzoga n’ibiyobyabwenge

Biragenda bisanzwe kubona abagore batwite banywa itabi, rimwe na rimwe bari kumwe n’abagabo babo. Ndabamenyesha ko kunywa itabi no guhumeka umwotsi w’abandi banywa itabi byongera ibyago byo gukuramo inda, kubyara mbere y’igihe, kuvukana ibiro bike, ndetse n’ibibazo byo guhumeka ku mwana wavutse.

Inzoga nazo ni kimwe. Kunywa inzoga mu gihe cyo gutwita bishobora gutera indwara yitwa Foetal Alcohol Spectrum Disorders (FASD)—ikaba itera ubumuga bwo mu mutwe no ku mubiri.

Abagore benshi bari mu myaka ya za 20 bifashisha ibiyobyabwenge by’imyidagaduro mu gihe batwite. Bagomba kubihagarika kuko bibangamira imikurire y’ubwonko bw’umwana, bikatera ubumuga, ndetse bikongera ibyago byo gupfa kw’umwana ataravuka cyangwa kuvukana ububata ku biyobyabwenge.

Imiti itagenwe na muganga

Abagore benshi batwite baba barigize abaganga ku giti cyabo, bagafata imiti uko bishakiye. Kunywa imiti cyangwa ibinyabutabire bidasanze mu gihe cyo gutwita bishobora kwangiza umwana uri gukura, kimwe n’uko gukoresha ikawa nyinshi bishobora gutuma inda ivamo cyangwa umwana akavuka afite ibiro bike.

Kwirinda Imirimo Iremereye no Kuruhuka Bihagije

Hari abagore bagize ibibazo byo gukuramo inda inshuro nyinshi. Muganga yabasabye kuryama ngo baruhuke, ariko bagasubira mu rugo bagakora imirimo iremereye— barongera basubira ku byago! Gukora cyane cyangwa guterura ibintu biremereye byongera igitutu ku mubiri, bikongera ibyago byo gukuramo inda cyangwa kubyara mbere y’igihe, cyane cyane mu byumweru bya nyuma by’inda. Buri mugore utwite akwiye kwirinda ibyo.

Abagore batwite babura ibitotsi bihagije cyangwa barangwa na stress ikabije bagomba kumenya ko ibyo

bishobora guhungabanya ihame ry'imisemburo mu mubiri. Ibi byongera umuvuduko w'amaraso kandi bigira ingaruka mbi ku mikurire y'umwana uri mu nda.

IGICE CYA GATANDATU**UBUSHOBOZI BW'AMATA Y'UMUBYEYI MU KURINDA
NO GUTEZA IMBERE UBWUZIMA BW'UMWANA**

Amashereka ni ingenzi cyane mu mikurire n'ubuzima bwiza bw'umwana. Afasha mu mikorere y'ubwonko, mu gutuza amarangamutima, no mu mikurire y'umubiri. Ashimangira ihuriro ry'uturemangingo tw'ubwonko, atanga amavuta ngengabuzima akenewe cyane, agira uruhare mu miterere ya ADN (epigenetics), arinda umubiri binyuze mu kongera ubudahangarwa, afasha mikorobi nziza zo mu mara gukura, anateza imbere imyitwarire n'imibanire myiza ndetse no gukura kw'umubiri.

Urugero, igipimo cyinshi cya myo-inositol, isukari iboneka mu mashereka, gifasha ubwonko gukora neza mu bihe by'ingenzi by'iterambere. Amavuta nk'DHA na ARA ni ingenzi cyane mu mikorere y'ubwonko n'ubwenge bw'umwana. Konsa kandi ifasha kwimura mikorobi nziza

iva mu mubiri w'umubyeyi igasanga umwana, bigateza imbere ubuzima bwiza bwo mu mara.

Konsa gusa mu mezi atandatu ya mbere bifitanye isano n'imyitwarire myiza igihe umwana ageze ku myaka itanu, imibanire myiza n'ababyeyi be, no gukomera ku isano ikomeye y'amarangamutima. Konsa ni ingenzi cyane mu gutuma umwana akura neza mu buryo bwose.

Mubyeyi mwiza, menya ko amashereka yawe atuma ubudahangarwa bw'abana bawe bukomera, ariko si ibyo gusa. Afite uburyo bwihariye bwo kwitabira ibyifuzo bihindagurika by'umwana buri gihe. Amata yawe agaragaza ibyo wabonye mu buzima bwawe bwashize ndetse n'ibyo uri kunyuramo ubu. Bityo, arinda abana bawe ibyago byo kwandura virusi n'allergie, kandi afasha umubiri wabo kwiga no kugira ubushobozi bwo kwirinda neza mu gihe kiri imbere.

Ibyo ugomba kwibuka ni uko abana bato bafite ibyago byinshi byo kugira imyitwarire ikabije y'umubiri (inflammation), cyane cyane ku ruhu no ku bihaha, aho bikigira ubushobozi bwo kwihanganira ibintu (tolerance).

Ibyo bituma baba bafite ibyago byinshi byo kugira allergie.

Ariko, amashereka yawe abakingira ibyo byago biva hanze, akagira uruhare mu kuyobora imikurire y'ubudahangarwa bwabo, ndetse akanateza imbere ubushobozi bwo kwihinduranya k'ubudahangarwa buhererekanywa mu miryango (transgenerational immune adaptation) kugira ngo burusheho kwitwara neza mu bidukikije bibagose.

Nabonye abagore bamwe bavuga ko abana babo bakura neza bageze ku mezi atandatu, nyamara babonye amashereka mu byumweru bibiri gusa. Ariko se, umuntu yakwemeza ubuziranenge bw'igitabo ari uko abonye igitambaro cyacyo? Oya. Konsa bishobora gutanga inyungu nubwo zaba ntoya mu bijyanye no kwibuka kw'umwana akiri muto.

Ubushakashatsi bwa Garon-Carrier et al. (2023) bwakorewe ku miryango 2,210 yo muri Canada, bwagerageje gusuzuma isano iri hagati yo konsa gusa no gukura k'ubwenge bw'umwana. Bwatanze inama ku

bagore bemeza ko abana babo bakura neza nubwo babonye amashereka igihe gito, ko bakwiye kugira amakenga kuko ingaruka z'igihe kirekire zishobora kubaho.

Ibyavuye muri ubwo bushakashatsi, kimwe n'ubuhamya bw'abo babyeyi, byagaragaje ko nta tandukaniro rikomeye ryagaragaye hagati y'abana batakonswe na gato n'abakonswe gusa mu gihe cy'impuzandengo y'amezi 9.2. Abo batakonswe gusa mu mezi 6.8 bo bagaragaraga nk'abafite ubushobozi bwo kwibuka buhambaye ku myaka ine, kandi icyo kinyuranyo cyagumyeho kugeza ku myaka irindwi.

Ubundi bushakashatsi nabwo bwerekanye ko myoinositol, imwe mu ntungamubiri iboneka mu mashereka y'imbere y'igihe, ishobora gufasha mu mikurire y'ubwonko bw'umwana binyuze mu kongera imikoranire y'uturemangingo tw'ubwonko.

Mu bundi bushakashatsi kandi, konsa abana bavutse igihe kitaragera bifitanye isano n'imikurire myiza y'ubwonko ndetse no kugabanya ibyago byo kurwara

indwara zitandura. Ibi bishobora gusobanurwa n’uko amashereka agira ingaruka ku mikorere y’uturemangingo binyuze ku miterere ya epigenetiki, harimo nk’uduce tutandikishwa mu ndangagaciro (non-coding RNA), uturemangingo ngengabuzima (stem cells), na mikorobi ziba mu mara (microbiome). Ibyo byose bifasha mu gutuma uduce tw’ubwonko dukura neza no mu gushimangira ubuzima bwiza bw’amara y’umwana (Gialeli et al., 2023).

Si ibyo gusa. Modak et al. (2023) nabo basanze ko konsa biftiye akamaro k’imitekerereze n’amarangamutima ababyeyi n’abana, harimo: gukomeza isano y’amarangamutima hagati yabo, kugabanya agahinda k’ababyeyi babyaye vuba, kongera icyizere mu kwita ku mwana, no guteza imbere imikurire y’umwana.

