



Sick Leave in Colombia in the 2016–2018 period: A Retrospective Cross-Sectional Observational Study

Licencia por enfermedad en Colombia en el período 2016-2018: Estudio observacional transversal retrospectivo

Ivonne Constanza Valero-Pacheco¹ orcid.org/0000-0002-3217-0800

Martha I. Riaño-Casallas^{2*} orcid.org/0000-0002-9384-1428

Olmer García-Bedoya³ orcid.org/0000-0002-6964-3034

Fredy G. Rodríguez-Páez¹ orcid.org/0000-0001-5067-1353

Fabián Cardona⁴ orcid.org/0000-0002-5988-4547

Eliana M. Téllez-Avila⁵ orcid.org/0000-0001-7421-0439

Ruth M. Palma-Parra⁵ orcid.org/0000-0001-8494-7370

1. Universidad de Bogotá Jorge Tadeo Lozano, Faculty of Economic and Administrative Sciences, Bogota, Colombia.

2. Universidad Nacional de Colombia, Faculty of Economic Sciences, Bogotá, Colombia.

3. Universidad de Bogotá Jorge Tadeo Lozano, Faculty of Natural Sciences and Engineering, Bogotá, Colombia.

4. Association of Integral Medicine Companies (ACEMI), Colombia.

5. National Health Institute (NHI), Colombia.

Fecha de recepción: Enero 27 - 2021

Fecha de revisión: Enero 21 - 2022

Fecha de aceptación: Agosto 26 - 2022

Valero-Pacheco IC, Riaño-Casallas MI, García-Bedoya O, Rodríguez-Páez FG, Cardona F, Téllez-Avila EM, et al. Sick Leave in Colombia in the 2016–2018 period: A Retrospective Cross-Sectional Observational Study. Univ. Salud. 2022; 24(3):218-226. DOI: <https://doi.org/10.22267/rus.222403.276>

Abstract

Introduction: To understand the sick leave situation and the causes and effects of a temporary loss of capacity to work allows for the strengthening of policies and management in the provision of health services. **Objective:** To analyze sick leave in Colombia in the 2016–2018 period. **Materials and methods:** A retrospective cross-sectional observational study and the relative risk was calculated. Sick leave reports were provided by the Ministry of Health and Social Protection. 12,410,837 reports from formal workers between the ages of 18–70 years and had at least one temporary disability were processed. **Results:** The average age of people with sick leave was 37.11 years, 53% corresponding to females. On average, sick leave was 90.6% and 5.6% for dependent and independent workers, respectively. The principal causes of disability were musculoskeletal diseases and were more likely in men and adults according to RR. Men in comparison to females and adults in comparison to youths are less likely to have sick leave due to respiratory disease. **Conclusions:** In Colombia, females presented more temporary sick leave, even if males had more days of disability, even though the median was three days in both genders. Youth and adults had more sick leave days.

Keywords: Sickness absence; sick leave; disability insurance; delivery of health care; public health surveillance (Source: DeCS, Bireme).

Resumen

Introducción: Comprender la situación de incapacidad por enfermedad, causas y efectos de una pérdida temporal de la capacidad de trabajo fortalece las políticas y la gestión en la prestación de servicios de salud. **Objetivo:** Analizar las incapacidades por enfermedad en Colombia en el período 2016-2018. **Materiales y métodos:** Estudio observacional transversal retrospectivo, con cálculo del riesgo relativo. Se procesaron 12.410.837 registros de trabajadores formales entre 18 y 70 años de edad y con al menos una incapacidad temporal, según los informes del Ministerio de Salud y Protección Social. **Resultados:** La edad promedio de las personas fue de 37,11 años, 53% fueron mujeres. En promedio, el 90,6% de las incapacidades fue para trabajadores dependientes y el 5,6% trabajadores independientes. Las principales causas de incapacidad fueron las enfermedades del sistema musculoesquelético más frecuentes en hombres adultos según RR. Los hombres en comparación con las mujeres y los adultos en comparación con los jóvenes tienen menos probabilidades de tener licencia por enfermedad respiratoria. **Conclusiones:** Las mujeres presentaron más incapacidades temporales por enfermedad, aunque los hombres tuvieron más días de incapacidad, la mediana fue de tres días en ambos géneros. Los jóvenes y los adultos tenían más días de baja por enfermedad.

