Cerebrovascular Diseases

Original Paper

Cerebrovasc Dis
DOI: 10.1159/000540038

Received: March 17, 2024
Accepted: June 21, 2024
Published online: July 4, 2024

Recommendations for Implementing the INTERACT3 Care Bundle for Intracerebral Hemorrhage in Latin America: Results of a Delphi Method

Ma. Ignacia Allende[a] Paula Muñoz-Venturelli[a, b, c] Francisca Gonzalez[a, d] Francisca Bascur[a] Craig S. Anderson[a, c, e] Menglu Ouyang[c] Baltica Cabieses[f] Alexandra Obach[f] Vanessa Cano-Nigenda[g] Antonio Arauz[g]
on behalf of the LATAM INTERACT3 Consensus Statement Panel

[a]Centro de Estudios Clínicos, Instituto de Ciencias e Innovación en Medicina, Facultad de Medicina Clínica Alemana Universidad del Desarrollo, Santiago, Chile; [b]Servicio de Neurología, Departamento de Neurología y Psiquiatría, Clínica Alemana de Santiago, Facultad de Medicina Clínica Alemana Universidad del Desarrollo, Santiago, Chile; [c]The George Institute for Global Health, Faculty of Medicine, University of New South Wales, Sydney, NSW, Australia; [d]Facultad de Ciencias de la Salud Blanquerna, Universitat Ramon Llull, Barcelona, Spain; [e]Institute of Science and Technology for Brain-Inspired Intelligence, Fudan University, Shanghai, China; [f]Centro de Salud Global Intercultural, Instituto de Ciencias e Innovación en Medicina, Facultad de Medicina Clínica Alemana Universidad del Desarrollo, Santiago, Chile; [g]Instituto Nacional de Neurología y Neurocirugía Manual Velasco Suarez, Mexico City, Mexico

Downloaded from http://karger.com/ced/article-pdf/doi/10.1159/000540038/4258896/000540038.pdf by guest on 19 August 2024

Keywords
Implementation science · Intracerebral hemorrhage · Care bundle · Stroke · Latin America

Abstract

Introduction: The third Intensive Care Bundle with Blood Pressure Reduction in Acute Cerebral Hemorrhage Trial (INTERACT3) showed that the implementation of a care bundle improves outcomes after acute intracerebral hemorrhage (ICH). We aimed to establish consensus-based recommendations for the broader integration of the care bundle across Latin American countries (LAC). ***Methods:*** A 3-phase Delphi study allowed a panel of 32 healthcare workers from 14 LAC to sequentially rank statements relevant to 7 domains (training, resources/infrastructure, patient education, blood pressure, temperature, glycemic control, and anticoagulation reversal). The pre-defined consensus threshold was 75%. ***Results:*** A total of 43 statements reached consensus by the third round, with 12 new statements emerging through rounds. The highest-ranked statements in each domain emphasized critical aspects, but successful implementation requires appropriate resourcing. Key priorities were con-

Names of the LATAM INTERACT3 Consensus Statement Panel are listed in the supplementary material (for all online suppl. material, see https://doi.org/10.1159/000540038).

karger@karger.com
www.karger.com/ced

© 2024 The Author(s).
Published by S. Karger AG, Basel

This article is licensed under the Creative Commons Attribution-NonCommercial 4.0 International License (CC BY-NC) (http://www.karger.com/Services/OpenAccessLicense). Usage and distribution for commercial purposes requires written permission.

Correspondence to:
Paula Muñoz-Venturelli, paumunoz@udd.cl

tinuous training of all healthcare workers in ICH management, establishing protocols aligned with available resources, and collaborative interdisciplinary care supported by institutional networks. Statements related to anticoagulation reversal had the highest priority. ***Conclusions:*** Consensus statements are provided to facilitate integration of the INTERACT3 care bundle to reduce disparities in ICH outcomes in LAC.

