

# The impact of COVID-19 on the well-being and cognition of older adults living in the United States and Latin America

Ganesh M Babula<sup>1</sup> | Valeria L Torres<sup>2</sup> | Daisy M Acosta<sup>3</sup> | Cinthya Aguero<sup>2</sup> |  
 Sara Gloria Aguilar-Navarro<sup>4</sup> | Rebecca E Amariglio<sup>2</sup> | Juliana Aya Ussui<sup>5</sup> |  
 Ana Y Baena<sup>6</sup> | Yamile Bocanegra<sup>6</sup> | Sonia MD Brucki<sup>7</sup> | Julian Bustin<sup>8</sup> |  
 Diego Cabrera<sup>9</sup> | Nilton Custodio<sup>10</sup> | Monica M Diaz<sup>11</sup> | Lissette Duque<sup>12</sup> |  
 Idalid Franco<sup>13</sup> | Jennifer R Gatchel<sup>2</sup> | Ana Paola Garza-Naveda<sup>14</sup> |  
 Mariana Gonzalez-Lara<sup>15</sup> | Lidia Antonia Gutiérrez<sup>4</sup> | Edmarie Guzman-Velez<sup>2</sup> |  
 Bernard J Hanseeuw<sup>16</sup> | Ivonne Z Jiménez-Velazquez<sup>17</sup> | Tomas Leon<sup>18</sup> |  
 Jorge J Llibre-Guerra<sup>19</sup> | Maria J Marquine<sup>20</sup> | **Jairo E Martinez<sup>2</sup>** | Luis D Medina<sup>21</sup> |  
 Claudia Miranda-Castillo<sup>22</sup> | Alejandra Morlett<sup>23</sup> | Diana Munera<sup>2</sup> |  
 Alberto Nuñez-Herrera<sup>12</sup> | Maira Okada de Oliveira<sup>24</sup> | Santiago Palmer Cancel<sup>25</sup> |  
 Enmanuelle Pardilla-Delgado<sup>26</sup> | Jaime Perales<sup>27</sup> | Celina F Pluim<sup>2</sup> |  
 Liliana A Ramirez-Gomez<sup>2</sup> | Dorene Rentz<sup>26</sup> | Claudia Rivera-Fernandez<sup>28</sup> |  
 Monica Rosselli<sup>29</sup> | Cecilia Serrano<sup>30</sup> | María Jose Suing<sup>31</sup> | Andrea Slachevsky<sup>32</sup> |  
 Marcio Soto<sup>33</sup> | Reisa A Sperling<sup>2</sup> | Fernando Torrente<sup>34</sup> | Daniela Thumala<sup>35</sup> |  
 Patrizia Vannini<sup>2</sup> | Clara Vila-Castelar<sup>2</sup> | Tatiana Mirella Yanez Escalante<sup>36</sup> |  
 Yakeel T Quiroz<sup>2</sup>

<sup>1</sup> Washington University School of Medicine, St. Louis, MO, USA<sup>2</sup> Massachusetts General Hospital, Harvard Medical School, Boston, MA, USA<sup>3</sup> Universidad Nacional Pedro Henriquez Ureña, Santo Domingo, Dominican Republic<sup>4</sup> Instituto Nacional de Ciencias Médicas y Nutrición Salvador Zubirán, México, DF, Mexico<sup>5</sup> Massachusetts General Hospital, Harvard Medical School, Charlestown, MA, USA<sup>6</sup> Grupo de Neurociencias de Antioquia, Universidad de Antioquia, Medellin, Colombia<sup>7</sup> Cognitive and Behavioural Neurology Unit - University of São Paulo, São Paulo, Brazil<sup>8</sup> INECO, CABA, Argentina<sup>9</sup> Universidad Peruana Cayetano Heredia, San Martín de Porres, Peru<sup>10</sup> Research Unit, Instituto Peruano de Neurociencias, Lima, Peru<sup>11</sup> Universidad Peruana Cayetano Heredia, Lima, Peru<sup>12</sup> Neuromedicenter, Quito, Ecuador<sup>13</sup> Harvard Medical School, Boston, MA, USA<sup>14</sup> Mass. General Brigham, Boston, MA, USA<sup>15</sup> Instituto Nacional de Ciencias Médicas y Nutrición Salvador Zubirán, Distrito Federal, DF, Mexico<sup>16</sup> Massachussets General Hospital, Harvard Medical School, Boston, USA<sup>17</sup> University of Puerto Rico, School of Medicine, San Juan, Puerto Rico<sup>18</sup> Memory and Neuropsychiatry Disorders Clinic (CMYN), Santiago, Chile<sup>19</sup> Washington University in St Louis, St Louis, MO, USA