Konsa iterera imbere imikurire y’ubwonko, kongera ubudahangarwa no gukura neza kw’ubwenge. Kubashishikariza konsa bisaba ubumenyi, ubufasha n’imiterere isanzwe y’ubuzima bw’abantu. Gukura mu mitekerereze igoreka amakuru cyangwa iteranya

abagore, bifasha ababyeyi gufata ibyemezo bishingiye ku bumenyi. Konsa kandi irinda ihungabana ry'ababyeyi, yongerera icyizere cyabo, bityo ikagira uruhare mu mibanire myiza mu muryango no ku hazaza h'abana.

Konsa ni kimwe mu bikorwa bigaragaza ubwitange n'urukundo ababyeyi bagira ku mwana, kandi yerekana uruhare mpuzamahanga mu gukomeza ubuzima bw'abana n'ababyeyi.

Ikindi kandi, mu bushakashatsi bwakozwe na Moradi et al. (2023), basuzumye uburyo konsa bigira uruhare ku bipimo by'imikurire y'abana hakoreshejwe ubumenyi bw'igihe kirekire (longitudinal data) hamwe n'uburyo bwa multivariate t linear mixed model. Ibyo byagaragaje ko hari itandukaniro rikomeye ku burebure, ibiro, n'umutwe hagati y'abana bonse amashereka gusa n'abakoreshejwe amata y'ifu, bikagaragaza neza ko konsa gusa ari ingirakamaro cyane ku mikurire y'abana.

Ariko nubwo konsa ari ingenzi cyane ku kubaho no kuzira uburwayi k'umwana, ndetse ifite inyungu nyinshi kandi ishyigikiwe n'amabwiriza mpuzamahanga, Nixarlidou et

al. (2024) bemeje ko igipimo cy'abonsa gusa kigikiri hasi ku isi hose.

Ibi biterwa n'imvange y'impamvu zitandukanye zirimo izijyanye n'imyaka n'imiterere y'umuryango, ibibazo by'imitekerereze, imibereho y'ubukungu, imikorere y'ababyaza, uburambe ku zindi nda, imikurire idasanzwe y'inda (labour itoroshye), ikoreshwa rya epidural, kubyara imbura gihe, n'igihe umubyeyi ashyizwe muri ICU—ibi byose bigira uruhare mu kugabanya amahirwe yo konsa gusa.

Ndagusobanukiwe, wa mubyeyi w'umunyabikorwa wibereye mu kazi, amashuri, no kwita ku muryango. Nzi neza ko ubuzima bwawe bushobora kuba butoroshye. Ariko ndakwinginze, uzirikane ko konsa ari ishoramari rikomeye rishobora kurokora abana bawe kugira ngo bataguma bajyanwa kwa muganga kubw'ibibazo by'umubiri cyangwa ibijyanye n'imitekerereze.

IGICE CYA KARINDWI

ABANA BAFITE UBWENGE MU BY'AMARANGAMUTIMA

Wigeze wibaza ibyo ababyeyi batekereza kubyara umwana uzaba afite ubwenge bwo mu by'amarangamutima? Yego, birashoboka rwose kubyara umwami cyangwa umwamikazi mu gihe ababyeyi babyitegura neza, bagafata ubuzima bwiza kandi bakita ku buzima bwabo mbere yo gusama. Reka nkwereke uko kurera umwana ufite ubwenge mu by'amarangamutima bitangirira igihe avutse, bikakomereza mu rukundo n'uburere abona mu bwana bwe.

Urugero, mbere no mu gihe cyo gutwita, ababyeyi bagomba kugabanya stress no kwiga gucunga amarangamutima yabo. Ibi ni ingenzi kuko abana bagira ingaruka ziterwa n'uko ababyeyi babo biyumva. NK'umujoyanama mu buzima no mu mibanire, kenshi ndasaba abifuzza kuba ababyeyi gukora imyitozo y'ubwenge bw'amarangamutima (mindfulness),

kwitabira meditation cyangwa inama z'ubujyanama kugira ngo bagabanye umunaniro w'ubwonko.

Ni ingenzi kandi ko bafata imyitwarire iboneye mu buzima bwa buri muni. Imirire iboneye, imyitozo ngororamubiri n'ikiruhuko gihagije bigira uruhare mu mikurire y'ubwonko bw'umwana uri mu nda. Omega-3, aside folique ndetse no kwirinda uburozi nk'inzoga n'itabi ni ingenzi cyane. Muri iki gihe kandi, bakwiye gutura ahantu huzuyemo urukundo n'inkunga, kuko bituma umwana yumva atekanye.

Ababyeyi bakwiye kwita ku itumanaho ryiza no gukemura amakimbirane mu mahoro. Nk'uko ubushakashatsi bubigaragaza, inda ishobora gutangira kumva amajwi mato cyane nk'ijwi riranguruye hagati y'icyumweru cya 28 n'icya 30 mu gihe cyo gutwita. Si byiza ko yumva amagambo mabi, imirwano cyangwa urusaku rw'utubyiniro. Ndashishikariza ababyeyi gutegura ubusabane n'umwana binyuze mu magambo aruhura, umuziki uciye bugufi, no kumukoraho mu buryo bumutera icyizere. Ibi byose bituma umwana yumva

atekanye kandi atangira kubaka igitsure n'urukundo kuva akiri mu nda.

Ishuri rya Mbere ku Mwana

Ishuri rya mbere umwana ajyamo ni mu rugo rwe, aho amasomo y'ibanze atangirira mbere y'uko ajya mu ishuri rizwi ku mugaragaro. Abana bigira ku byo babona n'ibibakikije; ni yo mpamvu umuryango utanga ubufasha n'urukundo ari wo ushyira urufatiro ku myigire ihamye no ku ishyirwaho ry'imico myiza izamufasha mu buzima bwe bwose. Amasomo umwana akura mu rugo ni yo amufasha kugira uburyo bwiza bwo kwiga, kugira umubano mwiza n'abandi no kumenya gutura neza muri sosiyete.

Uburyo umuryango uteye bugira uruhare rukomeye mu mikurire y'ubwenge, amarangamutima, imibanire n'imyifatire y'umwana. Urugero, guhura bwa mbere n'ururimi ku mwana bibera mu rugo. Abagize umuryango n'abamurera bagirana ibiganiro n'umwana binyuze mu

kuvuga, kuririmba no gusomera abana, bikamufasha kumenya amagambo no kumenya kwitanga mu itumanaho. Ariko nanone, niba mu rugo ababyeyi bakoresha amagambo y'ibitutsi cyangwa ay'ubugome, bishobora kugira ingaruka ku mwana.

Uburyo abagize umuryango bavugana n'uko bafatirana hagati yabo, bigisha umwana uko yagaragaza ibitekerezo bye, uko yabaza ibibazo n'uko yitabira ibiganiro. Umwana yigira ku mico n'indangagaciro z'ababyeyi n'abamurera. Mu by'ukuri, indangagaciro nk'ubunyangamugayo, kubaha, impuhwe n'umutwari wo kubazwa ibyo umuntu akoze, byose bigaragazwa mbere na mbere mu muryango.

Uretse ibyo, urugo ni ishuri ryigisha abana uko bagenga amarangamutima yabo, uko bagira icyizere mu byo bakora, n'uko babaka umubano mwiza n'abandi. Ni ibisanzwe ko abana bato bigira kwishyira mu mwanya w'abandi, gufatanya no gukemura ibibazo babikuye mu byo babona ku mibanire y'abagize umuryango wabo.

Mu muryango mvukamo, twemera ko ineza itangirira mu rugo. Ni yo mpamvu ibikorwa byoroheje bya buri muni, nk'ibiryo, kwambara, isuku no gukora imirimo yo mu rugo, bigira uruhare mu kwigisha abana inshingano no kwigenga. Urugo ntirwigisha abana gusa kuyobora igihe, gufata ibyemezo no kwiyitaho, ari byo bibategurira imbogamizi z'ahazaza, ahubwo runabashyiriraho imyitwarire myiza no kwihangana. Imigenzo, ibihembo n'ibihano bifasha abana kumva uko gahunda ikorwa no kwiyumvamo inshingano.

Ababyeyi benshi ntibamenya ko bagira uruhare mu buryo abana babo babona kwiga binyuze mu kubatoza kugira amatsiko, gusoma ibitabo no kubashishikariza gushakashaka. Ababyeyi babwira abana inkuru, babariraho ibintu cyangwa bakina imikino ifite icyo yigisha, baba batanga amasomo y'ingenzi nubwo ataba mu buryo bwemewe n'amategeko y'amashuri.

