Perspectives and Contributions of Nursing to the Promotion of Universal Health

PAHO

Pan American Health Organization

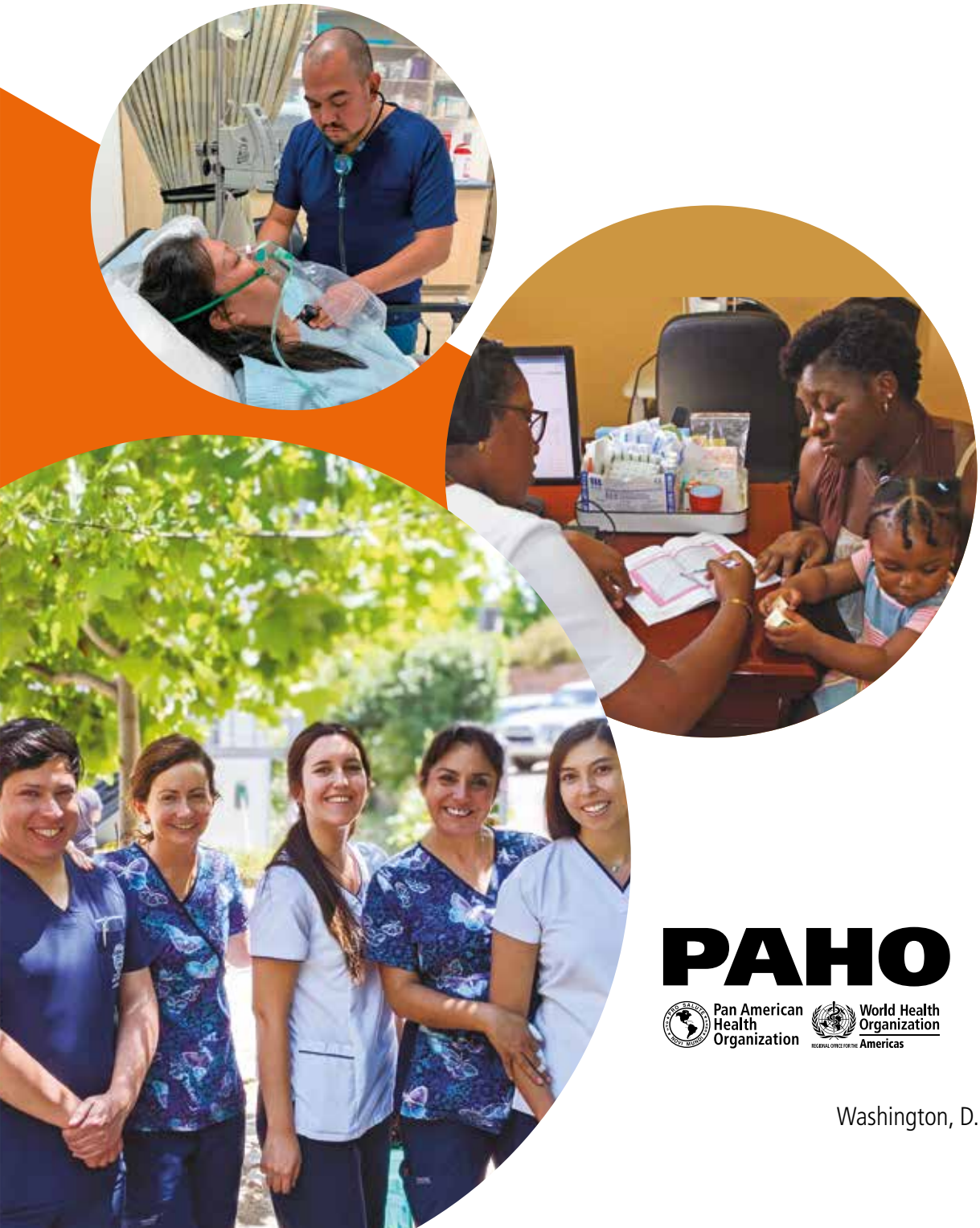
World Health Organization

REGIONAL OFFICE FOR THE Americas

COLLEGE OF NURSING

UIC

Perspectives and Contributions of Nursing to the Promotion of Universal Health



PAHO

Pan American Health Organization

World Health Organization
Regional Office for the Americas

COLLEGE OF NURSING

UIC

Washington, D.C., 2020

Perspectives and Contributions of Nursing to the Promotion of Universal Health

ISBN: 978-92-75-12218-1
eISBN: 978-92-75-12219-8

HSS/HR/2020

Contents

Authors

ARGENTINA

Gerardo Iván Cárdenas
Head of *Proyecto Enfermero*
Area Program Manager, Hospital Plottier Neuquén

Pablo Adrián Grunewald
Primary health care nurse
Municipality of Olavarría

Viviana Rosana Schneider
Assistant Director of Primary Health Care
Municipality of Olavarría

BELIZE

Herson Blandon
Registered nurse, Isabel Palma Polyclinic II
Toledo District

BRAZIL

Adrielen Aparecida Silva Calixto
Ribeirão Preto School of Nursing
University of São Paulo
Municipal Health Office, Ribeirão Preto

Amanda Ruiz
Scholarship student, nursing
Franciscan University (UFN), Santa Maria (Rio Grande do Sul)

Ana Rita de Faria
Nurse
São Paulo Association for Advances in Medicine

Bethânia Haag
Master's program student
Professional program on Maternal and Child Health
Franciscan University (UFN), Santa Maria (Rio Grande do Sul)

Carla Regina de Souza Teixeira
Ribeirão Preto School of Nursing
University of São Paulo

Daísy Vieira de Araújo
Nurse
Medical professor
Universidad Federal de Rio Grande do Norte

Dirce Stein Backes
Professor, Nursing program
Coordinator, Professional Program in Maternal and Child Health
Franciscan University (UFN), Santa Maria (Rio Grande do Sul)

Edna Albuquerque Brito
Nurse, Family Health Strategy
Fundação Municipal de Saúde de Teresina

Elizabeth Akemi Nishio
Nurse
São Paulo Association for Advances in Medicine

Emiko Yoshikawa Egry
Professor emeritus
University of São Paulo School of Nursing
Visiting professor at São Paulo School of Nursing
Federal University of São Paulo

Érica Gomes Pereira
Laboratory specialist
Department of Public Health Nursing
University of São Paulo School of Nursing

Fábia Barbosa de Andrade
Nurse
Medical professor
Universidad Federal de Rio Grande do Norte

Felipe Costa Soares
Bachelor of Nursing
Pará University Center

Gladstone Rodrigues da Cunha Filho
Secretary
São Paulo Association for Medical Development

Ivonete Vieira Pereira Peixoto
Teaching nurse
Universidad Federal de Rio de Janeiro

Joceli Mara Magna
Supervisor of the psychology branch of the Program for
Multidisciplinary Improvement in Hypertension and Diabetes
Ribeirão Preto School of Nursing
University of São Paulo

Karen Namie Sakata So
Laboratory specialist
Department of Public Health Nursing
University of São Paulo School of Nursing

Lucimara Fabiana Fornari
Postdoctoral student, Department of Public Health Nursing
University of São Paulo School of Nursing

Maria Raquel Gomes Maia Pires
Assistant professor
Department of Nursing
University of Brasilia

Maria Teresa da Costa Gonçalves Torquato
Ribeirão Preto Municipal Health Office
University of São Paulo

Marúcia Fernandes Verçosa
Teaching nurse
Pará University Center

Mylene Gomes da Silva
Resident in cardiology nursing
Dante Pazzanese Cardiology Institute

Nacime Salomão Mansur
Superintendent
São Paulo Association for Advances in Medicine