© 2024 The Author(s).
Published by S. Karger AG, Basel

Introduction

Intracerebral hemorrhage (ICH) is less frequent but has a higher loss of productive life than ischemic stroke [1, 2]. The third Intensive Care Bundle with Blood Pressure Reduction in Acute Cerebral Hemorrhage Trial (INTERACT3) used an international stepped-wedge cluster-randomized design to show that the reconfiguration of hospital services to implement a care bundle involving early intensive blood pressure (BP) lowering (systolic BP <140 mm Hg), glycemic control (6.1–7.8 mmol/L and 7.8–10.0 mmol/L without and with diabetes mellitus, respectively), treatment of pyrexia (temperature level ≤37.5°C), and reversal of anticoagulation (international normalized ratio [INR] <1.5) improves outcomes from acute ICH [3].

Latin American countries (LAC) have a high burden of stroke [4] and unique challenges in implementing evidence-based strategies, fragmented healthcare systems, social disparities, and diversity in culture and health literacy [5, 6]. Although the INTERACT3 process evaluation captured some implementation barriers, we wished to consolidate such information by generating strategies specific to LAC. Herein, we report our efforts to establish recommendations to implementing the INTERACT3 care bundle in LAC.

Methods

We performed a 3-phase online Delphi study, following the Recommendations for the Conducting and Reporting of Delphi Studies (CREDES), as outlined in detail in the online supplementary material [7]. In brief, the first draft followed a comprehensive review of the INTERACT3 process evaluation among participating sites in LAC (unpublished data) to produce 43 statements categorized into 7 domains which outline the four primary interventions plus domains frequently mentioned in the process evaluation: (i) training and education; (ii) human resources and infrastructure; (iii) early intensive BP control; (iv) strict glucose control; (v) body temperature control; (vi) rapid reversal of anticoagulation; and (vii) education for patients and family members. Participants for our study were recruited from 14 LAC according to the following criteria: healthcare professionals with ≥5-years postgraduation, ≥1-year work experience in a public health facility; and active involvement in the care of ICH patients. People working in a facility without computerized tomography or an emergency area were excluded.

In the first round, panelists rated each statement according to their level of agreement on a 4-point Likert scale (strongly agree [SA], agree, disagree, and strongly disagree); an open-box section allowed for comments. Pre-defined consensus threshold was set at 75% agreement (SA or agree) to retain a statement [8, 9]; statements below this threshold were modified according to feedback.

In the second round (R2), new and modified statements that achieved consensus were removed and included in round 3 (R3) where panelists provided their percentage agreement and relevant citations. R3 followed a similar dynamic process using a ranking on a 9-point Likert scale, from 1 "most important" to 9 "least important." Panelists could indicate the statements they considered could be removed with 75% exclusion agreement so that the final report included all statements with a substantial level of importance.

Results

The panel comprised 32 participants (mean age 37.1 ± 5.8 years) from 14 LAC (Fig. 1) who were predominantly neurologists (87.5%) with a mean 9.7 ± 3.7 years of experience (Table 1). In the first round, 11 of the 43 statements achieved consensus so they were not modified and did not pass to R2. The 32 statements that failed to achieve consensus, and another 8 new statements, were included in R2, where 32 of 40 statements achieved consensus and 4 new statements emerged. Thus, the final round involved 12 statements in which all achieved consensus and none were excluded in the final report. In R3, the panelists ranked all 55 statements across the rounds (Fig. 2), with key aspects of each domain highlighted below. Figure 3 contains the top half recommendations in each domain, full details of the consensus-based statements and supporting quotes are outlined in the online supplementary material.

Training and Education

Statements concerning national initiatives were the highest ranked and achieved substantial consensus; for example, the need to create a "stroke code" protocol for the early treatment of ICH patients (SA 93.8%; ranking 1.34 ± 1.45). Education to the public was to emphasize the importance of symptom recognition and need to promptly call emergency services (SA 84.4%; ranking 1.46 ± 1.31).

Downloaded from http://karger.com/ced/article-pdf/doi/10.1159/000540038/4258896/000540038.pdf by guest on 19 August 2024

Fig. 1. Distribution of panelists in Latin America.