Nagiye numva impaka nyinshi zigaruka ku ivangura ry'indangagaciro. Hari urugero rw'umupakurura ufite amaguru aregereye imbere (knocked-knees) wabajijwe

ku bijyanye n’uko imizigo ye itajyanye, ariko aho kuvuga ku mizigo, abantu bagarutse ku maguru ye. Muri ubwo buryo, abantu benshi babura gukomeza ku cy’ingenzi. Ni ngombwa kumenya ko urugo ari rwo rwigisha abana imico y’igihugu cyabo, umuco n’imigenzo ya sosiyete. Kumva inkomoko yabo bituma abana bagira kwiyumva no kumenya aho bakomoka.

Uretse ibyo, abana bahigira imyemerere y’iyobokamana cyangwa iy’umwuka, ibabwira ibyerekeye kwizera, gushimira n’imyitwarire myiza.

Mu buryo bwo kubishyira mu gaciro, urugo ni ishuri rya mbere ry’umwana, naho ababyeyi ni abarimu ba mbere. Kuva umwana akivuka no mu buto bwe, yiga yitegereza ibimukikije. Ababyeyi bagomba kugaragaza amarangamutima mu buryo buzima no kwigisha abana uko bayagenga. Iyo babyeyi bitaye ku marangamutima y’umwana bakamuhumuriza igihe arira, bimwubakiraho icyizere n’umutekano w’amarangamutima, ari nabyo bizamura ubwenge mu by’amarangamutima. Ababyeyi bakwiye kwigisha abana kuvuga uko biyumva no kumva

ko amarangamutima yabo yubashywe aho kuyatesha agaciro. Bagomba kugaragaza ineza no gushishikariza abana kureba ibintu mu buryo bw'abandi binyuze mu nkuru no mu byabaye mu buzima busanzwe.

Bagomba gufasha abana gukemura amakimbirane bakoresheje amagambo n'ubwenge aho gukoresha uburakari, ndetse bagatanga umwanya wo gukina, guhura n'abandi no kwakira urukundo. Ibi ni ingenzi kuko gukina, gukundwa no kugira umubano n'abandi bifasha umwana kugira imbaraga mu by'amarangamutima. Si igihe cyo gukoresha umwana nk'intwari yo kurwanya uwo mwashakanye cyangwa kumushyira mu bibazo byanyu nk'abakuru. Umwana ni umwana; ntakwiye guterwa kuba mukuru imburagihe, nk'uko akenshi bigaragara mu miryango nyafurika.

Gushyira ubwenge mu by'amarangamutima (EI) mu burere bw'abana mu muco nyafurika bisaba guhuzwa n'indangagaciro gakondo n'amasomo y'iki gihe. Uburyo bw'inshi bwo kurera mu muco nyafurika bushingiye ku kubaha, uburere bushingiye ku rugaga, no kwita ku

muryango mugari. Ibi byose bishobora guhurizwa hamwe n'ubwenge mu by'amarangamutima kugira ngo harebwe uburere buhamye.

Ndasobanukiwe ko uburere bushingiye ku butware bwuje urukundo n'imyumvire y'ubuyobozi, ari uburyo bwiza bwo guhuza igitsure n'urukundo. Ubu buryo buhuje neza n'iby'ubwenge mu by'amarangamutima. Ndabizi ko imiryango imwe y'icyiciro cyo hasi mu bukungu ishobora kugira imyitwarire ikaze ndetse ntitandukanya igitsure n'uburakari, ariko ku mubyeyi wese ushaka kurera umwana w'umwamikazi cyangwa umwami, agomba guteza imbere uburyo bwo kuganira aho gukoresha igitsure gishingiye ku gutera ubwoba. Bagomba guha abana uburenganzira bwo gutanga ibitekerezo byabo, ariko bagashyiraho imipaka isobanutse. Nubwo bishobora gusa n'igitangaje, bitewe n'imiterere y'umwana, buri mubyeyi agomba kugaragaza icyubahiro igihe arera cyangwa ahana umwana, kugira ngo umwana yige guha agaciro abandi mu buryo nk'ubwo nawe

yahawe. Ibi bizamufasha gukemura amakimbirane mu mahoro aho gukurikira gusa amabwiriza.

Ndi Umunyanijeriya ukomoka mu bwoko bw'Abayoruba, aho dufite umuco wo kubaha abakuze mu buryo bw'ikirenga. Tuzi ko abana badakwiye gusuzugura abakuru, nubwo hari igihe baba babarenganya. Nemeranya n'iri bubahiro ryuzuye, ariko aho kubuza abana kuvuga igihe barakaye ku bantu bakuru, ababyeyi bagomba kubashishikariza kuganira mu buryo bubaha. Ibi bituma abakuze basobanukirwa ko abana bari mu bwigunge cyangwa bababaye, bityo bikemeza ko bafite uburenganzira bwo kuba bababaye.

Hari agaciro gahambaye mu kumva ijwi ry'umwana avuga ibyo atekereza aho kumusaba gusa kuvuga ibyo ababyeyi bashaka. Agomba kureba ibintu uko abyumva aho kumva gusa uko ababyeyi babyifuza. icyo ababyeyi bashobora gutunganya atari ukwica impano z'umwana, ahubwo ni uburyo bwiza bwo kumwigisha uko yavugaga cyangwa yabona ibintu mu bwitonzi no mu kinyabupfura. Bityo rero, ababyeyi bashobora gusaba abana kongera kuvuga

ibyo bavuze nabi, ariko noneho mu buryo bubaha. icyo gihe, ikintu cyose gishobora kuvugwa neza, mu buryo busobanutse kandi burimo ikinyabupfura.

Ndakwemera ko imiryango myinshi y’Afurika gakondo ikoresha uburyo bwo kurera bushyira imbere igitsure, igatwarwa n’amategeko akomeye ariko idatanga urukundo ruhagije. Ubu buryo bushingiye ku gusaba ubuhakane n’ubwumvira butagombera gusobanurwa. Nubwo igitsure gifite umumaro, ababyeyi bagomba kubanza kumva no kwemera amarangamutima y’abana mbere yo kubahana cyangwa kubakosora. Ibi bivuze ko aho guterera agati mu ryinyo ku marangamutima y’umwana, ababyeyi babanza kuyemera. Urugero: “Nshuti yanjye, mbona ubabaye cyangwa ubabaye cyane, ariko si byiza kurira cyangwa gusakuza nk’uko ubikoze.”

Byongeye, ababyeyi bagomba gukoresha ibihano byubaka aho gukoresha ibihano bisenya. Igihe nigaga icyiciro cya kabiri cya master mu burezi bw’abantu bakuru, nigishijwe ko aho gukubita umwana, ababyeyi bakwiye kumureka akigira ku ngaruka z’ibikorwa bye

karemano, ndetse bagasobanurira impamvu amategeko yashyizweho.

Nk'umuganga w'imibanire n'imiryango, narabibonye: uburyo bwo kurera bushyira imbere igitugu bwangije byinshi mu buzima bw'abana. Bamwe bagira ubwoba bwo kubana n'abandi (social phobia). Abandi baraceceka burundu, ntibabasha gutanga ibitekerezo byabo imbere y'abashakanye babo cyangwa ku kazi. Ababyeyi bagomba gushyigikira abana babo mu kwigira icyizere no gutanga ibitekerezo byabo. Bagomba guhabwa uburenganzira bwo gutanga ibitekerezo byabo mu buryo bubaha, nubwo amategeko agomba gukurikizwa.

IGICE CYA MUNANI
INGARUKA ZISHIDIKANYWAHO ZITERWA
N'UBUSHYUHE

Kugirwaho ingaruka n'ubushyuhe bushyushye cyane bishobora kugira ingaruka mbi ku myanya ndangagitsina y'abagabo, cyane cyane ku dusabo tw'intanga (testes), twagenewe gukora neza iyo turi ku bushyuhe buri hasi y'ubusanzwe bwo mu mubiri. Ubushyuhe bukabije bushobora kugabanya umubare w'intanga ngabo, bikanagabanya ireme ryazo, bigatera kwangirika kwa ADN y'intanga, ndetse bikanahungabanya ihindagurika ry'imisemburo, bikaba byatera ubumuga mu turemangingo cyangwa kugabanuka kw'uburumbuke.