Nancy Nay Leite de Araújo Loiola Batista
Nurse
Federal Nursing Council

Nubia Cassia Camargo Carvalho
Nurse
São Paulo Association for Advances in Medicine

Paula Souza da Silva Rocha
Teaching nurse
Universidad Federal de Pará

Rosa Maria Godoy Serpa da Fonseca
Senior professor
University of São Paulo School of Nursing

Rute Aparecida Casas Garcia
Ribeirão Preto School of Nursing
University of São Paulo
Municipal Health Office, Ribeirão Preto

Sandra Cecília de Souza Lima
Nurse
Federal Nursing Council

Sharon da Silva Martins
Nurse
Maringá Family Health Strategy
Santa María, Rio Grande do Sul

Sinval Avelino dos Santos
Ribeirão Preto School of Nursing
University of São Paulo

Vanessa Ceravolo Gurgel da Silva
Nurse
São Paulo Association for Advances in Medicine

Vanessa Cristina Bertussi
Nurse
São Paulo Association for Advances in Medicine

CANADA

Carolyn Solomon
Manager, Nursing Policy Secretariat,
Ministry of Health of British Columbia

Claudette Gagnon
Nurse
Pakua Shipi Nursing Station
Pakua Shipi Health Centre

Christiane Théberge
Nurse
Pakua Shipi Nursing Station
Pakua Shipi Health Centre

Danielle Daigle
President and Director of the Board
Association of Nurses and Nurse Practitioners of British Columbia

David W. Byres
Associate Deputy Minister for Clinical Leadership
Ministry of Health of British Columbia

Ernesto Hernandez
Nurse
Pakua Shipi Nursing Station
Pakua Shipi Health Centre

Gwyneth McIntosh
Advanced practice nurse
RICHER Initiative
British Columbia Children's Hospital

Joanne Maclaren
Executive Director, Nursing Policy Secretariat
Ministry of Health of British Columbia

Maude Poirier
Head nurse
Pakua Shipi Nursing Station
Pakua Shipi Health Centre

Marika Desjardins
Nurse
Pakua Shipi Nursing Station
Pakua Shipi Health Centre

Minna Miller
Advanced practice nurse
Adjunct professor of the School of Nursing
University of the British Columbia

Natasha Prodan-Bhalla
Chief nurse and advanced practice official
Ministry of Health of British Columbia

Nicolas Bouffard
Nurse
Pakua Shipi Nursing Station
Pakua Shipi Health Centre

Tamera Stilwell
Advanced practice nurse
British Columbia, Canada

CAYMAN ISLANDS

Carvell Bailey
Program coordinator, School Health
Health Services Authority

Hazel Brown
Government Head Nurse
Health Services Authority

Joanna Rose-Wright
Nursing Manager
Primary Health Care Services
Health Services Authority

CHILE

Carolina Arias Vivanco
Master of University Education
Professor of Gerontology/Geriatrics
School Nursing and Obstetrics
University of the Andes

Cecilia Zavala Guzmán
Professor of Gerontology/Geriatrics
School Nursing and Obstetrics
University of the Andes

Melissa Zimmermann Vildoso
Master of Nursing in Care Management
Professor of Gerontology/Geriatrics
School Nursing and Obstetrics
University of the Andes

Paula Jaman Mewes
Master of Clinical Nursing
Professor of Gerontology/Geriatrics
School of Nursing and Obstetrics
University of the Andes

Pilar Ureta Fernández
Master of Aging and Quality of Life
Professor of Gerontology/Geriatrics
School of Nursing and Obstetrics
University of the Andes

COLOMBIA

Ivett Adriana Herrera Zuleta
Nurse specialized in quality management
Master of Maternal and Child Nursing
Professor, University of Cauca

Yolanda Vallejo Pazmiño
Head of the *FUCS al parque* community public health program
Professor of Care Management and Health Services
Coordinator of Social Projection of the School of Nursing
Fundación Universitaria Ciencias de la Salud

CUBA

Adyeren Ruiz Reyes
National Advisor on Nursing
Ministry of Public Health
Instructing Professor
Member of the Cuban Nursing Society

Anahy Velazquez Aznar
National Head of Nursing
Ministry of Public Health
Assistant Professor
University of Medical Science of Havana
Member of the Cuban Nursing Society

Caridad Dandicourt Thomas
National Nursing Group
Secretary of the Cuban Nursing Society

Norma Corrales Fernández
National Advisor on Nursing
Ministry of Public Health
Assistant Professor
Member of the Cuban Nursing Society

DOMINICAN REPUBLIC

Gabriela Luz del Alba Castillo Veras
Doctorate in Education
Nurse in charge of the Adolescents Program
Dr. Luis Manuel Morillo King Regional University Hospital

ECUADOR

Doris Marcela Castillo Tomalá
Project Tutor
Universidad Estatal Península de Santa Elena

María Dolores Suárez Villao
Project Director
Universidad Estatal Península de Santa Elena

Sonnia Apolonia Santos Holguín
Project Tutor
Universidad Estatal Península de Santa Elena

EL SALVADOR

Elba Francisca Menjivar de Vargas
Bachelor of Nursing and Master of Public Health
Benjamín Bloom National Children's Hospital

María Dinora Alas de Canales
Bachelor of Theology
Nursing Assistant
Benjamín Bloom National Children's Hospital

HONDURAS

Martha Manley Rodriguez de Carias
Master of Public Health with emphasis on Nutrition and Maternal and Child Nursing
University of San Carlos

JAMAICA

Karen Simone Nelson
Deputy Chief Nursing Officer
Ministry of Health and Wellness

MEXICO

Alan Eduardo Cayetano Sánchez
Bachelor of Nursing and Obstetrics
Youth promoter
City of Mexico Youth Institute
Clinical educator
Technical University of Mexico

Alma Angélica Villa Rueda
School of Nursing
Autonomous University of Baja California

Cipriana Caudillo Cisneros
Academic secretary
Health Sciences Division
University of Guanajuato

Didier Francisco Aké Canul
Master of Public Health
Professor, School of Nursing
Autonomous University of Yucatán

Dora Julia Onofre Rodríguez
School of Nursing
Autonomous University of Nuevo León
Mexico

Luxana Reynaga Ornelas
Professor
Department of Nursing and Obstetrics
University of Guanajuato

María del Sagrario Vargas Espadas
Master of Social Work
Professor, School of Nursing
Autonomous University of Yucatán

Martha Patricia Dzul Centeno
Bachelor of Nursing
Professor, School of Nursing
Autonomous University of Yucatán

Osmar Efrén Figueroa Palomino
Bachelor of Nursing
Nursing Department
University of Sonora

Russell Izael Trujeque Zavala
Bachelor of Social Work
Professor, School of Nursing
Autonomous University of Yucatán

Sergio Marquez Gamiño
Professor
Department of Sciences Applied to Work
University of Guanajuato

Sheila Mariela Cohuo Cob
Master of Governmental and Public Policy
Professor, School of Nursing
Autonomous University of Yucatán

Viridiana Mariely Solís Díaz
Nurse, perinatal specialist
National Autonomous University of Mexico

MONSERRAT

Alex Ackie
Public health nurse
St. John's Clinic
Ministry of Health and Social Services

PANAMA

Veyra Beckford Brown
Nurse, specialized in gyno-obstetrics
Head Nurse, Maternity Ward
Dr. Raúl Dávila Mena Regional Hospital

PARAGUAY

María Luisa Castillo de Sánchez
Nurse
Ministry of Public Health and Social Welfare
Mariscal Estigarribia, Boquerón

PERU

Ana Rimac Arrieta
Nurse
San Juan de Miraflores Primary Health Care Center
Rebagliati health care network (EsSalud)

Daniel Urrieta Salazar
Nurse
San Juan de Miraflores Primary Health Care Center
Rebagliati health care network (EsSalud)