Human Resources and Infrastructure

The key concern was the provision of training to healthcare workers (SA 90.6%; ranking 1.09 ± 0.29) and need for cohesion between different discipline units. Assurance over the allocation of minimum resources in countries (SA 81.3%; ranking 1.43 ± 0.84) was given a high priority. Importance was also given to statements highlighting a collaborative approach and communication pathways to ensure prompt notification of imaging results (SA 68.8%; ranking 1.71 ± 1.05) and continuity of management between units (SA 68.8%; ranking 1.75 ± 1.27).

Early Intensive BP Control

Adherence to the INTERACT3 monitoring protocol was a high priority but also had a high level of disagreement (combined disagreement 15.7%, ranking 1.28 ± 0.58). Although panelists agreed on the frequency of BP measurements used in INTERACT3, they also indicated that monitoring should be based on the requirements of individual patients. They also wished to emphasize that a minimum level of resources should be readily available (e.g., intravenous antihypertensive drugs) (SA 81.3%; ranking 1.31 ± 0.64) as this was considered a key barrier to effective implementation. Given challenges over resource allocation, initiatives to align protocols with local resources was encouraged (SA 87.5%; ranking 1.37 ± 0.55).

Strict Glucose Control

As insulin pumps are generally reserved for patients with very poor levels of glucose control in LAC, the panelists expressed concern over their availability and highlighted the need for training in glycemic management with low agreement (SA 59.4%; ranking 1.5 ± 0.80). Panelists agreed

Downloaded from http://karger.com/ced/article-pdf/doi/10.1159/000540038/4258896/000540038.pdf by guest on 19 August 2024

Table 1. Baseline panelists characteristics

	Participants (n = 32)
Sociodemographic	
Male	21 (65.6)
Age, years mean±SD	37.1±5.8
Income of country[a]	
Lowermiddle-income	2 (6.25)
Uppermiddle-income	24 (75)
High-income	6 (18.75)
Profession	
Physiotherapist	1 (3.13)
Medical doctor	31 (96.88)
General practitioner	1 (3.13)
Specialist	
Neurology	28 (87.50)
Internal medicine	1 (3.13)
Urgenciology	1 (3.13)
Experience	
Years in profession, mean±SD	9.71±3.70
Years in ICH patient care, mean±SD	7.62±2.76
Years in the public health system, mean±SD	8.12±4.05
INTERACT3 investigator	6 (18.75)
Panelist hospital	
Location	
Urban	30 (93.75)
Semi-urban	2 (6.25)
Rural	0 (0)
Health sector	
Private	6 (18.75)
Public	25 (78.13)
Other	1 (2.70)
Computerized tomography available	32 (100)
Service units	
Emergency department	32 (100)
Neurosurgery	27 (84.38)
Intensive care unit	32 (100)
Stroke unit	16 (50.00)
Laboratory facilities	31 (96.88)
Stroke protocol	26 (81.25)
Inclusion of ICH treatment	17 (65.38)

Data are n (%) or mean ± SD. [a]Income of countries based on the World Bank classification system: high-income includes Chile and Brazil; upper middle-income includes Argentina, Brazil, Colombia, Costa Rica, Dominican Republic, Ecuador, El Salvador, Guatemala, Mexico, Paraguay, and Peru; lower middle-income includes Bolivia. ICH, intracerebral hemorrhage; INTERACT3, third Intensive Care Bundle with Blood Pressure Reduction in Acute Cerebral Hemorrhage Trial.

that specific protocols (SA 87.5%, ranking 1.68 ± 0.89) and communication with endocrinologists and pharmacists (SA 40.6%, ranking 1.75 ± 0.76) need to be established for complex patients.

Body Temperature Control

Emphasis was placed on the training of healthcare workers (SA 75%; ranking 1.53 ± 1.13) and the monitoring of patients (SA 59.4%; ranking 1.75 ± 0.84).

