**Examining the Impact of Renal Dysfunction and Diabetes on Post-Myocardial Infarction Mortality: Insights from a Comprehensive Retrospective Cohort Study Across Different Age Groups.**

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These datasets contain information used for creation of a scientific article „Examining the Impact of Renal Dysfunction and Diabetes on Post-Myocardial Infarction Mortality: Insights from a Comprehensive Retrospective Cohort Study Across Different Age Groups.”

Estonian Myocardial Infarction Register (EMIR) was established in 2012. It collects data on all acute myocardial infarction hospitalizations nationwide, reporting approximately 2,700 cases annually. We extracted data covering years 2012 – 2019. This database provided information on cardiovascular risk factors, concomitant diseases, in-hospital treatment, and recommended drug therapy at discharge.

Based on the list of patients from EMIR an inquiry from six largest Estonian hospitals, North Estonia Medical Centre (PERH), Tartu University Clinic (TYK), East Tallinn Central Hospital (LTKH), West Tallinn Central Hospital (ITK), East Viru Central Hospital (IVKH) and Pärnu Hospital (PH), was made to obtain data about estimated glomerular filtration rate (eGFR) and glycated haemoglobin (HbA1c).

**Data specific information.**

**Datasets EMIR12-18 and emir2019**

**Column headings and variables:**

* D raviasutus – hospital
* E PATIENT\_DEATH\_TIME\_RR – patient’s time of death
* F PATIENT\_LAST\_UPDATE\_TIME\_RR ­– last time data was updated
* I Varasem südamelihase infarkt – previous myocardial infarction
  + Ei – No
  + Jah – Yes
  + Teadmata – Unknown
* J Eelmiste südamelihase infarkti/infarktide ajad (aasta/aastad)
  + Dateerimata – no date available
* K Stenokardia esinemine enne käesolevat atakki – angina prior to the attack
  + Ei – No
  + Jah – Yes
  + Teadmata – Unknown
* L Krooniline südamepuudulikkus enne käesolevat atakki (NYHA j.) – chronic heart failure prior to the attack (New York Heart Classification I – IV)
  + Ei – No
  + Jah – Yes
  + Teadmata – Unknown
* M Varasem ajuinfarkt – previous stroke
  + Ei – No
  + Jah – Yes
  + Teadmata – Unknown
* N Anamneesis perifeersete veresoonte haigused – known peripheral artery disease
  + Ei – No
  + Jah – Yes
  + Teadmata – Unknown
* O Varasem PTKA – previous percutaneous coronary intervention
  + Ei – No
  + Jah – Yes
  + Teadmata – Unknown
* P Varasem AKŠ – previous coronary artery by-pass surgery
  + Ei – No
  + Jah – Yes
  + Teadmata – Unknown
* Q Suitsetamine – smoking
  + Suitsetab – currently smoking
  + Ei suitseta – does not smoke
  + Varem suitsetas – previously smoked
  + Teadmata - unknown
* R Diabeet – diabetes mellitus
  + Ei ole diabeeti – no diabetes
  + Jah, dieetravil – yes, on diet
  + Jah, tablettravil – yes, on oral medication
  + Jah, insulin- ja tablettravil – yes, on insulin and oral medication
  + Jah, insulinravil – yes, on insulin
  + Teadmata – unknown
* S Diabeet avastati käesoleval hospitaliseerimisel – Diabetes diagnosed during the current hospitalization
  + Jah - yes
* T Arteriaalne hüpertensioon – arterial hypertension
  + Ei ole – no
  + Jah, ebaregulaarselt – yes, inconsistent therapy
  + Jah, regulaarselt tarvitab ravimeid – uses medication regularly
  + Teadma - unknown
* U Perekonnaanamneesis südame isheemiatõbi – positive family history for ischaemic heart disease
  + Ei – No
  + Jah – Yes
  + Teadmata – Unknown
* V Düslipideemia - dyslipidaemia
  + Ei – No
  + Jah – Yes
  + Teadmata – Unknown
* W Hospitaliseerimise aeg\_Saabus vastuvõttu – date and time of hospitalization
* X Ravimid haiglas – Medication during hospitalization
* Y Antiagregandid - antiaggregants
  + Ei – No
  + Jah – Yes
  + Teadmata – Unknown
* Z Määratud antiagregandid – prescribed antiaggregants
* AA Muud antiagregandid – other antiaggregants
* AB Antikoagulandid - anticoagulants
  + Ei – No
  + Jah – Yes
  + Teadmata – Unknown
* AC Määratud antikoagulandid – prescribed anticoagulants
  + Hepariin – heparin
  + Madalmolekulaarne heparin – low molecular weight heparin
  + Varfariin – warfarin
* AD Muud antikoagulandid – other anticoagulants
* AE Glükoproteiin IIb/IIIa inhibiitorid – glycoprotein IIa/IIIb inhibitors
  + Ei – No
  + Jah – Yes