Ni yo mpamvu ari ngombwa kwirinda igihe kirekire umuntu ari ahantu hashyushye cyane. Intanga zangiritse cyangwa zifite ibibazo bya chromosomes (nk'iyo ziba zifite amakosa mu mabwiriza ya genetique) zishobora gutera gukuramo inda, uburwayi bwo mu mikurire y'umwana cyangwa ubumuga bw'inkomoko, nko

kudakura neza k'ubwonko cyangwa indwara z'umutima. Ireme ribi ry'intanga ngabo ryongera ibyago by'izo ndwara ku bana bavuka.

Kugirwaho ingaruka n'ubushyuhe bwinshi bishobora gutuma intanga zitagenda neza, bigatera kwangirika kwa ADN, ndetse bikagabanya amahirwe yo gusama mu gihe cyo kwifashisha uburyo bw'uburumbuke bwifashisha ikoranabuhanga.

Inkomoko z'ubu bushyuhe bubi ku burumbuke zirimo:

- Gukoresha sauna kenshi;
- Kwirirwa wicaye cyane ufite mudasobwa ku bibero;
- Gukora akazi ahantu hashyushye cyane;
- Uburwayi bujyana n'umuriro mwinshi.

Mu rwego rwo kugabanya ibyago, umuntu akwiye:

- Kwirinda ubushyuhe burambye;
- Kwambara imyenda y'imbere idakumira umwuka;
- Gufata umwanya wo kuruhuka hagati y'akazi;
- Kugenzura uburumbuke bwe mu gihe gikwiye.

Nk'uko Bunin n'abandi (2006) babigaragaje, kugaragara ku babyeyi ubushyuhe bwinshi ndetse n'imirasire ya electromagnetique ni bimwe mu bishobora gutera indwara za kanseri zifata ubwonko bw'abana bato nka *medulloblastoma (MB)* na *primitive neuroectodermal tumour (PNET)*. Babonye isano ifatika hagati yo gukoresha sauna ku mubyeyi w'umugore hafi y'igihe cyo gusama, n'uburyo umugabo yakoresheje sauna, ibiringiti byashyushye (electric blankets), cyangwa se yagaragaye ahantu hashyushye cyane.

Ubushakashatsi bwakorewe muri *University of Oregon* no mu mavuriro y'uburumbuke bwerekanye ko n'izamuka rito ry'ubushyuhe bushobora kugira ingaruka mbi ku burumbuke bw'abagabo, bigaragaza ko igikorwa cy'ikorwa ry'intanga kirangwa n'ubworoherane cyane ku mpinduka z'ubushyuhe.

Nta gushidikanya, kugaragara ku bushyuhe bwinshi bigira ingaruka ikomeye ku buzima bw'uburumbuke bw'abagabo, bishobora guteza ubumuga ku bana bavuka. Ikibabaje ni uko abagabo benshi batazi amayeri

akoreshwa n’ubu bushyuhe mu gusenya ubuzima bw’abana babo bataravuka. Ababigizemo uruhare barimo:

- Gukoresha sauna kenshi;
- Kwicara igihe kirekire ukoresha mudasobwa ku bibero;
- Gukora ahantu hashyushye cyane.

Nk’uko Lakhoo n’abandi (2025) babivuga, abagabo bagaragaye ku bushyuhe bwinshi bashobora kugira intanga zitagendagenda neza, zangiritse (DNA fragmentation), ndetse no kugira amahirwe make yo gutera inda. Kugira ngo hagabanywe ibyo byago, abagabo bagomba kwirinda ubushyuhe burambye, kwambara ipantalo zisanzuye, gufata intera zo kuruhuka, no kugenzura uburumbuke bwabo.

Ese abagore batwite ntibagirwaho ingaruka z’ubushyuhe ku buzima bw’abana batwite? Oya. Nk’uko Bekkar n’abandi (2023) babigaragaje, kugaragara ku bushyuhe bwinshi bigira ingaruka zikomeye ku matsinda y’abantu boroheje nko ku bagore batwite n’abana, kandi bifitanye

isano n'ibibazo bikomeye ku buzima bw'umwana n'umubyeyi.

Dalugoda n'abandi (2022) bavuze ko ubushyuhe bwinshi ku bagore batwite bushobora gutera:

- Kubura inda (miscarriage);
- Kubyara hakiri kare (preterm birth);
- Ubumuga ku mwana uvuka;
- Gupfusha umwana akivuka (stillbirth).

Ku bana, ubushyuhe bushobora gutera:

- Heatstroke (guhinda umuriro cyane);
- Umwuma (dehydration);
- Kwangirika k'impyiko;
- Indwara z'ubuhumekero n'iza nyababyeyi (gastrointestinal infections);
- Kudasinzira neza, ibibazo by'imitekerereze, n'ihungabana.

Principi n'abandi (2025) bashyigikiye ibyavuzwe na Dalugoda, banemeza ko ubushyuhe bwinshi ku mubyeyi butera ingaruka mbi ku mubyeyi n'umwana nk'uko byagaragajwe haruguru.

Nubwo sauna ifite inyungu nyinshi ku buzima, ubushakashatsi bwerekana ko ishobora kugira ingaruka ku burumbuke bw'abagabo. Nk'uko Fedorchenko n'abandi (2025) babitangaje, ubushyuhe buturuka kuri sauna bushobora kugabanya umubare w'intanga n'ubushobozi bwazo bwo kugenda neza.

Buri mukoresha wa sauna agomba kwibuka ko ikorwa ry'intanga mu mubiri w'umugabo ari ingenzi cyane, kandi ko igitsina cy'umugabo (scrotum) kigomba kuba kiri hanze y'umubiri kugira ngo gikomeze ubushyuhe bukwiye. Ubushyuhe bwinshi kuri scrotum bushobora guteza apoptosis (gupfa kw'uturemangingo), oxidative stress (kwangirika kw'uturemangingo kubera imyuka yangiza), n'ibyangiza ADN (DNA damage).

Nta gushidikanya, umubiri ufite uburyo bwo kugenzura neza ubushyuhe bwa scrotum. Ariko, nk'uko byagaragajwe, izamuka rya dogere imwe gusa ku bushyuhe bw'ikirere rizamura ubushyuhe bwa scrotum ku rugero rwa cumi gusa ($1^{\circ}\text{C} \rightarrow \sim 0.1^{\circ}\text{C}$).

Ku bw'ibyo, buri mugabo wese wifuza gutera inda agomba kwitondera ibi bikurikira:

- Koga mu mazi ashyushye (hot tubs);
- Gukoresha sauna kenshi;
- Gukoresha mudasobwa ku bibero (laptop);
- Gukoresha intebe z'imodoka zishyuha (car seat warmers);
- Kwambara impuza-mubiri zifashe cyane (boxers);
- Kwicara igihe kirekire.

Ibi byose bifitanye isano n'ubuziranenge buke bw'intanga.

Kwihutira kwirinda ibi byago bishobora gufasha abagabo kubungabunga uburumbuke bwiza no kwirinda ingorane zo kutabyara. Kutabyara ni ikibazo gikomeye mu buvuzi, kandi 50% y'ibi bibazo iterwa n'abagabo.

Nk'uko Paul n'abandi (2008) babivuze, ubushyuhe bwinshi ku mabya bushobora gutuma intanga zangirika, zigira ibice bya ADN byacitse (DNA strand breaks), ndetse bigateza iterambere ridatunganye ry'utugingo (embryo) mu gihe cy'iterwa ry'inda

IGICE CYA CYENDA**UMWAMI, UMWAMIKAZI CYANGWA UMUKENE: NI ABABYEYI BABIGENA**

Kurera abana nk'abami cyangwa abamikazi bivuze kubaremamo ishema, icyubahiro, n'amarangamutima y'agaciro bihagije. Imyitwarire y'ababyeyi n'imyemerere yabo ni bwo musingi wa mbere bagenderaho mu kurera abo bana. Niba agaciro k'umubyeyi gashingira ku buzima busanzwe butitaye ku ndangagaciro z'ubwami, bizamugora cyane kuzamura abana ku rwego rurenze iryo asanzwe azi. Kugira ngo umwana arekwe nk'umwami cyangwa umwamikazi, ni ngombwa ko yigishwa kwiyumva nk'ufite agaciro kamukwiriye, ushoboye kandi wubashywe. Ababyeyi nk'abo baha agaciro inkomoko y'umuco wabo, bakazamura icyizere cy'umwana kandi bakamufasha kugira ishusho nziza ku buzima bwe.