Downloaded from http://karger.com/ced/article-pdf/doi/10.1159/000540038/4258896/000540038.pdf by guest on 19 August 2024

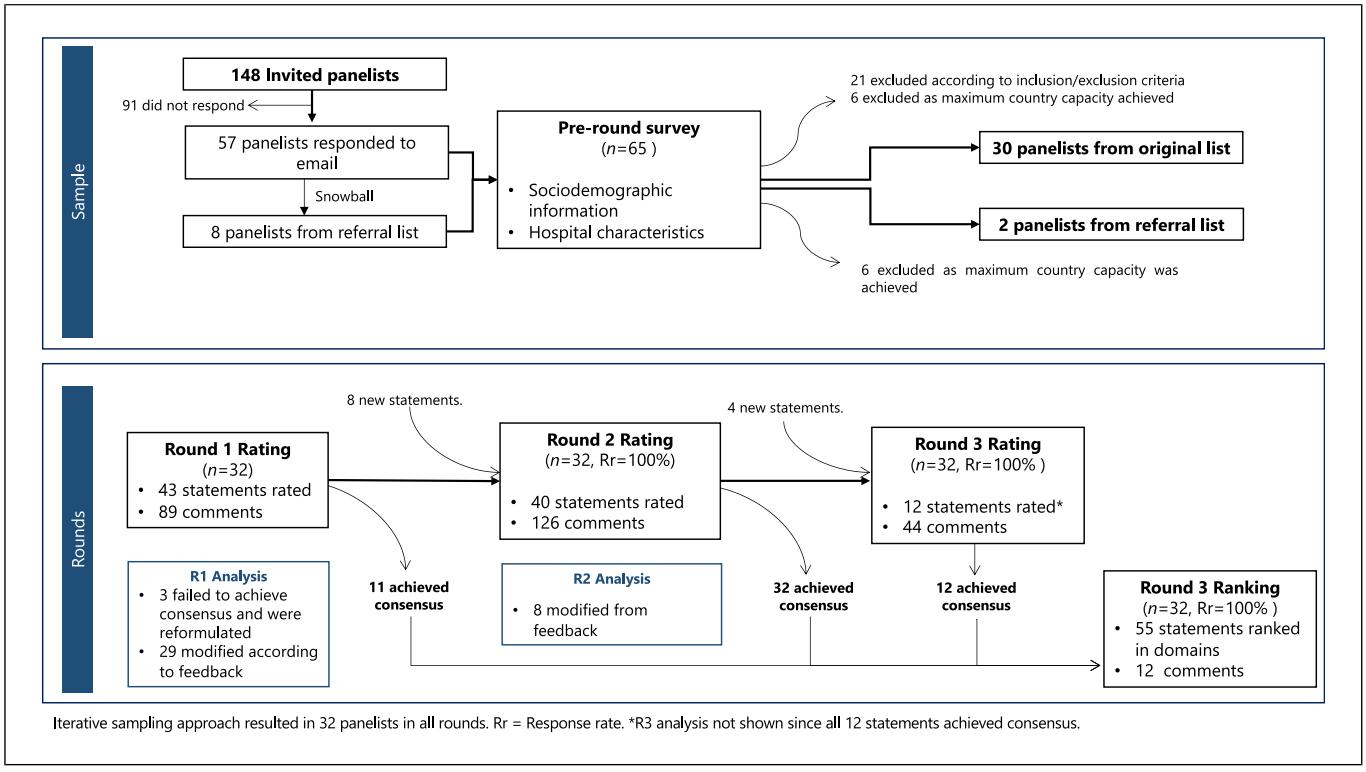

Fig. 2. Flowchart of sampling and Delphi rounds.

Rapid Reversal of Anticoagulation

High priorities were given to the availability and affordability of modern new oral anticoagulation reversal agents (SA 81.3%; ranking 1.21 ± 0.49) and for 24/7 availability of INR measurement as part of a collaborative network work approach (SA 81.3%; ranking 1.21 ± 0.49).

Education for Patients and Family Members

Use of plain language to educate patients and families (and/or caregivers) was a priority (SA 90.6%; ranking 1.37 ± 0.75) covering the need for frequent monitoring (SA 78.1%; ranking 1.62 ± 0.75) and to avoid projecting unrealistic expectations.