  + Teadmata – Unknown
* AF Määratud Glükoproteiin IIb/IIIa inhibiitorid – prescribed glycoprotein IIa/IIIb inhibitors
* AG Muu glükoproteiin IIb/IIIa inhibiitor - other glycoprotein IIa/IIIb inhibitor
* AH Beeta-blokaatorid – beta blockers
* AI Ca-kanali blokaatorid – Ca channel blockers
* AJ Diureetikumid – diuretics
* AK Inotroopsed ravimid – inotropic drugs
* AL Südameglükosiidid – cardiac glycosides
* AM Antiarütmikumid (v.a Beeta-blokaatorid) – antiarrhythmics (excl. beta blockers)
* AN Nitraadid – nitrates
* AO AKE inhibiitorid – angiotensine converting enzyme inhibitors
* AP AT2 retseptori blokaatorid – angiotensin II receptor blockers
* AQ Statiinid – statins
* AR Muud lippidelangetavad ravimid – other lipid lowering drugs
* AS Kontratseptiivid/hormoonasendusravi – contraceptives/hormone replacement therapy
* AT Antidiabeetiline ravi – antidiabetic medication
* AU Diabeedi ravimiseks – diabetes medication
  + Tablettravi – oral medication
  + Insuliinravi – insulin treatment
  + Insuliin – ja tablettravi – insulin and oral medication
* AV Trombolüütiline ravi – thrombolytic therapy
  + Ei – No
  + Teadmata – Unknown
  + tPA preparaadid – tissue plasminogen activating drugs
* AW Trombolüüs teostatud teises haiglas – thrombolysis done in another hospital
  + Jah – yes
* AX Koronarograafia – coronarography
  + Ei – No
  + Jah – Yes
  + Teadmata – Unknown
* AY Koronaarangioplastika – coronary angioplasty
  + Hiline/planeeritud – late/planned
  + Primaarne – primary
  + NSTEMI korral – in case of non-ST segment elevation myocardial infarction
  + Facilitated
  + Ei – No
  + Ebaõnnestunud protseduur – failed procedure
  + Teadma – unknown
* AZ Stent – stent
  + Jah, ravimkaetud stent – yes, drug eluting stent
  + Jah, metallstent – yes, bare metal stent
  + Ei – no
* BA Sulguri kasutamine – closure device
  + Ei – no
  + Jah, Angioseal – yes, Angioseal
  + Jah, muu – Yes, other device
  + Teadmata – unknown
* BB Sulguri nimetus – closure device name
  + Tr band – Tr band
  + Rõhkmanžett – pressureband
* BC Aortokoronaarne šunteerimine – coronary bypass surgery
  + Jah – Yes
  + Ei – No
  + Tulevikus planeeritud – planned in the future
* BD Elektrokardiostimulatsioon – cardiac pacing
  + Ei – No
  + Jah, ajutine – yes, temporary
  + Jah, permanentne – yes, permanent
* BE Ehhokardiograafia – echocardiography
  + Ei – No
  + Jah – Yes
  + Teadmata – Unknown
* BF Stresstest – stress test
  + Ei ole tehtud- No
  + Teadmata – unknown
  + Füüsiline koormustest – physical stress test
* BG Välja kirjutatud – discharged
  + Koju – home
  + Teise raviasutusse – to another hospital
  + Surm – death
* BJ Diagnoos väljakirjutamisel – diagnosis at discharge
  + STEMI/LBBB MI – ST elevation myocardial infarction/left bundle branch block myocardial infarction
  + NSTEMI – non-ST segement elevation myocardial infarction
  + Teised (võimalik ÄMI) – others (possible acute myocardial infarction)
  + Andmed puudulikud – data missing
* BK Põhidiagnoos haigusloost – diagnosis from discharge documents
  + RHK10 – ICD 10
* BL Põhidiagnoosi alajaotus – subdivision of the diagnosis code
* BN Aspiriin koju – aspirin prescribed at discharge
  + Jah – Yes
  + Ei – No
  + Teadmata - unknown
* BO Antiagregandid koju – antiaggregants prescribed at discharge
  + Prasugreel/Klopidogreel – prasugrel/clopidogrel
  + Teised antiagregandid – other antiaggregants
  + Ei – No
* BP Antikoagulandid koju – anticoagulants prescribed at discharge
  + Vit. K antagonistid – vitamin K antagonists
  + Ei – No
  + Teadmata – unknown
* BQ Beeta-blokaatorid koju – beta blocker prescribed at discharge
  + Jah – Yes
  + Ei – No
  + Teadmata - unknown
* BR AKE- inhibiitorid koju – angiotensin converting enzyme inhibitors prescribed at discharge
* BS AT2 retseptori blokaator koju – angiotensin II receptor blockers prescribed at discharge
* BT Ca-antagonistid koju – Ca channel blockers prescribed at discharge
* BU Nitraadid koju – nitrates prescribed at discharge
* BV statiinid koju – statins prescribed at discharge
* BW Antidiabeetiline ravi – antidiabetic drugs
* BX Antidiabeetiline ravi koju – antidiabetic drugs prescribed at discharge
  + Tablettravi – oral drugs
  + Dieetravi – diet
  + Insuliinravi – insulin
  + Insulin – ja tablettravi – insulin and oral drugs