Nagiye nibaza ukuntu kwigisha abana gukunda umuco, kwishimira ubwiza bwabo kamere, no kurwanya ibitekerezo byo kwiya, byashoboka mu miryango aho

ababyeyi ubwabo barwaye indwara y'ubwenge bushingiye ku mahanga (Eurocentrism)—bagasuzugura ibyabo, bakemera iby'abandi nk'ukuri guhoraho.

Ntibyagombye kuba impaka kuba umwami cyangwa umwamikazi ayobora mu kuri, afite intego kandi afata inshingano. Ababyeyi bagomba guhera mu buto bigisha abana kugira inshingano, gufata ibyemezo byiza, kugira impuhwe no kumenya gutandukanya icyiza n'ikibi. Gutuma abana bafata ibyemezo bijyanye n'imyaka yabo, kubashishikariza kwitabira ibikorwa by'iterambere rusange no kubaha urugero rw'ubuyobozi bushingiye ku cyubahiro mu rugo aho kubarera mu buruhukiro, byose ni iby'ingenzi.

Umwami cyangwa umwamikazi ntabwo yemera ibimuca intege. Kwigisha abana gushyiraho imbibi, kumenya agaciro kabo, no kutemera kubabazwa cyangwa guhezwa, kimwe no kubigisha kuva mu mibanire mibi cyangwa kuvugira uburenganzira bwabo, ni inzira igana ku buyobozi.

Umuryango urimo ibyago byinshi, irari, n'akarengane bishingiye ku kwikunda, bishobora guterwa n'uko ababyeyi bo hambere cyangwa abo muri iki gihe batashoboye gutoza abana babo indangagaciro z'ubwami nyakuri nk'impuhwe, kwihangana, no kugenzura amarangamutima. Abifuza kurera abana nk'abami n'abamikazi bagomba kubigisha kugenzura amarangamutima yabo, gutumanaho mu kinyabupfura, no guhangana n'ibibazo mu mahoro. Bagomba kubigisha kuvuga ibyo batekereza n'amarangamutima yabo aho kubigaragariza mu bikorwa by'uruhande, kandi bakabereka urugero rw'ubukure mu myitwarire. Ibyo byose bidashingiye ku bupfura ni uburyarya.

Ntibikwiye kunsenyera amagambo: kurera abana nk'abami cyangwa abamikazi ni umuhamagaro wo kubashishikariza kuba indashyikirwa, si ukubaka ku buryo nta makosa bakora. Ni ukugira imyumvire y'iterambere, kwihangana, n'imbaraga zituruka ku mbaraga bashyize mu rugendo aho gushingira ku musaruro gusa. Ababyeyi bakwiye guhamba umwana wihatira gukora, kabone

n’ubwo yaba ataratsinze, kandi bakamufasha kuzahuka igihe yahuye n’imbogamizi. Umubyeyi mwiza ntajugunya umwana hamwe n’amazi yamwozeho—ahubwo aha agaciro uruhare yatanze.

Gukolonizwa mu Bitekerezo: Abanyafurika Barera Abana Babo nk’Abazungu

Kurera umwana nk’umwami cyangwa umwamikazi bishobora gusobanurwa mu buryo bw’umuco nyafurika. Afurika igira umutungo udasanzwe, cyane cyane mu myumvire yerekeye indangagaciro, kumenya aho umuntu akomoka, n’inshingano ku muryango. Hariho itandukaniro rinini hagati y’indangagaciro zimwe z’Abanyafurika n’iz’Abazungu. Mu muryango nyafurika, umwana afatwa nk’impano yavuye ku bazimu, nk’umwubatsi w’ejo hazaza, ndetse nk’uwaragijwe umurage w’umuco.

Kurera umwana nk’umwami cyangwa umwamikazi ni ikimenyetso cy’uko agaciro ke, icyerekezo cye, n’uruhare

rwe mu muryango byubashywe kandi bishimwa. Mu moko menshi y'Abanyafurika harimo inzego z'ubwami n'ubwamikazi. Nk'umwe mu bakomoka ku bwoko bw'Abayoruba bo muri Nijeriya, ndabizi neza. Ibi kandi ni ukuri ku Buganda, Zulu n'andi moko, aho buri mwana avukira mu muryango cyangwa mu bwoko bufite inkomoko ifite agaciro gakomeye. Ibi bisobanura ko abana bigishwa ko bakomotse ku bwiza n'ubuhangange, ko bafite icyubahiro cy'igihugu cyabo—bityo ntibakwiye guhara ubwami bwabo ngo bagure n'inyungu z'ako kanya.

Imyemerere ya Ubuntu, "Ndi uwo ndiwe kubera ko turiho," ishimangira ko agaciro umuntu yihaye gushingira ku mubano afitanye n'abandi no ku muryango. Umwami cyangwa umwamikazi yitabwaho kandi agatozwa gukorera abandi, kubarinda no kubahugura. Ubuntu ihuza icyubahiro n'inshingano, kuko abana bigishwa kubaha abakuru n'umuryango nyamara banategurwa kugira uruhare mu buyobozi hakiri kare.

Ugereranyije n’imyigishirize y’ababyeyi b’iki gihe, bigaragara ko hari itandukaniro rinini. Ubu, twirengagiza ibisigisigi by’umuco wacu tukohereza abana bacu mu butumwa bwo ku mbuga nkoranyambaga bw’ahandi butubakiye ku ndangagaciro zacu, ahubwo bubatoza kwigana ibitekerezo bitaturuka iwacu.

Umwami cyangwa umwamikazi agomba gukura afite ubwenge, ikinyabupfura, n’imyitwarire irangwa n’icyubahiro hashingiwe ku ndangagaciro z’umuco.

Mbese, twebwe ababyeyi, nitwaba turi kwitandukanya n’iyo ntego igihe duhaye abana bacu amazina nka Johnson—umuhungu wa John, Jackson—umuhungu wa Jack, Wilson—umuhungu wa William, cyangwa Henderson—umuhungu wa Henry cyangwa Hendry? Thompson ni umuhungu wa Thomas; Davidson ni umuhungu wa David; Robinson ni umuhungu wa Robin cyangwa Robert. Stephenson—umuhungu wa Stephen, Jameson—umuhungu wa James, cyangwa Richardson—umuhungu wa Richard—nyamara se w’uwo mwana atari John, Jack, William, Henry, Thomas, David, Robin,

Stephen, James, cyangwa Richard. Hari igihe nibaza impamvu iby’ahandi bisa n’aho bihora bisa neza— nk’icyatsi cy’ahandi cyeruruka kurusha icy’iwacu.

Mu buryo butandukanye, muri Afurika amazina ahora afite ibisobanuro kandi kenshi agaragaza ejo hazaza h’umwana. Ariko rero, nubwo twambara nk’inguge dufite imigozi ku ijosi, duhora dukwirakwiza indangagaciro z’amahanga, tukirengagiza imigani migufi, ibitekerezo bikubiye mu nkuru za kera, n’imigenzo y’imiryango, nyamara ari byo bikoresho byiza byo gutanga indangagaciro, ubutwari n’ishema.

Kubaha umuntu ubwe, kubaha abakuru n’abandi ni ingenzi cyane mu burere bw’umwana ugomba gutozwa nk’umwami cyangwa umwamikazi, nk’uko inyigisho z’Afurika zibivuga.

Bityo rero, nk’umubyeyi, ugomba kuba icyitegererezo cy’icyubahiro mu buryo uganira n’umwana wawe n’abandi bantu, aho kwibanda gusa ku kwigisha uburyo bwo kuramukanya, gukoresha amazina y’icyubahiro, n’indi migenzo.

Koresha imigani. Toza abana bawe ko abami n'abamikazi nyakuri bubaha abandi ndetse banibaha, ko ubuhangange bwabo bugaragarira mu buryo bitwara ku bandi, kandi ko ubwami nyakuri butesha abandi agaciro ahubwo bubazamura.