Discussion

Our study provides perspectives on areas to be addressed for successful integration of the INTERACT3 care bundle in LAC hospitals, with high priority given to BP control, anticoagulation reversal, resourcing, and education and training. A common perspective was that a minimum level of resources should be made available to allow effective integration of the care bundle. The panelists expressed concern over the shortage of antihypertensive drugs and modern approach to anticoagulation reversal, which were deemed critical barriers to effective ICH management. Consistent with previous studies [10], the most frequently mentioned barriers were the poor availability of glucometers, thermometers, and BP monitors, although these were ranked as a lower priority of need.

The generation of a "stroke code" emerged as critical aspect. While the implementation of reperfusion therapy for acute ischemic stroke has been a global focus in recent decades, no such urgency has been uniformly applied to patients with ICH. While 90% of the panelists reported having a local "stroke code" protocol at their hospital, only two-thirds had this integrated with a pathway for ICH management. This was the practice gap that needs to be addressed, given the evidence that is emerging over the effectiveness of treatments for ICH being dependent on the time from symptom onset. The passive approach of clinicians to patients with ICH is further reflected in many having a low threshold to withdraw active care [11]. Thus, training on the benefits of the care bundle was considered a means of addressing premature use of do-not-resuscitate orders and clinician misjudgment over

Downloaded from http://karger.com/ced/article-pdf/doi/10.1159/000540038/4258896/000540038.pdf by guest on 19 August 2024

