VP35 Economic Consequences Of A Restricted Dutch Sexually Transmitted Infection-Testing Policy

AUTHORS:

Anita Suijkerbuijk (anita.suijkerbuijk@rivm.nl), Eelco Over, Fleur Aar, Hannelore Götz, Birgit Benthem, Anna Lugnér

INTRODUCTION:

Due to the rising costs caused by an increasing demand for Sexually Transmitted Infection (STI) care, the Dutch government changed the funding of STI-clinics (1). A more restrictive testing policy introduced in 2015 no longer required syphilis and human immunodeficiency virus (HIV) tests for younger, heterosexual clients. A less extensive testing policy could be detrimental to the aim of finding and treating STIs (2,3). Infections that remain undetected could possibly lead to an increase in both the total and individual burden of disease, due to transmission and the need for more intensive treatment resulting in higher healthcare costs in the long term. In this study, we evaluated the new Dutch testing policy with respect to intended savings and missed syphilis and/or HIV infections. Moreover, we explored the efficiency of alternative test policies.

METHODS:

Using national surveillance data from 2011 to 2013 with still comprehensive testing for all, we estimated the effects of restrictive testing on test costs, number of infections missed, costs per missed infection, costs per Quality Adjusted Life Year (QALY) lost, and calculated the net monetary benefit.

RESULTS:

The 2015-policy led to estimated savings of EUR1.1 million, while missing approximately three of ten HIV infections and seven of twenty syphilis infections among all younger heterosexual clients (in total 143,612 consultations) per year. Savings were EUR435,000 per QALY lost. Standard testing second-generation immigrants for syphilis and HIV saved EUR525,000/QALY lost. Offering an HIV test when diagnosed with chlamydia or gonorrhoea resulted in savings of EUR568,000/ QALY lost.

CONCLUSIONS:

The 2015-testing policy resulted in substantial savings as few missed HIV and syphilis infections caused QALY losses. Additional standard syphilis and HIV tests for second-generation immigrants and an additional HIV test in case of positive chlamydia or gonorrhoea diagnosis could reduce missed infections in a cost-effective way.

REFERENCES:

1. Suijkerbuijk AW, Over EA, Koedijk FD, et al. More efficient testing policy at STI clinics. *Nederlands tijdschrift voor geneeskunde* 2014, 158:A6980.

2. Leibowitz AA, Byrnes K, Wynn A, Farrell K. HIV tests and new diagnoses declined after california budget cuts, but reallocating funds helped reduce impact. *Health affairs* (Project Hope) 2014, 33(3):418-426.

3. O'Riordan M, Fitzpatrick F. The impact of economic recession on infection prevention and control. *J Hosp Infect.* 2015, 89(4):340-345.

VP36 Cost-Effectiveness Of Non-Invasive Prenatal Testing For Down Syndrome

AUTHORS:

Estibalitz Orruño, Juan Carlos Bayón, Isabel Portillo, José Asua (jasua@euskadi.eus)

INTRODUCTION:

The analysis of cell-free fetal DNA in maternal blood, also called Non-Invasive Prenatal Testing (NIPT), represents an emerging technology and a possible alternative/complement to current prenatal screening based on biochemical and sonographic markers for Down Syndrome (DS) detection.

https://doi.org/10.1017/S0266462317003257 Published online by Cambridge University Press

The aim of the study was to compare the application of NIPT with the prenatal diagnosis/screening procedures currently applied in the Basque Country.

METHODS:

An analytical decision model was developed to assess the costs and consequences, comparing current prenatal screening, NIPT as a contingency test in high-risk cases and NIPT as a first-line screening test. An economic analysis was conducted to determine which strategy was more cost-effective. Sensitivity analyses were performed (1).

RESULTS:

For a population of 97,074 pregnant women in gestational week 14 and a cut-off point of 1:270, NIPT as a contingent test was not cost-effective, detecting two cases less of DS and causing a lower number of miscarriages related to invasive-testing (4 versus 23) at a slightly lower cost (EUR8,111,351 versus EUR8,901,872).

For risk cut-off points of 1:500 or 1:1000 for contingent NIPT, the number of DS cases detected increased, as did the cost. It could be cost-effective compared with current prenatal screening, (EUR61,763 or EUR256,123 per extra DS case detected, respectively).

Using the NIPT as a primary test detected more DS cases (296 versus 271) and caused less miscarriages (5 versus 23), at a substantially higher cost (EUR41,395,645 versus EUR8,901,872). Cost-effectiveness analysis indicated that it was more expensive and more effective.

Univariant sensitivity-analysis showed that when the price of the NIPT as primary test was EUR76, it was dominant compared with current prenatal screening. It was also cost-effective compared with the NIPT as a contingent test (EUR9,869 per extra DS case detected).

CONCLUSIONS:

The study shows that NIPT had higher detection rates for DS in different scenarios, but the cost constitutes a limiting factor for implementation in the Basque Health System.

REFERENCES:

1.Bayón Yusta JC, Orruño Aguado E, Portillo Villares MI, Asua Batarrita J. *Prenatal screening for Down syndrome through fetal DNA sequencing from maternal blood*. Health Technology Assessment Report. OSTEBA. 2016. http://www.ogasun.ejgv.euskadi.eus/r51-catpub/es/k75aWebPublicacionesWar/k75aObtenerPublicacionDigitalServlet?R01HNoPortal=true&N_LIBR=051918&N_EDIC=0001&C_IDIOM=es&FORMATO=.pdf

VP40 Comprehensive Evaluation Of Islet Transplantation For Type I Diabetes

AUTHORS:

Danni Chen, 15211020029@fudan.edu.cn), Kun Xiong, Di Xue

INTRODUCTION:

Despite several therapeutic options existing for the patients with type I diabetes, the patients are still at high risk for severe acute and chronic complications (1). Pancreatic islet transplantation is a promising therapy to achieve good glycemic control with no or little additional insulin (2). This study was to evaluate the effectiveness, safety, economics and social ethics of islet transplantation (IT) for the patients with type I diabetes.

METHODS:

We searched PubMed, Cochrane Library, CNKI and CBM to retrieve eligible literatures. The values of H1bAc before and after transplantation, the rates of insulin independence and functional islet graft at the last follow-up, and the insulin dose per patient-day were analyzed. Descriptive statistics, t tests and random effects meta-analyses were used in the study.

RESULTS:

Totally 21 original papers with 488 cases from 9 different countries were reviewed and analyzed. The studies showed that the H1bAc was decreased from 7.7 percent

https://doi.org/10.1017/S0266462317003257 Published online by Cambridge University Press