Diego Alonso Ubaldo Farro
Master of Psychology
Cayetano Heredia University

Gianina Farro Peña
General Coordinator of the Program
Vice-dean of the School of Nursing
Cayetano Heredia University

Lisbeth Consuelo Albújar Paico
Bachelor of Nursing
Cayetano Heredia University

Patricia Fernández Sánchez
Nurse
Bureau of Level I and II Health Services
Rebagliati health care network (EsSalud)

Renzo Rubén Quezada Echenique
Bachelor of Nursing
Cayetano Heredia University
Ministry of the Interior
Rafael Hoyos Rubio Peruvian Army HQ

SAINT LUCIA

Kerthney Charlemagne-Surage
Government Head Nurse
Ministry of Health and Welfare

SAINT VINCENT AND THE GRENADINES

Peggy P. Da Silva
Government Head Nurse
Ministry of Health, Environment and Welfare

TRINIDAD AND TOBAGO

Glenda Lynch-George
Primary Care Nursing Manager
Eastern Region Health Authority

UNITED STATES OF AMERICA

Carol M. Baldwin
Center for Innovation in Healthy and Resilient Aging
Edson College of Nursing and Health Innovation
Arizona State University

Jennifer Dohrn
Associate Professor of Nursing
School of Nursing, University of Columbia
Vice-dean of the Office of the Director for Global Initiatives
Director of PAHO Collaborating Centre for Advanced Practice Nursing

Johis Ortega
Associate Dean for Global and Hemispheric Initiatives
University of Miami School of Nursing and Health Studies
Director, PAHO/WHO Collaborating Centre for Nursing Human Resources Development and Patient Safety

Juan M. González
Family Nurse Practitioner Program
University of Miami School of Nursing and Health Studies

Lorely Ambriz
Edson College of Nursing and Health Innovation
Arizona State University

Maria Teresa Cerqueira
Edson College of Nursing and Health Innovation
Arizona State University

Stuart F. Quan
Professor of Sleep Medicine
Harvard Medical School
Division of Sleep and Circadian Disorders

URUGUAY

Adriana Corsiglia
Bachelor of Nursing
Federation of Medical Suppliers of the Interior
National Advisory Commission on Nursing

Carmen Camacho
Bachelor of Nursing
Master of Management
Social Welfare Bank
National Advisory Commission on Nursing

Luciana Picardo
Bachelor of Nursing
University of the Republic
National Advisory Commission on Nursing

Pilar González Ortuya
State Health Services Administration
National Advisory Commission on Nursing

Ricardo Temer
Bachelor of Nursing
National Advisory Commission on Nursing

Rosana Tessa Giménez
Bachelor of Nursing
Master of Education
Catholic University of Uruguay
Specialist in Maternal and Child Nursing
National Advisory Commission on Nursing

Zoraida Fort
PhD, Professor
National Advisory Commission on Nursing

VENEZUELA (BOLIVARIAN REPUBLIC OF)

Elizabeth Delgado Rodríguez
Bachelor of Nursing
Master of Maternal and Child Nursing
Regional Supervisor of the Sexual and Reproductive Health Program

Yenny Gómez
Bachelor of Nursing
Regional Supervisor of the Maternal Route of the Carabobo Sexual
and Reproductive Health Program

Preface

The World Health Organization has declared 2020 as **International Year of the Nurse and Midwife**. This year also commemorates the bicentennial of the birth of Florence Nightingale, the founder of modern nursing.

Nurses and midwives perform important functions at all levels of health care, and they are essential to the transformation of health care systems. They are often the first, and sometimes the only, professionals who provide care to people. This means that the quality of their assessments, treatments, and care is vital. They also are part of their local communities, with whom they share culture, strengths, and vulnerabilities, and they can design and implement effective interventions to serve the needs of patients, families, and communities.

It is essential to invest in these professionals. In 2016 the report of the United Nations High-level Commission on Health Employment and Economic Growth concluded that investments in education and in the creation of decent jobs in the health sector and social sector are worth triple their value for health, health security, and global economic growth.

In order to strengthen the role of nursing professionals in the Region of the Americas, it is necessary to design and implement strategies that take advantage of the close ties between health, education, work, and community. It is also necessary to promote the participation of municipalities and organizations in the regulation of nursing education and practice, and to empower individuals and communities and encourage their participation in policy-making. Finally, these strategies should increase access to and use of scientific evidence to transform nursing practice.

In 2019 the Pan American Health Organization (PAHO) presented *Strategic Directions for Nursing in the Region of the Americas* with a view to strengthening the role of nurses through interventions by PAHO, other regional organizations, countries, and other partners. In that document, Line of Action 2 is: *Addressing the working conditions and capacities of nurses to expand access and coverage with equity and quality, in order to promote a people-, family-, and community-centered model of care and strengthen both the primary level of care and integrated health services networks*. PAHO's agreed was to disseminate the best collaborative practices and models for nursing in primary health care (PHC).

The present publication contains a selection of best practices, case studies, proposed and implemented projects, and new initiatives focused on education and health services oriented

towards improving health conditions for the population. This compendium of the contributions that nursing has made to promote PHC, universal health, and health for all in the Region of the Americas is one way that PAHO has responded to the call for necessary interventions expressed in *Strategic Directions for Nursing.*

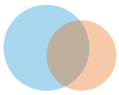
We hope that these examples of best practices and interventions serve as inspiration for health professionals in the countries of the Region. Through this publication, PAHO wishes to recognize the important contributions made by nursing professionals. Investing in nursing means advancing toward universal access to health and universal health coverage, with a profound impact on health and well-being in the world.

Acknowledgments

Silvia Cassiani, Regional Advisor on Nursing and Allied Health Personnel Development, coordinated this publication by PAHO and the University of Illinois at Chicago College of Nursing, a PAHO/WHO Collaborating Centre for International Nursing Development in Primary Health Care.

Special thanks to Desirée LaGrappe, intern in PAHO's Department of Health Systems and Services from September 2019 to February 2020, for her contributions to this document.

Thanks to everyone who, in one way or another, contributed valuable stories that highlight the contributions of nursing to universal health.



Introduction

For more than 40 years, primary health care (PHC) has been recognized as the cornerstone of an effective and responsive health system. The Declaration of Alma-Ata in 1978 reaffirmed the right to the highest attainable standard of health, based on the fundamental values of equity, solidarity, and the right to health.

The Declaration of Alma-Ata emphasized the need for comprehensive health services that are not only curative, but that also address the need for health promotion, disease prevention, rehabilitation, and treatment of common illnesses. A first level of care with strong response capacity is the basis for health system development.

In 2014, PAHO Member States adopted the Strategy for Universal Access to Health and Universal Health Coverage (*1*), reiterating the right to health, solidarity, and equity, and promoting the development of PHC-based health systems. The strategy focuses on implementing reforms for universal access and coverage in the Americas by:

- Expanding equitable access to comprehensive, quality, people- and community-centered health services
- Strengthening leadership and governance
- Increasing and improving financing, with equity and efficiency, and advancing toward the elimination of direct payments that are a barrier to access at the point of service delivery
- Strengthening multisectoral coordination to address the social determinants of health that affect the sustainability of universal coverage

In September 2017, the 29th Pan American Sanitary Conference adopted the Strategy on Human Resources for Universal Access to Health and Universal Health Coverage *(2)*. This strategy is meant to guide national policies on human resources for health, who need to be available, accessible, appropriately trained, relevant, and with the right skills to achieve the

objectives of the strategy and of the 2030 Agenda for Sustainable Development (*3*). The strategy's lines of action are:

1. Strengthen and consolidate governance and leadership in human resources for health.
2. Develop conditions and capacities in human resources for health to expand access to health and health coverage, with equity and quality.
3. Partner with the education sector to respond to the needs of health systems in transformation toward universal access to health and universal health coverage.