Palabras clave: Ausencia por enfermedad; baja laboral por enfermedad; absentismo por enfermedad; licencia por enfermedad; días de baja por enfermedad (Fuente: DeCS, Bireme).

*Autor de correspondencia

Martha Isabel Riaño Casallas
e-mail: mirianoc@unal.edu.co

The study carried out by the Arrieta Burgos *et al*⁽²¹⁾, indicates that 55.3% of SL had a duration of 1–2 days; while in our findings, differences were observed by age groups, where young people had SL of short duration (less than three days), in contrast to adults and older people who had SL of three to 90 days.

This study's main limitation was not having data on occupation or economic activity, which would allow analysis of disability and its relationship with possible occupational risk factors. Additionally, since different institutions provided the information to the MHSP, there were problems with these records' quality.

One of the strengths of this study was in being the first developed with data from official sources and representing the entire Colombian population that belongs to the Contributive Health System, which allows comparison and establishment of results that point significantly toward health management public policy guidelines. These are raw data covering the entire sample population.

In Colombia, females have more SL than males. In addition, females have, on average, longer incapacities. On the other hand, adolescents and young people have more SL due to NCDs and injuries, while for the adult and elderly groups there is an important and large contribution of NCDs. Injuries and traumas possibly have effects on work productivity, which suggests the need for more detailed studies, especially of the young population.

Additionally, analyzing three years of information allows us to have a baseline to evaluate the changes in SL behavior in each year. On the other hand, it presents information discriminated by gender and age groups, detailed in other studies, that only present general information.

Conflict of Interest: The authors have no conflicts of interest associated with the material presented in this paper.

References

1. Vaquero-Álvarez M, Álvarez-Theurer E, Romero-Saldaña M. Influence of the working conditions on sickness absence due to common diseases. *Aten Primaria* [Online]. 2018; 50(4):238-46. DOI: 10.1016/j.aprim.2017.03.011.
2. Mora D, Mejía Z, Rincón E, Barrios R, Padilla F. Work absenteeism by medical cause. Instituto Autónomo Hospital Universitario de Los Andes. Merida. Venezuela. 2001-2003. MedULA [Online]. 2006 [cited 2022 Mar 22]; 14(1-4):22-6.
3. Available from: <http://www.saber.ula.ve/handle/123456789/21861>
3. Sum G, Ishida M, Koh GC-H, Singh A, Oldenburg B, Lee JT. Implications of multimorbidity on healthcare utilisation and work productivity by socioeconomic groups: Cross-sectional analyses of Australia and Japan. *PLoS ONE* [Online]. 2020 Apr 28; 15(4):e0232281. DOI: 10.1371/journal.pone.0232281.
4. Vicente Pardo JM. Towards a new framework for medical assessment of capacity/incapacity. Proposals for improvement and change areas. *Med Segur Trab* [Online]. 2016 [cited 2020 Jul 15]; 62(Suppl):44-60. Available from: http://scielo.isciii.es/scielo.php?script=sci_arttext&pid=S0465-546X2016000400005
5. López Barragán CN, Bogotá Rodríguez LC, Valero-Pacheco IC, Torres Vanegas CA, Castillo Martínez AD. Temporary disability and related variables. A bibliographic review. *Cienc Tecnol Salud Vis Ocul* [Online]. 2020; 17(2):21-31. DOI: 10.19052/sv.vol17.iss2.3.
6. Vilardell Ynaraja M, Esteve Pardo M, Carreras Valls R, Olivé Cristany V, Bretau Viñas F, Subirats Cid P, et al. Descriptive study of sickness absence in the health care sector of Catalonia (2009–2012). *Arch Prev Riesgos Labor* [Online]. 2016 [cited 2020 Jul 23]; 19(1):15-21. Available from: http://scielo.isciii.es/scielo.php?script=sci_arttext&pid=S1578-25492016000100003&lng=es&tlang=es
7. Roelen CA, Koopmans PC, Anema JR, van der Beek AJ. Recurrence of medically certified sickness absence according to diagnosis: a sickness absence register study. *J Occup Rehabil* [Online]. 2010; 20(1):113-21. DOI: 10.1007/s10926-009-9226-8.
8. Kausto J, Verbeek JH, Ruotsalainen JH, Halonen JI, Virta LJ, Kankaanpää E. Self-certification versus physician certification of sick leave for reducing sickness absence and associated costs. *CDSR* [Online]. 2018 Aug 15; (8):1465-858. DOI: 10.1002/14651858.CD013098.
9. Villaplana García M, Sáez Navarro C, Meseguer de Pedro M, García-Izquierdo M. Effect of the sociodemographic, occupational, organisational and environmental variables on the duration of sick leave in Spain. *Aten Primaria* [Online]. 2015 Feb; 47(2):90-8. DOI: 10.1016/j.aprim.2014.03.010.
10. López-Guillén García A, Vicente Pardo JM. Incapacity map in Spain, an urge necessity. *Med Segur Trab* [Online]. 2015; 61(240):378-92. DOI: 10.4321/S0465-546X2015000300007.
11. Dekkers-Sánchez PM, Hoving JL, Sluiter JK, Frings-Dresen MHW. Factors associated with long-term sick leave in sick-listed employees: a systematic review. *OEM* [Online]. 2008; 65(3):153-7. DOI: 10.1136/oem.2007.034983.
12. Colombian Ministry of Health and Social Protection. Lifecycle [Online]. Bogotá (COL): Social Protection Communication Center; [cited 2020 Aug 31]. Available from: <https://www.minsalud.gov.co/proteccionsocial/Paginas/cicloVida.aspx>
13. Colombian Ministry of Health and Social Protection. Resolution N°1740 (Spanish). 2019 Jun 28. Available from: http://normograma.supersalud.gov.co/normograma/docs/resolucion_minsaludsps_1740_2019.htm
14. Colombian Ministry of Health and Social Protection. Resolution N°4622 (Spanish). 2016 Oct 3. Available from: https://normograma.info/crc/docs/pdf/resolucion_minsaludsps_4622_2016.pdf
15. Colombian Ministry of Labor. Decree N°2552 (Spanish). 2015 Dec 30. Available from:

- <https://www.funcionpublica.gov.co/eva/gestornormativo/norma.php?i=67555>
16. Colombian Ministry of Labor. Decree N°2209 (Spanish). 2016 Dec 30. Available from: <https://www.funcionpublica.gov.co/eva/gestornormativo/norma.php?i=78793>
17. Colombian Ministry of Labor. Decree N°2269 (Spanish). 2017 Dec 30. Available from: <https://www.funcionpublica.gov.co/eva/gestornormativo/norma.php?i=84939>
18. Colombian National Council of Social Security in Health. Agreement 260 (Spanish). 2004 Feb 4. Available from: https://www.minsalud.gov.co/Normatividad_Nuevo/ACUE_RDO%20260%20DE%202004.pdf
19. World Health Organization. International Classification of Diseases and Health Related Problems, 10th revision (ICD-10) Vol. 1 [Online]. 2003. [cited 2020 Aug 31]. Available from: <https://iris.paho.org/bitstream/handle/10665.2/6282/Volume1.pdf>
20. Global Burden of Disease. Global Health Data Exchange (GHDE) [Online]. Washington (USA): Institute for Health Metrics and Evaluation. 2019 [cited 2020 Aug 31]. Available from: <http://ghdx.healthdata.org/gbd-results-tool>
21. Arrieta Burgos E, Fernández Londoño C, Sepúlveda Zea C, Vieco Giraldo J. Third follow-up report on absenteeism and medical disabilities [Online]. Bogotá D.C (COL): Andi Centro de Estudios Sociales y Laborales (CESLA); 2019. Available from: <http://www.andi.com.co/Uploads/Tercer%20informe%20de%20seguimiento%20sobre%20salud%20y%20estabilidad%20en%20el%20empleo%20CESLA%20ANDI.pdf>
22. Manent Bistué I, Ramada Rodilla JM, Serra Pujadas C. Musculoskeletal disorders and temporary disability: Characteristics and duration. Catalonia, 2007–2010. *Arch Prev Riesgos Labor* [Online]. 2016; 19(4):222-30. Available from: <https://scielo.isciii.es/pdf/aprl/v19n4/original2.pdf>
23. Saldarriaga JF, Martínez E. Factors associated with the labour absenteeism by medical reason in an university institution. *Rev Fac Nac Salud Pública* [Online]. 2007 [cited 2022 Mar 22]; 25(1):33-9. Available from: https://www.researchgate.net/publication/262507756_Factors_associated_with_the_labour_absenteeism_by_medical_reason_in_an_university_institution