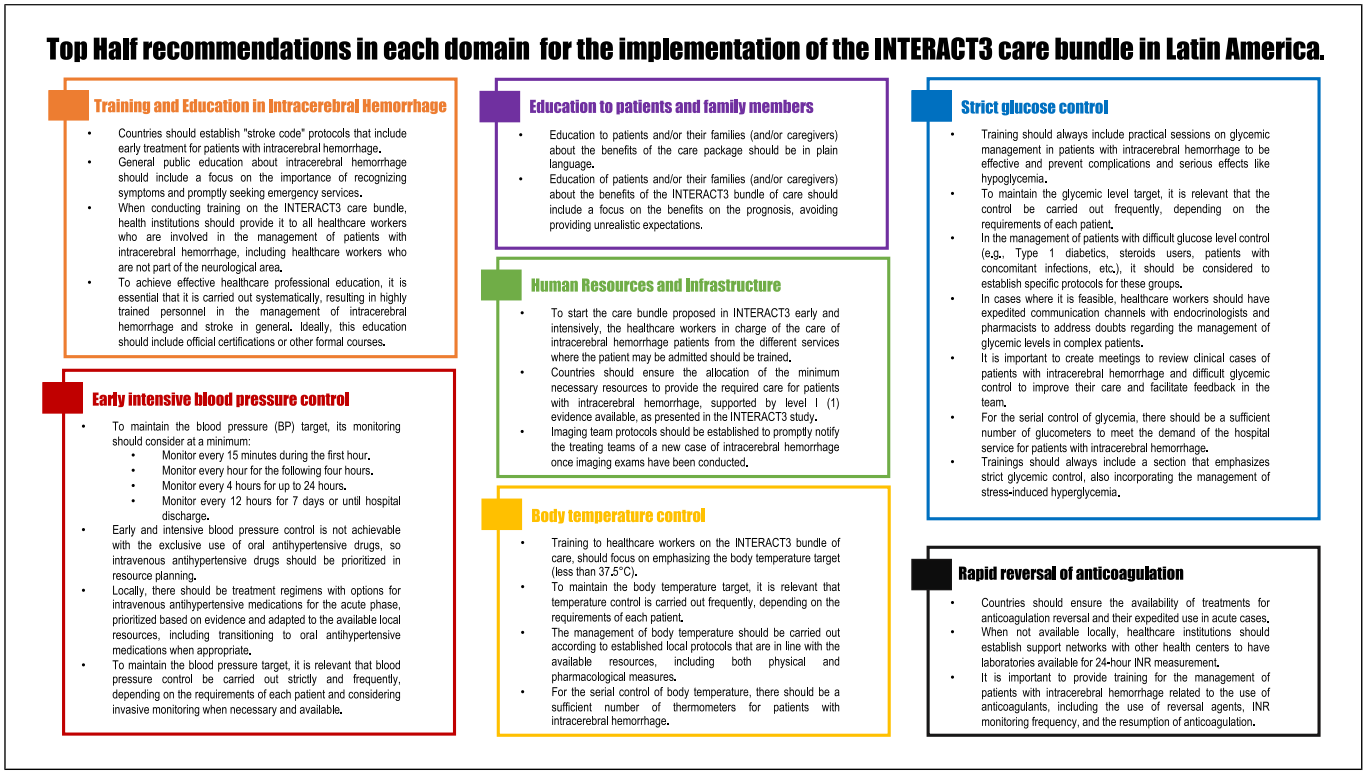

Fig. 3. Top half recommendations in each domain for the implementation of the INTERACT3 care bundle in Latin America.

prognosis [12]. Hence, inclusion of a CODE-ICH pathway and training all personnel on the INTERACT3 care bundle were considered pivotal first steps in reshaping perspectives on ICH management.

Our findings further highlight the need for a collaborative approach in stroke care by the recommendation of creating communication channels between professionals and through networks between healthcare institutions. This would foster safe and effective glycemic control and anticoagulation reversal when there is limited availability of treatments and knowledge in those areas. Panelists were reluctant to promote the use of insulin pumps, which is consistent with barriers found in fever, hyperglycemia, and swallowing dysfunction in the Quality in Acute Stroke Care (QASC) study [13], where two-thirds of participating clinicians found a key barrier post-implementation of the intervention. Similarly, process evaluation undertaken in the Chinese INTERACT3 participants found that blood glucose control was the most complex intervention to implement; in addition, facilitators included collaboration and consultations with the endocrine department, aligning with our findings [14]. During the rounds, the use of subcutaneous insulin was often mentioned, but it did not reach a high ranking, which emphasizes the need for training and protocols in the region. Notably, the lack of protocols and training is found as a common barrier across various settings including both high-income [15] and low-to-middle-income countries [16].

Given the relative low use of warfarin anticoagulation in LAC [17], and thus limited exposure to anticoagulation reversal, adequate supply of relevant agents on their own is unlikely to influence implementation of the care bundle. A study conducted in rural and community departments in the USA shows that the elevated cost and lack of knowledge about the utility and concerns about short shelf life were the main factors associated with the availability of anticoagulation reversal agents [18]. Our findings show that continuous training on drug reconstitution, organizational support, and ensuring 24/7 availability on INR measures through collaborative networks were important components of successful integration. Other studies have emphasized these aspects as key steps in reducing door-to-needle time for anticoagulation reversal [19] and are arguably even more relevant in the era of reversal agents for direct oral anticoagulants.

Our study has several strengths. The Delphi technique recommendations were formulated from the perspective

Downloaded from http://karger.com/ced/article-pdf/doi/10.1159/000540038/4258896/000540038.pdf by guest on 19 August 2024

of a range of clinician stakeholders from different healthcare settings and cultural contexts. Their commitment to completing responses to all the rounds enhances the reliability of results. However, there are limitations that are worth mentioning. Despite our efforts to construct a multidisciplinary panel, it was mainly comprised of neurologists, and there was no lived-experience perspective from patients or family and community engagement. Although the panelists were experienced and able to provide holistic views, these may not necessarily reflect those of junior or different background staff who work on the frontline or in the day-to-day management of patients with ICH, such as nurses, nurse technicians, and other disciplines. Nevertheless, the process evaluation conducted prior to this study, upon which we based the first round, included other healthcare professionals as well as patients and caregivers. Furthermore, prescriptions for BP control, glycemia, temperature, and anticoagulation reversal medications must be provided by a physician, making their contribution to the topic relevant to us. Finally, Latin America is a region composed by mainly uppermiddle-income and high-income countries, with only 5 countries categorized as lower middle-income; as this study was undertaken in LAC, the views may not represent lower middle-income regions or those of healthcare systems elsewhere.

In summary, the INTERACT3 care bundle has the potential to reduce the burden of ICH in LAC, alleviate the strain on diverse and complex health systems, and improve the health and well-being of those affected. Our study provides a priority list of key recommendations for the effective integration of time- and target-based protocols into systems of care in the region. These findings can be used to devise context-specific strategies toward effective implementation of the INTERACT3 care bundle and thus facilitate the incorporation of ICH into stroke care codes for patients in the region.