In September 2018, the 56th Directing Council of PAHO adopted the Plan of Action on Human Resources for Universal Access to Health and Universal Health Coverage 2018-2023. The plan of action seeks to reduce a deficit of some 800,000 health workers in the Region and to set a course of action that countries can follow in order to ensure they have the human resources they need to achieve the objective of universal health by 2030 (*4*).

In 2019, PAHO established the High-level Commission on "Universal Health in the 21st century: 40 years of Alma-Ata", under the coordination of Michelle Bachelet Jeria, United Nations High Commissioner for Human Rights. The report presents the concept of PHC as a necessary and sustainable path to achieving universal health as a right for all, while supporting the core values of Alma-Ata: quality, equity, and social justice.

The report presents ten recommendations to achieve health for all in the Region of the Americas in the 21st century. The eighth recommendation is to recognize human resources as protagonists in the construction and consolidation of PHC-based models of care (*5*). The document also suggests actions for different countries, including:

- Develop and implement human resources policies aimed at ensuring the availability and competencies of health personnel to meet the health needs of the population and facilitate their involvement in the processes of health system transformation based on a PHC model.
- Strengthen mechanisms that link the education sector with the health system in order to develop policies for training human resources for health, with a PHC-based approach.
- Strengthen the stewardship of the health authorities to regulate the competencies and profile of professionals on health teams and human resources issues in policies addressing research on health systems and services (*5*).

In response to the recommendations of the High-level Commission, the Director of PAHO called on the countries of the Region to make PHC the linchpin of health systems. The intention of this call was to accelerate movement toward universal health and the achievement of the goals of the 2030 Agenda for Sustainable Development (SDGs). At the same time, PHC 30-30-30, a Regional Compact on Primary Health Care for Universal Health, was established.

PHC 30-30-30 calls for a coordinated effort to eliminate access barriers by at least 30% and increase public health expenditure to at least 6% of gross domestic product. Of these resources, 30% should be invested in primary care. This will catalyze the transformation that is necessary to achieve universal health and the SDGs.

PAHO has helped countries establish interprofessional PHC teams, transform education for health, and create capacity for strategic planning and management of human resources for health.

Nurses play an important role at all levels of health care, including policymaking, management, redesign of health systems, coordination of teams, and direct provision of care to patients, families, and communities. However, the density of nursing professionals (including registered nurses, nurse technicians, and nurse assistants) varies widely across the countries in the Region.

For example, the United States of America has 111.4 nurses per 10,000 population, while Haiti has only 3.5. In half the countries of the Region, there are 10.4 or fewer nursing professionals per 10,000 population. The density of registered nurses in the countries of the Region tends to be low in comparison to other parts of the world. This undermines the conditions and capacity to expand access and coverage with equity and quality. There are also major differences in the overall distribution of the nursing workforce among the subregions of Latin America and the Caribbean.

In order to strengthen the nursing workforce, it is necessary to focus on the following aspects, among others: restructuring the learning curricula to promote an interprofessional approach; improving the labor market and offering attractive working conditions; developing leadership capacity and recognizing nurses as leaders; investing in the regulation and accreditation of nursing schools; and fostering positive work environments. Investing in and employing professionals and recognizing all of their potential can help improve the retention, recruitment, and conditions of professionals in the Region.

In 2018, PAHO published *Expanding the Roles of Nurses in Primary Health Care* (*6*), which emphasizes that the implementation of new roles such as advanced practice nursing (APN) will expand the reach of primary health care to reach populations in conditions of vulnerability and in remote areas. These highly trained nurses, who have master's or doctoral degrees, can perform advanced tasks in PHC. They can also provide diagnosis and medical treatment within the framework of nursing practice (prevention, holistic, and patient-centered). This would contribute to better health promotion, while helping prevent diseases and reduce mortality. The report offered nine recommendations to expand the role of advanced practice nurses in the Americas, and recommended that governments, professional associations, nursing schools, health institutes, and other interested organizations should discuss, implement, and expand the role of these professionals in accordance with each country's needs and context.

In 2019, PAHO published *Strategic Directions for Nursing in the Region of the Americas* (*7*), which proposed three lines of action and eight objectives to strengthen nursing in the Region.

Strengthening requires strategies that include close ties between the health, education, labor sectors, and communities. It is necessary to promote the participation of municipalities and social organizations in the regulation of nursing practice and education, as well as the empowerment of individuals and communities, promoting their participation in policy-making. Finally, it is important for scientific evidence to be increasingly accessible and applied to transforming nursing practice (*7*).

The contributions of nurses and midwives are key to promoting PHC and achieving universal access to health and universal health coverage in the Region. Nurses can play a crucial role in achieving expanded access to PHC, health promotion, disease prevention, and nursing care, without leaving anyone behind. A strong nursing profession is essential in order to transform health care systems.

Addressing the problems that face nursing in the Region is essential in order to achieve the objective of universal health, as well as SDG 3.4: "By 2030, reduce by one-third pre-mature mortality from noncommunicable diseases (NCDs) through prevention and treatment, and promote mental health and well-being (*3*)". Strengthening public policies and management, increasing the number and qualifications of registered nurses, improving their regulation and education, and expanding the labor market and their professional role can have a positive impact on health system performance and on the lives of people, families, and communities (*8-12*).

Expanding and regulating the role of registered nurses in PHC will help improve access to medical care in areas with a limited supply of physicians. It will also maximize access for older persons and patients with chronic diseases and mental health problems. Greater responsibility and autonomy for PHC nurses will lead to better access and quality care in vulnerable areas, especially where there is a limited number of physicians. Considering the relative size of health system workforces, it will simply be impossible to achieve universal access to health and universal health coverage, as well as other global mandates, without the full participation of the nursing profession.

This document is divided into six parts that demonstrate the contributions of nursing in the following areas:

1. Strengthening the stewardship and governance of health
2. Eliminating the barriers to universal access to health
3. Training the new cadre of nursing professionals
4. Promoting the use of technology and innovation
5. Developing programs that consider human diversity, interculturalism, and ethnicity
6. Generating social participation mechanisms

This document presents and summarizes projects, activities, stories and case studies received from the countries of the Region, illustrating the role of nurses and midwives in advancing toward universal health, in addition to their rich contributions to health systems, universities, prisons, communities, governments, and schools in the countries of the Americas.

This purpose of this material is to disseminate best practices in nursing innovation, leadership, research, policies, and education and to promote understanding of the ways in which nurses strengthen health systems and services toward achieving universal access to health, universal health coverage, and the SDGs, in collaboration with other health professionals.

It is important to note that this selection of 41 case studies offers an introductory overview of the perspectives and contributions of nurses and midwives to advance toward universal access to health and universal health coverage.

Methodology

The University of Illinois at Chicago (UIC) College of Nursing, a PAHO/WHO Collaborating Center, began gathering material related to this project in 2016. Results were not published, as submitted case studies were from North America only, and not representative of the full Region of the Americas.

In 2019, PAHO joined the project in a coproduction with UIC. PAHO sent a form to PAHO/WHO country offices, nursing associations, head nurses, and social networks in the Region of the Americas requesting cases, stories, and activities of nursing professionals in relation to PHC with information on the objectives of the service, project, or program described in each case study, the type of work involved, the outcome, and the population served.