**PHdata**

**Column headings and variables:**

* B hosp.kp – date of hospitalization
* C glükohemogl – glycated haemoglobin (%)
* D kreatiniin – creatinine (μmol/l)
* E eGFR – estimated glomerular filtration rate (ml/min/1,73 m2)

**LTKHdata**

**Column headings and variables:**

* C hosp.kp – date of hospitalization
* D HbA1C - glycated haemoglobin (%)
* E kreatiniin – creatinine (μmol/l)
* F EGFR (ckd-epi) - estimated glomerular filtration rate (ml/min/1,73 m2)

**IVKHdata**

**Column headings and variables:**

* B hospkp - date of hospitalization
* C glükohemogl - glycated haemoglobin (%)
* D kreatiniin – creatinine (μmol/l)
* E eGFR – estimated glomerular filtration rate (ml/min/1,73 m2)

**PERHdata**

**Column headings and variables:**

* A VANUS – age
* B SUGU – gender
  + M – male
  + N – female
* C ANAL KP – date of the analyse
* D NIMETUS – name of the analyse
  + e-GFR - estimated glomerular filtration rate (ml/min/1,73 m2)
  + B-HbA1c (glükohemoglobiin) - glycated haemoglobin (%)
* E VAARTUS - value

**ITKdata**

**Column headings and variables:**

* B HJ\_ALGUS – date
* D NIMETUS – analyse
* Glükohemoglobiin - glycated haemoglobin
* Hinnanguline glomerulaarfiltratsiooni kiirus (CKD-EPI valemi j.) - estimated glomerular filtration rate
* E VÄÄRTUS - value
* F ÜHIK – unit

**eGFRvastusedTÜK**

**Column headings and variables:**

* C Vaatluse nimi – analyse
  + eGFR (Crea, CKD-EPI) – estimated glomerular filtration rate
* D Vastus - value
* E Vastuse ühik - unit
* F Materjal kogutud – date and time of the analysis
* G Proovinõu ribakood – test tube code

**HbA1cTÜK**

**Column headings and variables:**

* C Vaatluse nimi – analyse
  + HbA1C - glycated haemoglobin
* D Vastus - value
* E Vastuse ühik - unit
* F Materjal kogutud – date and time of the analysis
* G Proovinõu ribakood – test tube code