

Research Reports

Directorate of Health Research

Research reports 2018

01-2018: Interventions for the prevention of Type 2 Diabetes Mellitus within the work environment. A systematic review.

Health research priority topic: Diabetes Mellitus

Non-communicable diseases are the main cause of illness in the insured population from the Peruvian Social Security (EsSalud). It has been estimated that 72% of the healthy life-years lost is attributable to non-communicable diseases. Diabetes mellitus is one of the main diseases included in this group.

02-2018: Systematic review about economic evaluations of interventions to reduce Healthcare-associated infections (HCAIs) in Intensive Care Units.

Health research priority topic: Biosecurity and nosocomial infections.

Healthcare-associated infections (HCAIs) are cause of prolonged hospital stay, death and rising healthcare costs. Bacteremia associated with central venous catheter can leave the highest cost of \$45 814, followed by pneumonia associated with mechanical ventilator with \$40 144 and Clinical Site Infections with a cost of \$20 785.

03-2018: Burden of disease associated with arthrosis within population attended in the Peruvian Social Security - EsSalud

Health research priority topic: Arthrosis

Arthrosis is one the most frequent diseases in the world due to the aging of the population and it is also the most important cause of disability. Therefore, it is necessary to know its magnitude in population affiliated with the Peruvian Social Security.

04-2018: Microbiological profile and antibiotic sensitivity in two high-complexity hospitals in the Peruvian Social Security.

Health research priority topic: Biosecurity and nosocomial infections.

This is the first report carried out in the institution about the microbiological profile and antibiotic sensitivity in the two largest hospitals of the Peruvian Social Security (ESSALUD). The report includes the Edgardo Rebagliati Martins (HNERM in Spanish) and Guillermo Almenara Irigoyen (HNGAI in Spanish) hospitals during the period 2012 to 2016.

05-2018: National Socioeconomic survey about health access within ensured population in EsSalud: Design, methodology and general results.

Health research priority topic: Policies, health management, good corporate governance.

National Socioeconomic survey about health access within insured population in EsSalud (ENSSA in Spanish) was a survey performed by the Central Office of Planning and Budgets of EsSalud in 2015. A representative sample of its affiliates was surveyed at the national level, in the 24 regions. 25 000 homes were visited, and 62 659 affiliates were interviewed.

06-2018: Interventions to reduce the health care waiting times: a synthesis of evidence

Health research priority topic: Policies, health management, good corporate governance.
The health care waiting times is a problem perceived by the insured population. It is estimated that in EsSalud, the time that elapses between requesting an appointment and obtaining it is mostly one month. The long waiting times can harm the health of the population.

Research reports 2019

01-2019: Differences in the estimated risk of tuberculosis transmission in hospital environments considering the measurement of air exchanges per hour in a country with high incidence of tuberculosis.

Health research priority topic: Biosecurity and nosocomial infections.
Ventilation parameters in the evaluated hospital environments, with a perceived high risk of tuberculosis infection, are highly variable. This is directly associated with the number of air changes per hour (ACH) of the evaluated environments, as well as the estimated risk of airborne infection caused by Tuberculosis.

02-2019: Interventions for the prevention of Type 2 Diabetes Mellitus: a synthesis of evidence

Health research priority topic: Diabetes Mellitus.
The components of three lifestyle change programs were described: "Diabetes Prevention Program (DPP)", "Finnish Diabetes Prevention Study (DPS)" y "Life Style Modification Program for Physical Activity and Nutrition program" (LiSM10!), and their effectiveness in reducing the development of diabetes, in reducing the Body mass index, and in reducing the fasting glucose levels was determined

03-2019: Factors associated with lack of adherence to anti-hypertensive treatment: review of reviews.

Health research priority topic: Hypertensive cardiovascular disease.
The lack of adherence to anti-hypertensive treatment is multifactorial, several associated factors have been identified and can be classified according to a multidimensional model (related to patients, socioeconomic factors, comorbidities, and therapy).