Each case study was analyzed to identify its key subjects, the main needs of the populations served, and to what extent the program fulfilled the criteria established for primary health care (Table 1). Two PAHO experts carried out a preliminary analysis, evaluating each submission according to the following criteria:

- Relevance to the theme of the publication
- Quality of content
- Quality of writing
- Innovations for nursing practice in the Region

The definitions and parameters of the review process are provided below. The case studies were scored and were included or excluded by consensus among the reviewers. The submissions with the highest scores were accepted. In case of disagreement, the case studies were subjected to a second review. Of the 98 initial case studies reviewed, 41 were eliminated, leaving 57.

A second analysis was conducted and cases, studies, and stories were selected, presenting the perspectives and contributions of nursing professionals in the six areas mentioned above.

Table 1. Story selection criteria

	High	Average	Low
Relevance to the theme of the publication	The presentation is relevant to the theme of the publication, which is PHC ("Primary health care is a strategic approach to developing, organizing, and financing health systems and services that are equitable, sustainable, and centered on people, families, and communities." The PHC approach involves all of society, a commitment in which the right to health is expressed fully, which requires increasing the capacity of the first level of care within integrated service networks, and intersectoral action to address the social determinants of health and social participation) and uses the key words *perspectives, contribution of nurses,* or *PHC*.	The submission is relevant to the theme of the publication, but does not address all the aspects of PHC, such as equity, a people-centered approach, and increasing the capacity of the first level of care.	The submission is not relevant to the theme of the publication.
Quality of the content	The purpose or objectives and the health problem are clear. The presentation has implications for nursing and midwifery, nursing practice, research, education, leadership, or policy, as well as impact on public health.	The purpose or the objectives and the health problem are somewhat clear or implicit. The presentation has implications that are somewhat clear or implicit for nursing and midwifery, nursing practice, research, education, leadership, or policy, and impact on public health.	The purpose and the health problem are not clear. The submission's implications for nursing and midwifery, nursing practice, research, education, leadership, policy, and impact on public health are not clear.
Quality of the writing	The writing style is coherent and communicates the authors' story effectively. It does not have grammatical or spelling errors.	The writing style is coherent and communicates the authors' story effectively. It has some grammatical and spelling errors.	The writing style is not coherent, nor does it communicate the authors' story effectively, and/or it has many grammatical and spelling errors.
New development (Innovation)	The authors present new or innovative original work on the role of nursing professionals or its expansion in country's context.	The authors present original work, but it does not discuss new or innovative developments in nursing within the country's context.	The authors do not present original, new, or innovative work.

Results

PAHO received more than 400 stories from throughout the Region, written in English, Portuguese, and Spanish. After applying the established criteria, 41 of these were selected (Table 2).

Table 2. Stories selected for publication, according to the six areas of contribution

Part	Stories	Spanish	English	Portuguese	Total
I	Strengthening the stewardship and governance of health	5	5	0	10
II	Eliminating the barriers to universal access to health	3	1	2	6
III	Training the new cadre of nursing professionals	4	1	3	8
IV	Promoting the use of technology and innovation	3	0	2	5
V	Developing programs that consider human diversity, interculturalism, and ethnicity	3	3	1	7
VI	Generating social participation mechanisms	3	1	1	5
	TOTAL	21	11	9	41

PART I

STRENGTHENING THE STEWARDSHIP AND GOVERNANCE OF HEALTH

The role and scope of nurses in primary and community care in British Columbia

David W. Byres, Natasha Prodan-Bhalla, Joanne Maclaren, Carolyn Solomon, Minna Miller, Danielle Daigle, Tamera Stilwell, Gwyneth McIntosh

Canada

British Columbia (BC), with a population of 5.1 million, is the third most populous province of Canada, after Ontario and Quebec, respectively. With a land base that is approximately 95% non-urban, the populations of rural British Columbia are often small, dispersed, and fluctuating.

The Nursing Policy Secretariat (NPS) was formally established in 2017 in BC to support collaboration among the health ministry, health authorities, professional colleges, the Nurses Bargaining Association, and other partners, to consider issues related to the scopes of practice and policy for all levels of nurses across the province. In January 2018, the *Nursing Policy Secretariat: Priority Recommendations* report was released, available at: www.health.gov.bc.ca/library/publications/year/2018/nursing-policy-consulation-report-Jan24-2018.pdf. The report contains 50 priority recommendations, focused in 13 thematic areas, to provide strategic direction to the Ministry of Health and system partners to optimize nursing practice, better support patients, and achieve health system goals overall.

In 2018, the NPS moved to establish the Provincial Nursing Network (PNN), comprised of representatives from all health authorities and key partner groups, to provide advice on nursing practice, education, regulation, policy, and research. They supported implementation of the 50 NPS priority recommendations. A parallel governance structure, the Nurse Practitioner Advisory Network, was also established to advance the NPS recommendations pertaining to cross-system integration of nurse practitioners (NPs). Three key initiatives undertaken by the NPS that relate to the advancement of universal access to primary care are described below.

To enhance access to primary care, the ministry has increased funding to educate nurse practitioners.

1. Improving Access to Team-Based Primary Care

The Ministry of Health has developed strategic policy to support the implementation of team-based primary care in BC. The policy affirms that effective health care delivery in the BC health system requires collaboration and coordination of care by multiple health care disciplines on behalf of the patient. It also outlines definitions and policy guidelines for the establishment of effective interprofessional health care teams.

To enhance access to primary care, the ministry has increased funding to educate nurse practitioners. A new compensation model has been created for NPs in these settings to enable them to provide longitudinal primary care services and work to their optimal scope of practice under an independent contract. Additionally, an innovative model of interprofessional team-based care, i.e., NP Primary Care Clinics (comprised of an interdisciplinary team: NPs, registered nurses, mental health worker, midwife, and general practitioner) has been launched at three sites across the province. It is anticipated that these clinics will address a significant access to care gap over the next three years.

2. Nursing Education and Transition Model

The ministry, in collaboration with the Nursing Education Planning Council, will be developing, implementing and evaluating a new, innovative model for baccalaureate nursing practice education and transition to practice programs to better prepare newly graduated nurses (NGNs) and support cost containment of escalating health care costs related to high attrition and turnover in the nursing workforce. The model will also address nursing faculty shortages and effectively build capacity and infrastructure to meet government's commitment to improve and strengthen health services (including primary and community care). The new model to address attrition rates and effectively support NGNs and nursing faculty will entail the following:

a. **Learning Pathways:** Baccalaureate nursing students enter a learning pathway in their final practicum that aligns their practice area of interest with potential for regular employment after graduation along with health system workforce needs.

b. **Provincial Transition Support Program:** All NGNs will be hired and supported beyond graduation through a provincial transition to practice program that would support NGNs from the end of their undergraduate program practicum up to 12 months post hire.

c. **Hybrid Faculty Educator Roles:** New hybrid roles that span academic and practice sectors along with faculty mentorship support would be employed to support faculty and clinical educators to effectively implement the model and to address the faculty workforce shortage.

Two health authorities have already demonstrated proof of concept of the efficacy of transition programs. They have achieved a turnover rate below 5% in practice areas where it is has been implemented.

3. Nurse Practitioners Improve Access to Primary Care in British Columbia, Canada

The NP role has existed in Canada since the 1960s. In BC, the first master's degree prepared NPs graduated in 2005. Legal authority for the NP scope of practice is provided by The Nurses (Registered) and Nurse Practitioners Regulation under the Health Professions Act. The BC College of Nursing Professionals (BCCNP) has established the scope of practice for NPs with the necessary standards, limits and conditions of practice.

In order to support the integration of NPs into the BC healthcare system, the Ministry of Health has provided funding for NP positions throughout the province. NPs work autonomously without physician oversight in diverse settings, improving access to health care services by contributing to a health care system that is responsive to the needs of British Columbians. NPs provide comprehensive primary care, including health promotion and disease prevention, diagnosis and management of diseases and illness, prescribing medications, ordering and interpreting laboratory and diagnostic tests, and initiating referrals to physician specialists and other health care professionals. NPs provide care in primary, acute and palliative care settings, including rural, remote, and urban centers.