Acknowledgment

The authors thank the LATAM INTERACT3 consensus panel.

Statement of Ethics

The study was approved by the Scientific Ethics Committee of Clínica Alemana-Universidad del Desarrollo (No. 2023-68). All panelists provide an online written informed consent before participation in the study.

Conflict of Interest Statement

C.S.A. reports receiving research grants from the National Health and Medical Research Council (NHMRC) of Australia, the Medical Research Council (MRC) and Medical Research Foundation (MRF) of the UK, and Takeda and Penumbra. He is the Editor-in-Chief of *Cerebrovascular Diseases*. P.M.-V. reports receiving research grants from ANID Fondecyt Regular 1221837, Pfizer, and Boehringer Ingelheim. B.C. reports research grants from Fondecyt Regular 1201461. A.O. reports a research grant from Merck. V.C.-N. reports a research grant from AstraZeneca and was a speaker for Boehringer and Sanofi. The other authors declare no conflict of interest.

Funding Sources

This study was funded by the George Institute of Global Health.

Author Contributions

P.M.-V., C.S.A., B.C., M.I.A., and A.O. contributed to the concept and rationale for the study. M.O., C.S.A., V.C.-N., A.A., P.M.-V., F.G., F.B., and M.I.A. contributed to the development and design of all three surveys. V.C.-N. and A.A. performed language refinement in neural Spanish and C.S.A. and M.O. in English. All the authors made substantial contribution to the methodology. F.B. was responsible for provision of software. M.I.A., F.G., and P.M.-V. performed formal analysis and data curation. M.I.A. wrote the first draft of the manuscript with input from F.B., F.G., and P.M.-V. All the authors reviewed and approved the final manuscript.

Data Availability Statement

The data that support the findings of this study are not publicly available due to their containing information that could compromise the privacy of research participants but are available from the corresponding author P.M.V. upon reasonable request.

References

1 Feigin VL, Stark BA, Johnson CO, Roth GA, Bisignano C, Abady GG, et al. Global, regional, and National burden of stroke and its risk factors, 1990–2019: a systematic analysis for the Global Burden of Disease Study 2019. Lancet Neurol. 2021;20(10):795–820. https://doi.org/10.1016/s1474-4422(21)00252-0

2 Magid-Bernstein J, Girard R, Polster S, Srinath A, Romanos S, Awad IA, et al. Cerebral hemorrhage: pathophysiology, treatment, and future directions. Circ Res. 2022;130(8):1204–29. https://doi.org/10.1161/CIRCRESAHA.121.319949

3 Ma L, Hu X, Song L, Chen X, Ouyang M, Billot L, et al. The third intensive care bundle with blood pressure reduction in acute cerebral haemorrhage trial (INTERACT3): an international, stepped wedge cluster randomised controlled trial. Lancet. 2023;402(10395):27–40. https://doi.org/10.1016/S0140-6736(23)00806-1

Downloaded from http://karger.com/ced/article-pdf/doi/10.1159/000540038/4258896/000540038.pdf by guest on 19 August 2024

