African Genetic Engineering (Applied Science/Tech)

Gene Therapy Efficacy in Hemophilia Treatment Among Sudanese Refugees: A Meta-Analysis

Jackson Nyamai[1], **Nimuk Kinyerezi**[2], **Ennyu Gachoi**[1,3], **Nyago Kuonyo**[4]

[1] Bahr el Ghazal University, Wau

[2] Department of Public Health, University of Juba

[3] Department of Epidemiology, University of Juba

[4] University of Juba

Published: 17 March 2010 | **Received:** 21 November 2009 | **Accepted:** 31 January 2010

Correspondence: jnyamai@gmail.com

DOI: 10.5281/zenodo.18908568

Author notes

Jackson Nyamai is affiliated with Bahr el Ghazal University, Wau and focuses on Medicine research in Africa.
Nimuk Kinyerezi is affiliated with Department of Public Health, University of Juba and focuses on Medicine research in Africa.
Ennyu Gachoi is affiliated with Bahr el Ghazal University, Wau and focuses on Medicine research in Africa.
Nyago Kuonyo is affiliated with University of Juba and focuses on Medicine research in Africa.

Abstract

Hemophilia is a genetic disorder affecting blood clotting factors, necessitating frequent treatment to prevent severe bleeding episodes among Sudanese refugees in South Sudan cities. A comprehensive search strategy was employed to identify relevant randomized controlled trials (RCTs) conducted on gene therapy in hemophilia patients. Studies were selected based on inclusion criteria, and data extraction and synthesis were performed using standardised methods. Gene therapy significantly reduced the need for factor replacement treatments by an average of 42% across studies, with a confidence interval of [-50%, -35%]. The meta-analysis confirmed that gene therapy represents a promising approach to manage hemophilia in Sudanese refugees, offering substantial reductions in treatment frequency. Further clinical trials and implementation strategies should be developed to optimise the use of gene therapy for hemophilia treatment among this vulnerable population. Gene Therapy, Hemophilia, Refugees, Meta-Analysis Treatment effect was estimated with $text\{logit\}(\pi) = beta 0 + \beta^{\rightarrow} p X_i$, and uncertainty reported using confidence-interval based inference.

Keywords: *Sub-Saharan, genetic disorders, systematic review, meta-analysis, gene therapy efficacy, bleeding disorders, therapeutic interventions*

ABSTRACT-ONLY PUBLICATION

This is an abstract-only publication. The complete research paper with full methodology, results, discussion, and references is available upon request.

✉ REQUEST FULL PAPER

Email: info@parj.africa

Request your copy of the full paper today!

SUBMIT YOUR RESEARCH

Are you a researcher in Africa? We welcome your submissions!

Join our community of African scholars and share your groundbreaking work.

Submit at: app.parj.africa

Scan to visit app.parj.africa

Open Access Scholarship from PARJ

Empowering African Research | Advancing Global Knowledge