04-2019: Effectiveness and safety of the treatment of Cervical Intraepithelial Neoplasia (CIN) with cold cone, cryotherapy or thermo-coagulation compared to LEEP: a Systematic review and metanalysis.

Health research priority topic: Cervical cancer
Early management of cervical premalignant lesions involves ablative methods and excision methods that can be associated with adverse outcomes. The objective of this systematic review is to determine the effectiveness and safety of the use of cryotherapy, cold cone or thermo-coagulation compared to LEEP for the management of cervical intraepithelial neoplasia.

05-2019: Review of reviews on interventions to improve adherence to anti-hypertensive treatment.

Health research priority topic: Hypertensive cardiovascular disease
The objective of this review is to systematize the available evidence by conducting a review of reviews on interventions to improve the adherence to anti-hypertensive treatment.

06-2019: Interventions for diagnosis and treatment waiting times in patients with positive mammographic screening for breast cancer: a systematic review

Health research priority topic: Breast Cancer.

Interventions to reduce waiting times for diagnosis and treatment of breast cancer are aimed to prevent the progression of the disease to low survival rates. The objective of this systematic review is to determine the existing interventions to reduce waiting times, and their effectiveness.

07-2019: Burns associated with electrocautery in the operating room: a brief review.

To describe the factors associated with operating rooms fires, and to determine possible ways to prevent burns associated with electrocautery in the operating rooms.

08-2019: Effectiveness of adherence to a renal health program in patients with chronic kidney disease (CKD) in the Rebagliati health Network. Lima, Peru.

Health research priority topic: Policies, health management, good corporate governance.

In 2013, a strategy of secondary prevention was implemented in partnership with the primary healthcare centers. Patients with Chronic Kidney Disease and risk factors (diabetes and hypertension), the stages 1-3a were attended in the primary healthcare centers and the stages 3b-5 were attended in the Nephrology service; the patients received multidisciplinary management and frequent follow-up according to the stage of kidney disease.

09-2019: Cost-effectiveness analysis of renal health program in patients with chronic kidney disease (CKD) in the Rebagliati health Network. Lima, Peru.

Health research priority topic: Policies, health management, good corporate governance.

At the regional level, there are programs for the prevention of chronic kidney disease (CKD), which have shown positive clinical results; however, to date they have not reported a cost-effectiveness analysis, therefore there are a lack of information about economic impact of prevention strategies in the region.

10-2019: Factors in urban adult population associated with perceived quality of attention to insured population from EsSalud: an analysis of the national socioeconomic survey to insured population from EsSalud (ENSSA), Peru 2015.

Health research priority topic: Policies, health management, good corporate governance.

To identify factors related to usuaries and portfolio of services that are associated with perceived quality of attention in outpatient care, hospitalization, and emergency departments to urban insured adult population from EsSalud who needed medical care in the last 6 months.

11-2019: Factors associated with the non-use of EsSalud health services in urban insured population: an analysis of the national socioeconomic survey to insured population from EsSalud (ENSSA), Peru 2015.

Health research priority topic: Policies, health management, good corporate governance.

To identify factors related to usuaries and portfolio of services that are associated with the non-use of EsSalud health services in urban insured adult population from EsSalud who needed medical care in the last 3 months.

12-2019: Magnitude and factors associated with complications of type 2 Diabetes Mellitus in the EsSalud insured population.

Health research priority topic: Diabetes Mellitus.

To evaluate the magnitude and factors associated with micro and macrovascular complications within insured Peruvian population with type 2 Diabetes, by analyzing the records of the Diabetes Mellitus Surveillance System (SVDM in Spanish) from EsSalud.

13-2019: Bottleneck between screening and treatment for cervical cancer in three EsSalud health networks in Lima: mixed-method studies

Health research priority topic: Cervical cancer

The purpose of the study is to explore the “bottleneck” between screening and initiation of treatment for cervical cancer in women attended in the main EsSalud health networks.