4 Pacheco-Barrios K, Giannoni-Luza S, Navarro-Flores A, Rebello-Sanchez I, Parente J, Balbuena A, et al. Burden of stroke and population-attributable fractions of risk factors in Latin America and the Caribbean. J Am Heart Assoc. 2022;11(21):e027044. https://doi.org/10.1161/JAHA.122.027044
5 Atun R, De Andrade LOM, Almeida G, Cotlear D, Dmytraczenko T, Frenz P, et al. Health-system reform and universal health coverage in Latin America. Lancet. 2015;385(9974):1230–47. https://doi.org/10.1016/S0140-6736(14)61646-9
6 Ruano AL, Rodríguez D, Rossi PG, Maceira D. Understanding inequities in health and health systems in Latin America and the Caribbean: a thematic series. Int J Equity Health. 2021;20(1):94. https://doi.org/10.1186/s12939-021-01426-1
7 Jünger S, Payne SA, Brine J, Radbruch L, Brearley SG. Guidance on Conducting and REporting DElphi Studies (CREDES) in palliative care: recommendations based on a methodological systematic review. Palliat Med. 2017;31(8):684–706. https://doi.org/10.1177/0269216317690685
8 Mason B, Boyd K, Doubal F, Barber M, Brady M, Cowey E, et al. Core Outcome measures for palliative and end-of-life research after severe stroke: mixed-method Delphi study. Stroke. 2021;52(11):3507–13. https://doi.org/10.1161/STROKEAHA.120.032650
9 Diamond IR, Grant RC, Feldman BM, Pencharz PB, Ling SC, Moore AM, et al. Defining consensus: a systematic review recommends methodologic criteria for reporting of Delphi studies. J Clin Epidemiol. 2014;67(4):401–9. https://doi.org/10.1016/j.jclinepi.2013.12.002
10 Baatiema L, Otim ME, Mnatzaganian G, de-Graft Aikins A, Coombes J, Somerset S. Health professionals' views on the barriers and enablers to evidence-based practice for acute stroke care: a systematic review. Implement Sci. 2017;12(1):74. https://doi.org/10.1186/s13012-017-0599-3
11 Parry-Jones AR, Paley L, Bray BD, Hoffman AM, James M, Cloud GC, et al. Care-limiting decisions in acute stroke and association with survival: analyses of UK National quality register data. Int J Strok. 2016;11(3):321–31. https://doi.org/10.1177/1747493015620806
12 Hemphill JC, White DB. Clinical nihilism in neuroemergencies. Emerg Med Clin N Am. 2009;27(1):27–37. https://doi.org/10.1016/j.emc.2008.08.009
13 Dale S, Levi C, Ward J, Grimshaw JM, Jammali-Blasi A, D'Este C, et al. Barriers and enablers to implementing clinical treatment protocols for fever, hyperglycaemia, and swallowing dysfunction in the quality in acute stroke care (QASC) project: a mixed methods study. Worldviews Evid Based Nurs. 2015;12(1):41–50. https://doi.org/10.1111/wvn.12078
14 Ouyang M, Anderson CS, Song L, Jan S, Sun L, Cheng G, et al. Implementing a goal-directed care bundle after acute intracerebral haemorrhage: process evaluation for the third INTEnsive care bundle with blood pressure reduction in acute cerebral haemorrhage trial study in China. Cerebrovasc Dis. 2022;51(3):373–83. https://doi.org/10.1159/000520669
15 Williams JM, Jude MR, Levi CR. Recombinant tissue plasminogen activator (rt-PA) utilisation by rural clinicians in acute ischaemic stroke: a survey of barriers and enablers. Aust J Rural Health. 2013;21(5):262–7. https://doi.org/10.1111/ajr.12052
16 Baatiema L, de-Graft Aikins A, Sav A, Mnatzaganian G, Chan CKY, Somerset S. Barriers to evidence-based acute stroke care in Ghana: a qualitative study on the perspectives of stroke care professionals. BMJ Open. 2017;7(4):e015385. https://doi.org/10.1136/bmjopen-2016-015385
17 Kozieł M, Teutsch C, Bayer V, Lu S, Gurusamy VK, Halperin JL, et al. Changes in anticoagulant prescription patterns over time for patients with atrial fibrillation around the world. J Arrhythm. 2021;37(4):990–1006. https://doi.org/10.1002/joa3.12588
18 Faine BA, Amendola J, Homan J, Ahmed A, Mohr N. Factors associated with availability of anticoagulation reversal agents in rural and community emergency departments. Am J Health Syst Pharm. 2018;75(2):72–7. https://doi.org/10.2146/ajhp160520
19 Parry-Jones AR, Järhult SJ, Kreitzer N, Morotti A, Toni D, Seiffge D, et al. Acute care bundles should be used for patients with intracerebral haemorrhage: an expert consensus statement. Eur Stroke J. 2023;9(2):295–302. https://doi.org/10.1177/23969873231220235

Downloaded from http://karger.com/ced/article-pdf/doi/10.1159/000540038/4258896/000540038.pdf by guest on 19 August 2024