IGICE CYA CUMI

IMIMERERE ITARI MYIZA ABANA BARERERAMO

Hari imimerere myinshi itari myiza ababyeyi bareramo abana babo, kandi zose zigira ingaruka mbi cyane ku buzima n’imibereho myiza y’abo bana. Imwe mu zigomba kwitabwaho byihariye ni ubuzima n’imyaka y’ababyeyi nk’uko byagarutsweho haruguru. Ibi bigira uruhare rukomeye ku mikurire y’ubwonko, ku mitekerereze, ndetse no ku buzima bw’umubiri bw’abana bataravuka. Umubyibuho ukabije, kunywa inzoga birengeje urugero, no kugaragara mu bidukikije byanduye bishobora kwangiza ADN y’intanga ngabo, bityo bikongera ibyago byo kuvukana ubumuga cyangwa ibindi bibazo by’imikurire. Abagabo bakuze cyane bafite ibyago byinshi byo gutanga intanga zirimo ubumuga bw’utaremangingo bushobora guteza indwara nka autisme na schizophrenia. Indwara ndende nka diyabete, umuvuduko ukabije w’amaraso, n’indwara zandura, zishobora gutuma intanga zangirika bikaba byaviramo umugore ibibazo mu

gihe cyo gutwita. Imyitwarire mibi irimo no kutarya neza nayo yagabanya ubuziranenge bw'intanga ndetse igatera ibyago byo kuvukana ubumuga.

Mu rwego rwo kugabanya izi ngaruka ziterwa n'imyitwarire mibi y'ababyeyi ku mwana utaravuka, hagomba gukorwa impinduka nziza ku buzima bw'umubiri, ku marangamutima, ndetse no ku bidukikije. Ibyo birimo: kwirinda ibintu bihumanya, kurya indyo yuzuye, gukora imyitozo ngororamubiri itekanye, kujya kwa muganga mbere yo gutwita, kwita ku buzima bwo mu mutwe, kurema ahantu hatekanye kandi hanezeza, kugabanya guhangayika guterwa n'ihohoterwa cyangwa amakimbirane, no kwitegura inshingano z'ububyezi. Aho bikenewe, ababyeyi bagomba gushaka ubufasha bwa kinyamwuga.

Ibibazo by'ubwonko, umutwe, n'umubiri bishobora kwibasira umwana utaravuka birimo: developmental prosopagnosia, autisme, schizophrenia, n'ikoreshwa ry'ibiyobyabwenge. Guhangana n'ibi bibazo kare ni

ingenzi cyane kugira ngo umwana azagire ubuzima buzira umuze kandi yishimye.

Muri urwo rwego, aho umugore atagifite ubuzima bwiza ku rwego rwa metabolic, hashobora kuvuka ibibazo birimo diyabete yo mu gihe atwite, ibyago byinshi byo kurwara umubyibuho ukabije cyangwa diyabete ku mwana, kudindira kw'imikurire bitewe no kutagera ku bwonko ibimenyetso bikwiye bya insulin, umuvuduko ukabije w'amaraso n'indwara z'umutima, ndetse n'indwara z'utaremangingo zidashira zishobora guterwa n'imyaka y'ababyeyi ishaje. Ubusumbane bw'utaremangingo, ibidukikije n'uburyo bwo kwita ku mubyeyi utwite bigira uruhare runini ku musaruro w'imikurire y'ubwonko. Impinduka za jenetiki zishingiye ku myaka y'umugabo ushaje (APA) zishobora kugira uruhare ku bice by'ubwonko nk'ahazwi nka fusiform gyrus, zishobora gutera developmental prosopagnosia (Dehghanbanadaki et al., 2025). Ariko kandi, uko umubyeyi yitwararika mu gihe atwite ndetse no mu

bwana bw'umwana nabyo bigira uruhare runini ku mikurire ye.

Mu rwego rwo kugabanya ingaruka mbi zituruka ku mibereho mibi y'ababyeyi ku mwana utaravuka, hakenewe impinduka ziteguye kandi zishingiye ku buzimabw'umubiri, ku buzima bwo mu mutwe n'amarangamutima, no ku bidukikije. Ingamba z'ingenzi zirimo kureka ikoreshwa ry'ibintu bihumanya n'ibiyobyabwenge, kurya indyo yuzuye, gukora imyitozo ngororamubiri itekanye, kujya kwa muganga hakiri kare igihe utwite, gukemura ibibazo byo mu mutwe n'amarangamutima harimo kugabanya stress no guhangana n'ihungabana, guhashya amakimbirane mu rugo, ihohoterwa cyangwa kwirengagizwa, ndetse no gukurikirana ubuzima bwo mu mutwe binyuze mu buvuzi no mu matsinda afashanya.

Byongeye kandi, gukemura ikibazo cy'imibereho n'ibidukikije bigira uruhare rukomeye, cyane cyane mu kugabanya guhura n'imyuka ihumanya, uburozi n'imibereho itekanye nkeya bishobora kubangamira

ubuzima bw'umugore utwite. Kwirinda ihohoterwa n'intambara nabyo bigira uruhare ku mikurire y'umwana uri mu nda. Guhabwa ubumenyi no kwitegura inshingano z'ububyeyi bishobora gufasha mu gukumira imyitwarire mibi ishobora gusubirwamo mu bana. Niba hari ibibazo by'ubuzererezi, ihohoterwa cyangwa ibibazo byo mu mutwe bitarakemuka, birasabwa gushaka ubufasha bw'abaganga, abajyanama cyangwa abandi bafasha mu mibereho myiza. Inama z'ingo cyangwa family therapy zishobora gufasha guca imigenzo mibi yagiye isubirwamo mu miryango no gushyiraho ibidukikije byiza ku mwana. Ibidukikije umwana akuriramo bifite agaciro gakomeye cyane mu gihe cy'ibanze cy'imikurire ye. Ibi ni ingenzi kuko ari bwo hashyirwaho fondasiyo y'imikurire ye y'umubiri, amarangamutima, ubushobozi bwo gutekereza no kubana n'abandi. Muri iki gihe, ubwonko bw'umwana bukura vuba cyane, bugakora imiyoboro y'ubwenge (neural connections) izagena uburyo azajya atekereza kandi yiga. Uburyo umwana abayeho muri iki gihe, yaba ibyiza cyangwa ibibi, bigira uruhare rukomeye

ku myubakire y'ubwonko no ku mikorere y'ubwenge y'ahazaza. Ni na cyo gihe umwana yiga uburyo bwo kubana n'abandi, kugaragaza amarangamutima ye, no kugira umutekano w'imbere. Imibanire myiza n'abamwitaho imwigisha kwizerana, kugira impuhwe no gukomera ku mutima.

Muri urwo rwego, uretse ko ubushobozi bw'abana bwo gusobanukirwa no gukoresha ururimi bukura cyane mu gihe cy'ingenzi cy'inkurikirane y'ubuzima, uko umwana ahura n'amagambo menshi ni nako ubushobozi bwe bwo kuvuga no gusobanukirwa bukura bikomeye mu minsi iza, kandi uburambe bw'ibanze ni bwo bubumbatira uburyo umwana azajya atandukanya ikibi n'icyiza. Aho gutandukana cyangwa gatanya y'ababyeyi, uburyo bwo gushimangira imyitwarire myiza, kuyobora neza no kuba urugero, bifasha abana gukura bafite imyitwarire myiza, ikinyabupfura n'ubumenyi bw'inshingano.

Uretse ko ubumenyi bw'ibanze mu gusoma no kwandika, imibare no gukemura ibibazo, bigira uruhare mu buryo umwana azitwara mu ishuri no mu buzima muri rusange,

uburezi bw'imbere y'ishuri n'ihugurwa rikwiye bifasha umwana kugira umuco wo kwiga ubuzima bwose, mu gihe indyo yuzuye, imyitozo ngororamubiri n'ubuvuzi bukwiye mu bwana bifasha umwana gukura neza no kwirinda kudindira mu mikurire cyangwa ibindi bibazo by'ubuzima byamubangamira mu kwiga no mu buzima bw'ejo hazaza, aho kugira ubuzima bubu mu bwana.

Ubushakashatsi bugaragaza ko abana bahabwa uburere bufite ireme, uburezi, n'inkunga y'amarangamutima kuva bakiri bato, bakura neza, bagatsinda mu ishuri, bakagira imibanire myiza kandi bagatanga umusaruro mwiza mu muryango (Billings, 2025; Bufalino, 2025; Khan et al., 2025; Li et al., 2025). Ntakwirengagizwa, ishoramari mu minsi y'ibanze y'ubuzima bw'umwana binyuze mu burere bukwiye, uburezi, n'ibidukikije bimurera neza, bituma akura ari umuntu wuzuye, wubahwa kandi w'icyitegererezo ku babyeyi be no ku muryango muri rusange.