There are over 603 NPs in BC, of whom 60% provide primary care services, most in community-based settings. Thirty percent of primary care NPs provide specialized services to the most vulnerable, including marginalized women and children, new immigrants/refugees, the homeless, those with HIV/hepatitis C, or with mental illness/addictions. NPs are truly improving access to care for these vulnerable populations in many underserved settings.

Images: © Minna Miller et al.

The role of nurses in the school health program

Hazel Brown, Joanna Rose-Wright, Carvell Bailey

Cayman Islands

The population of the Cayman Islands is 65,813 of whom 36,705 are Caymanian. The School Health Program presently serves 46 schools and 9,106 students, from preschool to high school, both public and private.

The Cayman Islands School Health Program is a nursing program formally established in 1987 as a joint effort of the Public Health Department, Ministry of Health and Ministry of Education, with the goal of optimizing each child's capacity to learn by identifying health problems affecting learning at an early age, making the appropriate recommendations/ referrals, and minimizing time spent out of class for health care purposes by promoting health and preventing illness.

The program promotes improvements in sexual and reproductive health, obesity reduction, and physical activity, self-care among youth with chronic health conditions such as asthma or diabetes, smoking cessation, and the prevention and management of infectious diseases through immunization.

The Program works towards achieving these outcomes through several measures: providing screening for hearing and vision defects, conducting periodic physical assessments for early identification of health problems affecting learning; providing immunizations to minimize risk of preventable communicable diseases; providing easily accessible health care for minor illnesses; making referrals to appropriate agencies for problems identified or suspected; providing rapid response to health crises in schools; and providing education for promotion of health and prevention of illness.

All students entering school in the Cayman Islands for the first time are required to undergo school entry screening. The screening consists of personal and family history, hearing and vision testing, a physical examination and administration of required immunizations. Annual health screening for approximately 700-

750 children aged 4-6 years is conducted during the months of July and August. Subsequent health screening includes follow-up vision assessment for all students if indicated, and BMI, vision and hearing screening for students aged 10-12 prior to entering high school.

The following vaccinations are offered to students through the school health program: MMR, DPT/IPV, Tdap, hepatitis B, varicella and HPV. Written consent is required from parents for all vaccines administered in school. Flu vaccines are also offered to the school staff and families of students.

Other services provided by the Cayman Islands School Health Program include a dietician, who provides guidance on healthy dietary options through health education sessions, and in partnership with the Ministry of Education, advising on policies and school menus for both private and public schools. Dental health services are provided by schools, and districts, dental officer, dental auxiliaries and part-time dental hygienists.

School nurses conduct health education on an individual basis and in classroom settings, with sessions covering a wide range of topics relevant to health, growth and development. Topics addressed include HIV/AIDS, nutrition, genetics, hygiene, growth and development, communicable diseases, safety and family planning. Additionally, health education for teen mothers through a teen pregnancy program is available. Nurses also provide onsite medical treatment for the students at schools that includes, but is not limited to, simple dressings, minor sports injuries, and assessment and treatment of medical conditions and injuries presented. If further care is necessary, referrals are made to the relevant parties (parents, family medical doctor or ambulance services).

The Cayman Islands School Health Program overcomes barriers to accessing care such as lack of transportation, inconvenient locations and appointment systems, and minimizes time spent out of class for health care purposes. The Program's services are provided free of cost to all students. This cost-benefit helps to reduce health disparities among families, allowing children and adolescents of underserved, low-income and high-risk households access to basic health care. It further reduces the burden on hospitals and clinics.

The Program promotes improvements in sexual and reproductive health, obesity reduction, physical activity, self-care among youth with chronic health conditions such as asthma or diabetes, smoking cessation, and the prevention and management of infectious disease

through immunizations. It has proven its effectiveness in the reduction of certain infections. Nurses in the Cayman Islands School Health Program are providing primary health care to students and their families, increasing access, reducing costs and improving health outcomes in their communities.

Images: © Hazel Brown et al.

Servicio Amigo program: Care for young adults and adolescents

Ivett Adriana Herrera Zuleta

Colombia

The *Servicio Amigo* (Friendly Service) program was launched in 2008 in Commune 6, at the Alfonso López University Health Center in Popayán, the capital of the department of Cauca. This initiative of the Ministry of Health of Colombia aims to provide care for adolescents and young adults to prevent pregnancy, sexually transmitted infections, and all types of violence, as well as promoting sexual and reproductive rights and safe sex.

A decade after it was launched, *Servicio Amigo* remains a valuable program. The activities that it organizes include not only Commune 6, but also the neighboring area. The care provided to public and private educational institutions and universities in the municipality of Popayán has reduced the percentage of teenage mothers from 20% in 2016 to 16% in 2018, according to data from the local authorities.

This major project provides the following services to the adolescent community:

1. **Program for sexual and reproductive health education.** This is offered in partnership with educational institutions, foundations, and universities. Four cohorts have concluded this program and, after receiving 20 hours of training, these more than 500 adolescents and young adults have become peer-to-peer knowledge multipliers. The program is run by university professors and students from the Cauca University nursing department, raising awareness about sexual and reproductive health among young people.
2. ***Servicio Amigo* has nursing professionals who provide comprehensive care.** They offer sexual and reproductive health counseling, including initial and ongoing consultations on the use of contraception.

The care provided to adolescents and young adults in the municipality of Popayán has reduced the percentage of teenage mothers from 20% in 2016 to 16% in 2018.

These free, accessible, and personalized services have enjoyed wide acceptance in the community. Adolescents and young adults ask questions and receive advice on their sexual and reproductive health, when to begin using contraceptive methods, and follow-up. Thanks to this service, young people have been able to access testing for the detection of sexually transmitted diseases, and cervical and uterine cytological screening. This positive response is shown by the large numbers who voluntarily participate.

The service is a prime example of how primary health care has generated a wide acceptance of sexual and reproductive health promotion among adolescents and young people.

Images: © Ivett Adriana Herrera Zuleta

Community nursing's role in providing care to people, families, and communities

Anahy Velazquez Aznar, Caridad Dandicourt Thomas, Norma Corrales Fernández, Adyeren Ruiz Reyes

Cuba

In Cuba, individuals can access the health system without geographic, cultural, organizational, or economic barriers, guaranteeing health services that are safe, personalized, of high scientific quality, and at a sustainable cost. Primary health care is a national policy. It is the cornerstone and essential setting for the constant transformation of the National Health System.

The main purpose of the Family Practice Office is to ensure comprehensive care to meet the health needs of each community and to increase participation at every level. It puts the physician and the nurse in direct contact with people, families, and the community.

This approach has led to the participation of people in solving their own health problems, and to positive changes in population health and the achievement of health targets. To improve professional performance, in 2004 the community nursing specialty was created in Cuba, using a residency system.

A hallmark of community-based care in Cuba is its scope of action: homes, schools, the workplace, and the community itself.

These professionals are trained to carry out complex functions, and under the Nursing Practice Regulations (Resolution 396) they are allowed more scope for independent judgment. Their level of skill enables them to make decisions, share responsibilities, and combine their functions with the other members of the health team.

According to official statistics, the first level of care in Cuba employs 1,746 nurse specialists, 37,246 registered nurses, and 11,134 nurse technicians. This represents 58% of all nursing personnel, distributed in urban, semi-urban, and rural areas.

The functions associated with community care are diverse and autonomous. They start with an analysis of the health situation, a continuous and dynamic process designed to assess the state

of the community's health and work towards its improvement by promoting early diagnosis of disease, timely treatment, and follow-up.