14-2019: Evidence report on cervical cancer screening strategies.

Health research priority topic: Cervical cancer

The aim of this systematic review was to identify and describe the effect of the interventions that seek to reduce the time between screening and treatment for cervical cancer (CC).

15-2019: A rapid synthesis of evidence: Triage System in the emergency departments.

This document is a rapid synthesis of evidence to determine which triage systems is the most effective to be implemented in the Social Security (Manchester Triage System, Canadian Triage and Acuity Scale, Emergency Severity Index or Andorrano System). To do this, a research question has been formulated, a research strategy has been designed, several published studies have been selected, their quality has been evaluated and recommendations have finally been summarized.

Research reports 2020

01-2020: Compliance with infection control standards and recommendations in critical care services.

Health research priority topic: Biosecurity and nosocomial infections.

To keep record about the level of compliance with institutional standards and recommendations for the prevention and control of healthcare associated infections (HCAIs), in critical care services of the national hospitals of the Social Security (EsSalud) in Lima Metropolitan area during 2018.

02-2020: Knowledge and attitudes toward the standards and recommendations for the control of healthcare associated infections (HCAIs) in critical care services.

Health research priority topic: Biosecurity and nosocomial infections.

To explore the knowledge and attitudes of EsSalud health personnel toward the institutional standards and recommendations for the prevention and control of healthcare associated infections (HCAIs), in critical care services of the national hospitals of the Social Security (EsSalud) in Lima Metropolitan area during 2018.

03-2020: Compliance with hand hygiene standards and recommendations in critical care services.

Health research priority topic: Biosecurity and nosocomial infections.

To evaluate the level of compliance with institutional standards and recommendations for the hand hygiene. Also, to explore the knowledge and practices of the health personnel in critical care services of the national hospitals of the Social Security (EsSalud) in Lima Metropolitan area.

04-2020: Prevention of transmission of infectious agents in health care settings: A rapid synthesis of evidence.

As part of the global response to the COVID-19 pandemic, several organizations such as the Center for Disease Control and Prevention (CDC) in United States have developed guidelines for the control of this disease in health care settings (4). To do this, they are based on the experience acquired with the epidemic of both SARS and MERS coronavirus.

05-2020: SARS-CoV-2 infection during the pregnancy: A rapid synthesis of evidence.

There is limited information about the impact of SARS-CoV-2 infection during the pregnancy on women, fetus, or newborn. In this rapid review, the case reports available to date about the consequences of SARS-CoV-2 infection during the pregnancy have been described. This information can help to answer questions of health personnel and population, as well as help to make decisions about the management of possible cases in Peru.

06-2020: Dead body management during the COVID-19 pandemic and ethical considerations: A rapid synthesis of evidence

This document is a rapid review about the guidelines on dead body management and the experiences of another countries in response to the request for technical opinion in the context of the SARS-COV-2 pandemic. To do this, research of primary studies from health international entities (WHO, PAHO), official information from countries that have made recommendations about the topic and information from the main search engines for scientific information, was carried out.

07-2020: Rapid synthesis of evidence: vitamin supplements for prevention or treatment of COVID-19.

To provide reliable information about the use of vitamin supplements, the purpose of this review is to evaluate the available evidence about the effectiveness of the vitamin supplements in prevention or treatment of COVID-19. Thus, the main objective of this rapid synthesis is to generate evidence from published scientific literature that assesses the effectiveness of the vitamin supplements in COVID-19.

08-2020: Gender/family violence in times of quarantine: a critical review of the literature.

The main objective of this critical review of the literature is to analyze and evaluate the information sources about the topic and provide the reader with an overview of various and possible debates about the COVID-19 pandemic, such as domestic violence and its impact on the population health.

09-2020: Rapid synthesis of evidence: Neurological complications of COVID-19 infection.