IGICE CYA CUMI NA KIMWE ABABYEYI, NI MUHORE AHO MUSHYAMIRANIYE

Iyo inzovu ebyiri zirwanye, ibyatsi ni byo bihababarira, nyamara zo ziba zishyizeho umutima ku ntambara yazo aho gutekereza ku ngaruka bigira ku byatsi. Intonganya zihoraho hagati y'ababyeyi, gutandukana cyangwa gatanywa mu gihe cy'ingenzi cy'iterambere ry'umwana, bishobora kugira ingaruka zikomeye ku mitekerereze, amarangamutima n'imibanire ye. Izo ngaruka zitandukana bitewe n'imyaka y'umwana, imiterere ye, urwego rw'amakimbirane hagati y'ababyeyi, ndetse n'inkunga ahabwa (Akram et al., 2025; Dawson, 2025; Dehghan Manshadi & Sarafraz, 2025; Ren et al., 2025).

Izo ngaruka zigaragarira mu bijyanye n'amarangamutima no mu mitekerereze aho abana bagira ubwoba n'icyizere gike ku hazaza habo, ndetse no gutinya ko bazagira umubano udakomera n'abandi. Bababazwa n'icyuho cy'umubyeyi umwe, cyane cyane iyo bumva ko yabatereranye. Hari aberekana umujinya ku mubyeyi

umwe cyangwa bombi, abandi bakiyitirira amakosa yateye gatanya, bikabaviramo kumva ko nta gaciro bafite cyangwa ko batifuzwa.

Abana nk'abo bagira impinduka mu myitwarire. Abato bakunze kurakara no kugira imyitwarire idasanzwe (nk'ibytso), mu gihe abakuru bashobora kuba indomwete cyangwa abahezanguni. Hari n'abiyitaho gusa, bakigunga bakirinda inshuti n'umuryango. Hari n'abashobora gutangira gukoresha ibiyobyabwenge cyangwa gukora imibonano mpuzabitsina imburagihe. Ibi byose bishobora kubaviramo kudashobora kwizera abandi, bikabagora kubaka umubano muzima mu gihe kizaza.

Ikibabaje kurushaho, abana babona amakimbirane hagati y'ababyeyi babo kenshi, bikabagora cyane kumenya gukemura amakimbirane yabo ubwabo. Hari bamwe bakura batinya gushyingirwa cyangwa kugira umubano w'igihe kirekire kubera gutinya kugwa mu makosa ababyeyi babo bakoze. Abajyanama b'ihungabana bakunze guhura n'imbogamizi zikomeye mu gufasha

bene abo bana, kuko baba barabaye abahanga mu kubaka iyo nkuru mbi barimo.

Ababyeyi benshi bari mu makimbirane bahamagajwe ku mashuri kenshi kubera ko imyitwarire yabo yatumye abana babo bagira igabanuka mu musaruro w'amasomo. Mu gihe ababyeyi bibwiraga ko ari bo bonyine bagomba kwibazaho mu gihe cya gatanya, ibibazo by'amarangamutima n'umunaniro byateje igabanuka mu myigire n'umurava w'abo bana b'inzirakarengane ariko bashyizwe hagati mu buryo butaziguye.

Bamwe mu bana bahita batakaza ubushake bwo kwitabira ibikorwa by'ishuri cyangwa bagatinda kuganira n'abandi, mu gihe gatanya ikurikiwe no kwimuka cyangwa guhindurirwa uburenganzira bw'uwurera umwana bituma imyigire n'imyitwarire byangirika. Impungenge z'umujoyanama wese wita ku buzima bwo mu mutwe ni ingaruka z'uburwayi bw'ihungabana. Abo bana baba bahanzwe n'ingaruka zo kugira ihungabana, kwiheba, cyangwa kubura ubushobozi bwo kwiyumvamo abandi mu buryo bwimbitse, ndetse hari n'abahita bafata

inshingano nk'iza bakuru bakiri bato, bakita ku bavandimwe cyangwa bakaba ari bo bashyigikira umubyeyi wababaye.

Maze igihe mvanze n'abantu bifuzaga gutandukana byoroshye, mbabwira ko bagomba kwitonda kubera abana babo. Urumva se, icyo ababyeyi bemeye kurera umwana bafatanyije kandi mu mahoro, abana bagira ingaruka nke cyane. Kandi ku babyeyi baba barafashe umwanzuro wa burundu, mbakangurira gushaka inkunga ikomeye y'abantu bakuru: ba nyirarume, ba nyirasenge, abarimu, abajyanama, cyangwa abandi bo mu muryango mugari – si nyamwigendaho cyangwa abantu basangira uburiri – kugira ngo bafashe abana guhangana n'ibibazo barimo.

References

Akhatova, A., Jones, C., Coward, K., & Yeste, M. (2025). How do lifestyle and environmental factors influence the sperm epigenome? Effects on sperm fertilising ability, embryo development, and offspring health. *Clinical Epigenetics*, *17*(1), 7.

Akram, H., Rahim, H. F. A., Daher-Nashif, S., Alsayed, D., Hassan, U. E., & Khaled, S. M. (2025). Gender-based differences in the prevalence and types of adverse childhood experiences and their associations with psychological distress and perceived lack of safety among adolescents in Qatar. *International Journal of Adolescence and Youth*, *30*(1), 2461232.

<https://doi.org/10.1080/02673843.2025.2461232>

Bekkar, B., DeNicola, N., Girma, B., Potarazu, S., & Sheffield, P. (2023, December). Pregnancy and newborn health-heat impacts and emerging solutions. *Seminars in Perinatology*, *47*(8), 151837.

<https://doi.org/10.1016/j.semperi.2023.151837>

Billings, T. R. (2025). *Nurturing Early Childhood Educator: Understanding Teacher Social-Emotional Competence* (Doctoral dissertation, Fielding Graduate University).

Braun, J. M., Messerlian, C., & Hauser, R. (2017). Fathers matter: Why it's time to consider the impact of paternal environmental exposures on children's health. *Current Epidemiology Reports*, 4, 46–55.

<https://doi.org/10.1007/s40471-017-0098-8>

Buafalino, G. (2025). Caring leadership in early childhood education. In *Pedagogies of Compassion and Care in Education* (pp. 245–272). IGI Global Scientific Publishing.

Bunin, G. R., Robison, L. L., Biegel, J. A., Pollack, I. F., & Rorke-Adams, L. B. (2006). Parental heat exposure and risk of childhood brain tumor: A Children's Oncology Group study. *American Journal of Epidemiology*, 164(3), 222–231. <https://doi.org/10.1093/aje/kwj174>

Dalugoda, Y., Kuppa, J., Phung, H., Rutherford, S., & Phung, D. (2022). Effect of elevated ambient temperature on maternal, foetal, and neonatal outcomes: A scoping review. *International Journal of*

Environmental Research and Public Health, 19(3), 1771.

<https://doi.org/10.3390/ijerph19031771>

Dawson, J. (2025). *Adverse Childhood Experiences in Early Adolescence and Adult Interpersonal Relationships Violence* (Doctoral dissertation, Walden University).

Dehghan Manshadi, Z., & Sarafraz, M. R. (2025).

Relationship of maternal childhood maltreatment and children's emotional-behavioral problems: Parental reflection functioning and social support's role. *BMC Psychology*, 13(1), 1–18.

<https://doi.org/10.1186/s40359-025-02627-x>

Dias, B. G., & Ressler, K. J. (2014). Parental olfactory experience influences behavior and neural structure in subsequent generations. *Nature Neuroscience*, 17(1), 89–96.

Donkin, I., & Barrès, R. (2018). Sperm epigenetics and influence of environmental factors. *Molecular Metabolism*, 14, 1–11.

Fedorchenko, Y., Fedorchenko, M., Yessirkepov, M., & Bekarysova, D. (2025). Sauna therapy in rheumatic

diseases: Mechanisms, potential benefits, and cautions.

Rheumatology International, 45(5), 94.