<sup>20</sup> University of California San Diego, La Jolla, CA, USA

<sup>21</sup> University of Houston, Houston, TX, USA

<sup>22</sup> Universidad Andres Bello, Santiago, Chile

<sup>23</sup> University of California, San Diego, La Jolla, CA, USA

<sup>24</sup> Atlantic Senior Fellow for Equity in Brain Health at GBHI, San Francisco, CA, USA

<sup>25</sup> Ponce Health Sciences University, Ponce, Puerto Rico

<sup>26</sup> Massachusetts General Hospital, Boston, MA, USA

<sup>27</sup> University of Kansas Alzheimer's Disease Center, Fairway, KS, USA

<sup>28</sup> Universidad Nacional de San Agustín de Arequipa, AREQUIPA, Peru

<sup>29</sup> Florida Atlantic University, Davie, FL, USA

<sup>30</sup> CEMIC, Buenos Aires, Argentina

<sup>31</sup> Instituto Nacional de Ciencias Médicas y Nutrición Salvador Zubirán, México, DF, Mexico

<sup>32</sup> Neuropsychology and Clinical Neuroscience Laboratory (LANNEC), Physiopathology Department - ICBM, Neuroscience and East Neuroscience Departments, Faculty of Medicine, Universidad de Chile, Santiago, Chile

<sup>33</sup> Universidad Nacional de San Agustín de Arequipa, Arequipa, Peru

<sup>34</sup> Institute of Cognitive and Translational Neurosciences (CONICET - Favaloro University - INECO Foundation), Buenos Aires, Argentina

<sup>35</sup> University of Chile, Santiago, Chile

<sup>36</sup> Universidad Nacional de San Agustín de Arequipa, Arequipa, Peru

#### Correspondence

Jairo E Martinez, Massachusetts General Hospital, Harvard Medical School, Boston, MA, USA  
Email: [jmartinez24@mgh.harvard.edu](mailto:jmartinez24@mgh.harvard.edu)

#### Abstract

**Background:** In the COVID-19 pandemic, older adults from vulnerable ethnoracial groups are at high risk of infection, hospitalization, and death. We aimed to explore the pandemic's impact on the well-being and cognition of older adults within and outside of the United States (US).

**Method:** 1,747 (646 White, 991 Latino, 77 Black, 33 Asian; 72% female) individuals from the US and 14 Latin American countries completed an online survey regarding well-being and cognition during the pandemic. Outcome variables (pandemic impact, discrimination, loneliness, purpose of life, subjective cognitive concerns) were compared across four US ethnoracial groups, and Latinos living in the US and Latin America.

**Result:** Mean age was 66·5 ( $SD = 7\cdot70$ ) years and mean education was 15·4 ( $SD = 2\cdot76$ ) years. We found no differences in the pandemic's overall impact across US ethnoracial groups. Compared to Whites, Latinos reported greater economic impact ( $p < .001$ ,  $\eta_p^2 = .031$ ); while Blacks reported experiencing discrimination more often ( $p < .001$ ,  $\eta_p^2 = .050$ ). Blacks and Latinos reported more positive coping ( $p < .001$ ,  $\eta_p^2 = .040$ ). Latin American Latinos reported greater pandemic impact ( $p < .001$ ,  $\eta_p^2 = .013$ ), more positive coping ( $p = .006$ ,  $\eta_p^2 = .008$ ), and less discrimination than US Latinos ( $p < .001$ ,  $\eta_p^2 = .013$ ).

**Conclusion:** The COVID-19 pandemic has differentially impacted the well-being of older ethnically diverse individuals in the US and Latin America. Future studies should examine how mediators like income and coping skills modify the pandemic's impact.