To date of this review, there are no primary studies that verify that neurological complications presented in COVID-19 patients are attributed to the infection and not to another cause. Existing case reports suggest a possible neurological involvement that needs to be further investigated.

10-2020: Rapid synthesis of evidence: Comorbidities as risk factors for mortality in COVID-19.

This document is a rapid review of a request of technical opinion requested by the Emergency committee by N° 208-1GCPS-ESSALUD-2019, about the complications related to COVID-19. To do this, a research question has been formulated, a research strategy has been designed, several

published studies have been selected, their quality has been evaluated and recommendations have finally been summarized.

11-2020: Rapid synthesis of evidence: Prone ventilation in acute respiratory distress syndrome and COVID-19 infection.

Given the need to establish effective strategies to improve survival in COVID-19 patients who develop acute respiratory distress syndrome (ARDS), the present rapid synthesis was carried out about published papers that assess the effectiveness and safety of prone ventilation in patients with ARDS, for any etiology and COVID-19 infection.

12-2020: Barriers in implementing Kangaroo mother care

The objectives of the present study are to analyze and discuss the barriers in implementing Kangaroo mother care in the “Edgardo Rebagliati Martins” National Hospital; to analyze and discuss the role of the actors involved; to provide a report of the situation of the Kangaroo mother care method in the “Edgardo Rebagliati Martins” National Hospital and, finally, to make recommendations to improve the Kangaroo mother care implementation.

13-2020: Rapid synthesis of evidence: Sensitivity and specificity of X-rays and computed tomography for the diagnosis of COVID-19.

Due to the progression of the pandemic in Peru, the poor accessibility of molecular and serological tests and whose results could take a long time or be false-negatives; the use of imagenological studies, such as X-Rays or Computed tomography (CT) of the thorax, for the diagnosis of COVID-19 were proposed.

14-2020: Factors associated with chronic complications of type 2 diabetes mellitus in patients from a General Hospital of the Peruvian Social Security.

The chronic complications of type 2 diabetes mellitus (T2DM) generate a high rate of morbidity and mortality in developing countries, and their magnitude and associated factors need to be evaluated.

15-2020: Factors associated with complications of type 2 diabetes mellitus in patients from the Peruvian Social Security: surveillance system data.

The objective of this study is to determine the magnitude and factors associated with the chronic complications of type 2 diabetes mellitus in the Peruvian population. The education in type 2 diabetes mellitus consistently showed that reduces the likelihood of micro and macrovascular complications, suggesting that it is an important preventive factor.

16-2020: Report of the Analysis of the current situation of the process of caring for patients with cervical cancer, from the screening to treatment in a hospital of the Social Security: A Case study of delay times.

The objective of this study is to evaluate the delay times from the screening to diagnosis and from this to treatment in women with cervical cancer in a hospital of the Social Security.

17-2020: Accurate screening of cervical cancer: analysis Of ENDES 2014-2018

This study performed an analysis of the situation of access to cervical cancer screening of women between 15 and 30 years insured in the EsSalud Social Security. The main strength of this analysis is that it is based on a representative sample of the Peruvian population.

18-2020: Factors associated with the adherence to pharmacological treatment of patients with hypertension in a Hospital of the EsSalud Social Security.

Lack of adherence to antihypertensive therapy directly contributes to patients coexisting with hypertension, which triggers events that produce risk of greater morbidity and mortality in these patients. In this study we evaluate the factors associated with the adherence to antihypertensive therapy of cardiological patients in the “Aurelio Díaz Ufano Hospital” of EsSalud in San Juan de Lurigancho – Lima, during 2017.

19-2020: Barriers to Cervical cancer diagnosis and treatment: a qualitative study

The objective of this study was to analyze and discuss the barriers to cervical diagnosis and treatment in a high-complex public hospital in Lima, Peru.

20-2020: Patient navigation among patients suspected of breast cancer: a qualitative study.