Health professionals' activities include providing home care to people and families, evaluating family health, and collaborating with families to provide comprehensive health care. They apply nursing techniques and protocols and participate in organizational processes to plan individual and collective activities. They carry out proactive investigations to enable timely identification of health problems, and coordinate and carry out the vaccination of the population according to the current immunization schedule.

Furthermore, they provide care to healthy children from 2 to 19 years old, incorporating different techniques from natural and traditional medicine. During the first semester of 2019, a total of 3,951,725 nursing visits were conducted (369,295 more than during the same period the previous year) by the basic health team for maternal and child health, communicable and noncommunicable diseases, and for risk groups.

Teaching activities include training nurses, collaborating in on-the-job training, and providing training for individuals, families, groups, and the community on different health issues. The professionals who provide their services in the community receive continuous, relevant training to meet their expectations and community needs, which increases their capacity to respond to the social context.

A hallmark of community-based care in Cuba is its scope of action (homes, schools, the workplace, and the community itself). The entire community is involved and is given the opportunity to carry out wide-ranging health actions to reach the greatest number of people in the shortest possible time.

Images: © Anahy Velazquez Aznar et al.

Comprehensive community-based care for children

Martha Manley Rodriguez de Carias

Honduras

The municipality of San Marcos de Sierra comprises four villages and 34 *caseríos,* which are village sub-divisions. Its population is estimated at 10,714 inhabitants and, according to the National Statistics Institute, it had 1,500 dwellings in 2010, with a local farming economy based on corn, beans, and fruit trees, as well as livestock.

In this community of indigenous Lenca people in the department of Intibucá, the main health problem is malnutrition, which especially impacts the child population (87%). Such a high rate of malnutrition is due to poverty, poor soil, and lack of water. In 2001, child mortality was very high. Before their first birthday, 90 children died per 1,000 live births; by 5 years old, the rate was 60 per 1,000.

In order to establish possible objectives and recommendations for revamping the health services, a comprehensive nursing network was created in the 1970s, involving the Social Security Institute, the Autonomous University of Honduras, schools for nurse technicians, trade unions, and women epidemiologists and researchers.

The agencies focused on the problem of malnutrition, but the public identified lack of a water supply as the main problem.

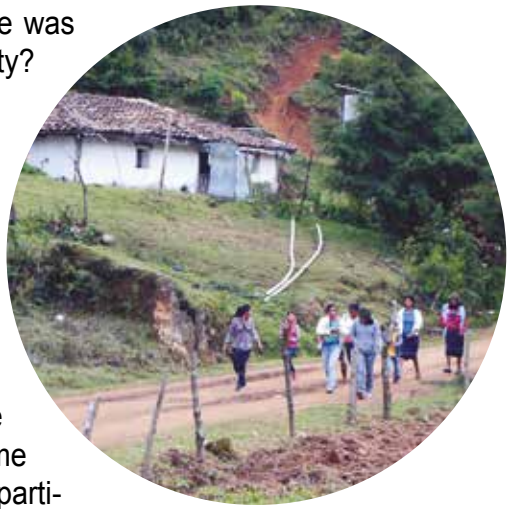
A group of nurses with decision-making roles at the local and regional levels was organized to collaborate with a nurse at the central level. A multidisciplinary effort was achieved with contributions from regional and local managers who were members of the core team. Health promoters, together with local physicians, nursing professionals, and social workers were key actors in implementing the primary health care process.

In 2010, partnerships were organized between sectors, including municipalities, local nongovernmental organizations, and the Secretariat of Education.

The results of the situation analysis – a joint effort involving city hall decision-makers, citizens, and aid workers – were

surprising. Contrary to the technical approach of the agencies, which focused on the central problem of malnutrition, the public believed that the main problem was water. They explained that, without water, it was impossible to produce enough to feed their families, and especially their children. This lack of food production was compounded by poor hygienic conditions, which also had to improve. They did not even have the option of eating green vegetables, so essential for a healthy life.

This raised important questions. What could be done in a municipality lacking vital water resources and food production, and with scarce resources to overcome the problem? How deep and proactive was the commitment and intent of the municipality and the community?



During the negotiation process, a decision-making panel was formed with municipal leaders, cooperating organizations, the community and, especially, women's organizations. It was decided that the problem should be presented to the department of Intibucá water agency, located in Comayagua.

Once the feasibility study was over, local society and public services institutions were mobilized. This included the National Water and Sanitation Service. Small working groups were organized to follow up on the public's previous efforts. At the same time, they worked at the neighborhood level, where community participation was a key determinant in completing each planned project.

The initiative concluded with a large celebration to inaugurate the water installations in several neighborhoods and communities in the municipality, as planned. In tandem, several workshops and seminars were organized to empower community leaders, both women and men, on issues such as governance, public policies, social participation, land use, and modern agriculture techniques.

Images: © Martha Manley Rodriguez de Cariasa

Improving the services offered by community nursing

Alex Ackie

Montserrat

The goal of Community Nursing in Montserrat is to develop, provide, and maintain nursing standards, using the Primary Health Care (PHC) approach to ensure quality nursing care to individuals, family and the community. Three initiatives are described here, addressing child health, community health and workplace wellness.

District nurses are increasing employees' access to primary care and reducing the barriers to care imposed by absence from paid work.

1. Child Health

The Ministry of Health has reviewed and updated Child Health Services to ensure that every child is provided with quality health care. The services include full immunization to protect against life-threatening childhood diseases and screening programs for early detection and referral of nutritional, physical, psychosocial and neurological disorders of all children from birth to school-leaving. Other actions of the nurses include:

- Carrying out weekly childhood obesity prevention clinics at all health centres, conducting healthy food preparation demonstrations with the parents, and focusing on utilizing locally available produce.
- Maintaining 100% immunization coverage of all children.
- Maintaining growth and developmental screening for children 0-5 years.
    - Conducting and participating in Weekly Child Health Clinics at all health centres.
    - Assisting with quarterly visits to Day Care and Nursery Schools to conduct rapid inspection.

- Participating in health education using all available media to include the Radio programs "This Week with the Nurses," "Enhancing Your Mental Health," and "Talking Health" to promote health and well-being.
- Home visiting to follow-up high risk and defaulted clients.
- Participating in the Annual School Health Program which includes physical assessment, laboratory tests, dental, vision, hearing checks and mental health screening of all 4 ½-5, 11-12 and 14 ½-15 year-olds.
- Assisting with rapid inspection of primary schools and BMI screening of 8-9 year-olds. This fills a gap in screenings for 8-9 year-olds, since children are not routinely seen after age 5 until they are 11-12 years old during the Annual School Health Program. It also gives the Ministry an opportunity to follow up those children screened at age 5 during the Annual School Health Program.

2. Community Health

In 2018, the Ministry of Health & Social Services made a decision to give greater support to community health by training the first-ever batch of six community health aides (CHAs). The program was conducted by the Nursing Department and the Montserrat Red Cross. The CHA curriculum emphasized developing health promotion skills and home visiting to follow up defaulters and identify individuals in the community in need of nursing services. CHAs also successfully completed a program in Basic Life Support to enhance their participation in the activities in the health centres and the community. They have been very supportive to the nurses as they are also responsible for conducting defaulter tracking and follow-up home visits.

3. Workplace Wellness

The Workplace Wellness program started with the District Nurses visiting workplaces and screening for hypertension, diabetes, and obesity. It has since been expanded to include depression screening, utilizing the members of the mental health team (psychiatric nurses and psychologist). The program has allowed nurses to track clients' progress with each consecutive screening, allowing them to see improvement over time. Employers have all embraced the program and look forward to members of the PHC Team visiting their workplaces to carry out the beneficial screenings. Employers are grateful for the benefits, which include:

- Reduced sickness absence levels.
- Greater staff satisfaction.
- Improved productivity.
- Improved morale and loyalty amongst employees.
- Less time away from work for staff.