<https://doi.org/10.1007/s00296-025-05852-0>

Garon-Carrier, G., Tiraboschi, G. A., Bernard, J. Y., Matte-Gagné, C., Laurent, A., Lemieux, A., & Fitzpatrick, C.

(2023). Unraveling the effects of maternal breastfeeding duration and exclusive breast milk on children's cognitive abilities in early childhood. *Frontiers in Public Health*, 11, 1225719.

<https://doi.org/10.3389/fpubh.2023.1225719>

Gialeli, G., Panagopoulou, O., Liosis, G., & Siahianidou, T. (2023). Potential epigenetic effects of human milk on infants' neurodevelopment. *Nutrients*, 15(16), 3614.

<https://doi.org/10.3390/nu15163614>

Giannubilo, S. R., Marzioni, D., Tossetta, G., Montironi, R., Meccariello, M. L., & Ciavattini, A. (2024). The "Bad Father": Paternal role in biology of pregnancy and in birth outcome. *Biology*, 13(3), 165.

<https://doi.org/10.3390/biology13030165>

Golding, J., Tunstall, H., Gregory, S., Granell, R., Dodd, J. W., Iles-Caven, Y., ... & Suderman, M. (2023). A history of asthma may be associated with grandparents' exposures to stress and cigarette smoking. *Frontiers in Toxicology*, 5, 1253442. <https://doi.org/10.59075/kr6y3j43>

Johannessen, A., Lønnebotn, M., Calciano, L., Benediktsdóttir, B., Bertelsen, R. J., Bråbäck, L., ... & Svanes, C. (2020). Being overweight in childhood, puberty, or early adulthood: Changing asthma risk in the next generation? *Journal of Allergy and Clinical Immunology*, 145(3), 791–799.

Khan, M. A., Tarar, M. A., Bano, S., Saleem, S., & Shahbaz, M. (2025). Child-parents relationship and its effect on child learning: A sociological study in Dera Ghazi Khan City. *The Critical Review of Social Sciences Studies*, 3(1), 2708–2723.

Kotelchuck, M. (2022). The impact of father's health on reproductive and infant health and development. *Engaged Fatherhood for Men, Families and Gender Equality*, 31.

Lakhoo, D. P., Brink, N., Radebe, L., et al. (2025). A systematic review and meta-analysis of heat exposure impacts on maternal, fetal and neonatal health. *Nature Medicine*, *31*, 684–694.

<https://doi.org/10.1038/s41591-024-03395-8>

Lane, M., Robker, R. L., & Robertson, S. A. (2014). Parenting from before conception. *Science*, *345*(6198), 756–760. <https://doi.org/10.1126/science.1254400>

Li, J., Tsuprykov, O., Yang, X., & Hocher, B. (2016). Paternal programming of offspring cardiometabolic diseases in later life. *Journal of Hypertension*, *34*(11), 2111–2126.

Li, Q., Wang, D., & Qin, G. (2025). Multiple attachment perspectives: The relationship between interpersonal attachment from family and school environments and children's learning engagement. *BMC Psychology*, *13*(1), 1–11. <https://doi.org/10.1186/s40359-025-02633-z>

Manikkam, M., Tracey, R., Guerrero-Bosagna, C., & Skinner, M. K. (2013). Plastics derived endocrine disruptors (BPA, DEHP and DBP) induce epigenetic

transgenerational inheritance of obesity, reproductive disease and sperm epimutations. *PLOS ONE*, 8(1), e55387.

Modak, A., Ronghe, V., Gomase, K. P., & Dukare, K. P. (2023). The psychological benefits of breastfeeding: Fostering maternal well-being and child development. *Cureus*, 15(10). <https://doi.org/10.7759/cureus.46730>

Moradi, M., Angali, K. A., Behzadi, M. H., & Farnoosh, R. (2023). The effect of breastfeeding on children's growth indices up to 6 months: An application of multivariate t linear mixed model. *Journal of Research in Medical Sciences*, 28(1), 31.

https://doi.org/10.4103/jrms.jrms_75_22

Nixarlidou, E., Margioulas-Siarkou, C., Alimperis, A., Vavoulidis, E., Laganà, A. S., Dinas, K., & Petousis, S. (2024). Clinical significance and main parameters promoting the breast-feeding strategy. *Medicine International*, 4(2), 14.

<https://doi.org/10.3892/mi.2024.138>

Nwaru, B. I., Ohlsson, C., Bygdell, M., Martikainen, J., & Kindblom, J. M. (2020). Pubertal BMI change and adult-onset asthma in men: Population-based cohort study in Sweden. *Clinical & Experimental Allergy*, *50*(1), 51–60.

Paul, C., Murray, A. A., Spears, N., & Saunders, P. T. (2008). A single, mild, transient scrotal heat stress causes DNA damage, subfertility and impairs formation of blastocysts in mice. *Reproduction*, *136*(1), 73.

<https://doi.org/10.1530/REP-08-0036>

Principi, N., Campana, B. R., Argentiero, A., Fainardi, V., & Esposito, S. (2025). The influence of heat on pediatric and perinatal health: Risks, evidence, and future directions. *Journal of Clinical Medicine*, *14*(4), 1123.

<https://doi.org/10.3390/jcm14041123>

Ren, X., Lin, C., Pan, L., Fan, Q., Wu, D., He, J., ... & Luo, J. (2025). The impact of parental absence on the mental health of middle school students in rural areas of Western China. *Frontiers in Public Health*, *13*, 1439799.

<https://doi.org/10.3389/fpubh.2025.1439799>

Shi, Q., & Qi, K. (2023). Developmental origins of health and disease: Impact of paternal nutrition and lifestyle.

Pediatric Investigation, 7(2), 111–131.

Tomar, A., Gomez-Velazquez, M., Gerlini, R., Comas-Armangué, G., Makharadze, L., Kolbe, T., ... & Teperino, R. (2024). Epigenetic inheritance of diet-induced and sperm-borne mitochondrial RNAs. *Nature*, 630(8017), 720–727.

Vassoler, F. M. (2025). Heritable consequences of paternal heroin use: A role for miR-19b in drug-taking behavior. *Neuropsychopharmacology*.

<https://doi.org/10.1038/s41386-025-02100-8>

Zhang, H., Zhang, G., Zhang, J., Xiao, M., Cui, S., Wu, S., ... & Lu, X. (2022). Transcription factor SP1 and oncoprotein PPP1R13L regulate nicotine-induced epithelial-mesenchymal transition in lung adenocarcinoma via a feedback loop. *Biochemical Pharmacology*, 206, 115344.

IBYEREKEYE IGITABO

Mbere yo gusama, ababyeyi vitaho imyororkere yabo binyuze mu mibereho myiza kugira ngo babyare abana bazima. kandi b'intelligent, Mbere y'oko umwana avuc, ababyeyi n'abana bubaka umubano wihariye, batanga ibidukikije bifite umtetetako, kandi bagaragaza ubumie mu kwita ku mwana. Mu gihe cy'aribanda, abbyeyi ba^t shyiroho icyizere n umutetako binyuze mugukorakora umwana, kumugaburira no kumwitaho buri gihe. Aka-banda gato karangva no guhugura umwan, kumwerekana urukundo no kumutaha gutekeriza. Mu cihe cy'abana boto, ababyeyi babatora inkunga no kubashyigikire, ariko mu cihe cy ubugimbi n ubwangavu hakibandwa ku umibananeisa n'abamu ruñwe ino bu a'iuuhansa rume. Ababyeyi bagomba kwiga ibijanywe ho rurera no menya uko abana bakura, cyane ceane bareba uruhare rw'imibereho bayo mbere yo gusama ku buzima bw'abana.

IBYEREKEYE UMWANDITSI

Christian Matthew ni impuguke mu buvuzi bw'abaskanane n imiryango, akaba umuhuza vemewe, umuiyanam mu by'iyobokamana, umutoza, umuhanga, n umwanditici. Nk'umubwirizabutumwa ugera hirya no hino, Christian yigisha, ahugura c'andi ashyigerira gahunda z'abitegura gushaka, abashakanne, nabarurshinze bashaka kubakau umubano urambe, Atanga inama no gukemura amakimbirene ku amtu ki gitirabo, ku bashakanne, imiryango ndkeze ibigo. Ni Umyuzidori Mukuru wa CMAT Family Therapy Services Ltd.

ISBN 978-979-2378-82-3



9 788782 277882