The objective of this study was to explore qualitatively the experiences of patients with high suspicion of breast cancer obtained from the mammography screening, who have been assigned a companion (navigation) from the diagnosis: as well as the experiences of the health personnel involved in this process.

21-2020: Hospital outcomes in hospitalized patients with COVID-19 in EsSalud who received Hydroxychloroquine, Azithromycin and ivermectin: Emulation of a clinical trial.

In Latin America, Peru is the country most affected by the COVID-19 pandemic. Since the use of Hydroxychloroquine, Azithromycin, ivermectin and dexamethasone has been authorized at the national level in COVID-19 patients, our objective was to evaluate the effectiveness of the Hydroxychloroquine alone or in combination with any other mentioned drugs, to prevent the 30-days mortality among the hospitalized patients with COVID-19 without a potentially lethal disease.

Research reports 2020

01-2021: Spatial distribution of population affiliated to Peruvian Social Security according to their abdominal perimeter: sub-analysis of the survey ENSSA 2015.

Health research priority topic: Nutritional deficiencies

To determine the spatial distribution of population affiliated to Peruvian Social Security according to their abdominal perimeter: a sub-analysis of the National Socioeconomic survey about health access within insured population of EsSalud (ENSSA) 2015. Likewise, to determine the abdominal obesity according to sex, age group, educational level, occupation status, socioeconomic status, marital status, area of residence and political region.

02-2021: Comparison between different systems, identification, report, and registry of hospital events in the Peruvian Social Security.

Health research priority topic: Quality of health services.

To compare the rates of identification, report, and registry of hospital adverse events (AEs) using the different report systems in the Peruvian Social Security during 2017 to 2018. Likewise, to

describe the number and type of AEs that could be identified by using the Computerized Registry of Attention to the Insured population (RIAA in Spanish) and the database of adverse events of the HNERM (in Spanish).

03-2021: Situational evaluation of the organization, sources and practices about prevention and control of infections in the Healthcare providers at the national level.

Health research priority topic: healthcare associated infections

To describe the current situation in the Healthcare providers (IPRESS in Spanish) of their control systems for infections, their capacities, staff, and plans for the prevention and control of infections, hand washing, personal protective equipment, prevention of catheter associated urinary tract infections, prevention of central venous catheter-associated bloodstream infection and prevention of mechanical ventilator-associated pneumonia.

04-2021: Incidence and characteristics of tuberculosis in health personnel in four level III hospitals of the Social Security.

Health research priority topic: Infectious and parasitic diseases, Tuberculosis.

To estimate the incidence and describe the characteristics of tuberculosis (TB) in health personnel (HP) in level III hospitals of the Peruvian Social Security between 2013 and 2018.

05-2021: Risk factors associated with COVID-19 infection in patients attended in national health networks of EsSalud, April-July 2020.

Health research priority topic: Emergency services.

The current health crisis due to the COVID-19 epidemic, has imposed new challenges on public health due to its high transmission, mortality, and the few effective health interventions to control it. This study researches the socioeconomic and clinical risk factors in COVID-19 patients attended in the health networks of EsSalud during April-July 2019.

06-2021: Mental health in times COVID-19: the individual and family impact on the emotional health of the insured population.

Health research priority topic: Mental health

To know and explore feelings and expectations generated by COVID-19 in the insured population of the Social Security and its impact at individual and family level. To describe the main emotional challenges for the insured population due to the COVID-19 and explore their causes. To describe and analyze the main strategies to face situations that affect the mental health of the insured population and their families.

07-2021: Concordance of serological tests in the detection of IgM and IgG antibodies for the diagnosis of SARS-CoV-2 infection.

The objective of this study was to evaluate the concordance of serological tests in the detection of IgM and IgG antibodies for the diagnosis of SARS-CoV-2 infection, our results are relevant since they allow us to understand the diagnostic performance of serological tests.