District nurses are increasing employees' access to primary care and reducing the barriers to care imposed by absence from paid work. Screening and monitoring control of chronic conditions such as hypertension and diabetes should improve health outcomes and maintain a healthier workforce.

Images: © Alex Ackie

Nurses leading improvements in maternal and child health services

Kerthney Charlemagne-Surage

Saint Lucia

St. Lucia is a small island, 27 miles long and 14 miles wide, located midway down the Eastern Caribbean chain, between Martinique and St. Vincent, and north of Barbados. With a population of approximately 170,000 people, there are currently 35 primary health wellness facilities, two national hospitals and one psychiatric hospital.

Universal Health remains a high priority for the Ministry of Health. One of the main strategies to achieving universal health care is the continuous strengthening of primary health care. One of the key areas of focus in 2019 was maternal, child, and adolescent health. Despite progress made over the years, neonatal and under-5 mortality remained high, at 11.6% and 15.8% per 1000 live births, respectively. Other major challenges included:

1. Maintaining a 95% coverage for all vaccines in all antigens, particularly in the over 1-year age group.
2. Challenges with data management in child health. Data is primarily entered manually, which may not always be done timely and may increase the chances of errors.
3. Standardization of practices between primary care and secondary care was also a major gap.

The primary health nursing team developed an ambitious work plan to address the maternal and child health problems, and a committee was formed to implement it.

The Primary Health Nursing team developed an ambitious work plan to address these problems, using a six-pronged approach. A committee was formed to implement the work plan. The principal nursing officer spearheaded the committee, which comprised only nurses and nurse-midwives. This nursing team led the activities described below, all geared at improving maternal and child health outcomes in primary care and ensuring universal access to care. The activities were as follows:

- **Revision of the current Maternal and Child Health Manual.** Revision of the Maternal and Child Health Manual commenced in 2018 and was led by a nurse who served as consultant for the project. The process involved a stakeholder consultation which included obstetricians, pediatricians, midwives, nurses, dentists, health educators, nutritionists, and other partners. The outcome was a manual that now includes preconception and adolescent health, in addition to pre-natal, intra-partum, and post-natal care. Before launching, a national training program was held, led by community nurses, to train the obstetricians, pediatricians, and midwives in the use and content of the manual. This manual now serves as the standardized national tool for implementation of care in the community and in hospitals, bridging the gap from primary to secondary care.
- **Revision of the Child Health Record.** The child health record—once a one-page, double-sided immunization record—was upgraded to a larger, more comprehensive booklet format. This booklet now contains not only a vaccination record, but growth charts, assessments and health information for parents.
- **Community Vaccination Awareness Campaign.** The national launching of community vaccination awareness was held in one low-coverage community to create awareness of vaccination activities. The opening ceremony included addresses and endorsements from key government partners followed by an Immunization Fair under the theme: "All in. Get Vaccinated". The fair included activities such as: Vaccination Verification of cards for immunization status.
- **Health promotion Community Outreach to improve vaccination coverage.** Eight nurses were recruited to dedicate time and effort to the accelerated response. These nurses received training in immunization policy, procedures and techniques. They collaborated with the Ministry of Education (MOE) through the hosting of workshops to not only inform and educate, but also to provide skills in information-sharing on vaccinations.
- **Increase awareness of educators' role in public health.** Nurses met with officials from the ministries of education and health to raise awareness of early childhood health requirements (developmental assessment, immunization, nutrition etc.).
- **Educate principals and other educators about vaccinations,** the diseases against which they offer protection, the vaccination schedule and the law requiring full immunization before school entry.

- **Improve vaccination surveillance.** Enforce and monitor compliance with the law and the rules to keep copies of the vaccination record.
- **Disseminate vaccine schedule posters to schools;** conduct public education targeting all caregivers and using appropriate and effective media such as videos shown in the clinic waiting room, face-to-face interaction at any contact, television, social media aimed at younger and first time mothers, flyers, brochures, and public service announcements.
- **Improve systems and service delivery by sensitizing health facility workers to increase emphasis on educating** clients on vaccine-preventable diseases, adverse reactions and keeping appointments for subsequent vaccinations.
- **Strengthen and maintain the school health services** to improve access to services and for detection of defaulters and needed vaccinations.
- **Improve systems of monitoring clients when vaccinations** are due and following-up defaulters.

As we move into 2020, the Primary Health Care department expects to see many gains from this extensive workplan. It is expected that the consistency and quality of care, as well as access to a full range of maternal and child health services, will improve significantly. This many-pronged approach utilizes nursing expertise across a range of settings and focus areas for this worthy goal of saving lives and building healthier communities.

Images: © Kerthney Charlemagne-Surage

Chronic disease screening in secondary schools in eastern Trinidad

Glenda Lynch-George, Sharon Dufeal-George

Trinidad and Tobago

In Trinidad and Tobago, health services for children are a central part of the primary health care offered by the Ministry of Health. Child health services are provided for children from birth to 5 years of age. Following this period, the care continues at primary schools for entrants at 5 years and leavers (Standard Five), at 11-12 years.

The District Health Visitor facilitates these services as an extension of her substantive function, albeit on a limited basis, mainly at the primary school level. Services at secondary schools, however, are based on event-related programs as directed by the Ministry of Health.

To provide more comprehensive health services to these children, the Chronic Disease Screening—Secondary School Prevention Program, in the Eastern Regional Health Authority, was initiated in 2006. The Eastern Regional Health Authority is one of the 5 Regional Health Authorities in Trinidad and Tobago responsible for providing health care for a catchment population of approximately 120,000.

The Program was coordinated by a District Health Visitor/Qualified School Nurse and facilitated by an interdisciplinary team comprising of nursing, nursing assistants, school health screeners, along with staff from the health education, nutrition and clerical departments. The objective of the Program is to promote primary prevention of non-communicable diseases through the adoption and maintenance of healthy lifestyles by education and empowerment of students, teachers and caregivers.

The Program comprises various components. Health education is a significant feature where students are given pre- and post-evaluation on knowledge about chronic diseases, risk factors and healthy lifestyle. Screening tests are performed to assess blood pressure, random blood glucose, cholesterol and body mass index (BMI). Other aspects of the Program include interview/assessment, referral and follow-up. The data collection instrument is designed to collect data on personal and family medical history, dietary habits, and lifestyle practices.

According to the Health Record Card for Trinidad and Tobago 2011, the Caribbean Food and Nutrition Institute (CFNI) for the period 2009-2010 revealed that the percentage of overweight/

obese children in primary and secondary schools was 23% and 25% respectively. A study conducted by the Diabetes Education Research and Prevention Institute (DERPI) reported that in 2009, of the 67,000 students, aged 5-17 years, whose urine was tested for glucose, for every 100,000 children, there were 10 children with Type 2 diabetes and 19 children with glucose intolerance.

Recognizing the importance of this school-based prevention Program, the District Health Visitor/Qualified School Nurse coordinator consulted with nursing management to develop the capacity of the Program. Subsequently, through a collaborative effort with all stakeholders (nursing, health education, nutrition and support staff), an in-depth evaluation of the Program was conducted, and a Way Forward Plan was established.

A mandate from the Ministry of Health through the National Strategic Plan for the Prevention and Control of Non-Communicable Disease 2017-2021 provided the impetus to implement a more structured approach for the school-based health initiative. As such, a plan of action was formulated to be implemented in both primary and secondary schools. This plan was fully endorsed by the Chief Education Officer of the Ministry of Education.

The Program contains several features aimed at influencing the four main behavioral risk factors for noncommunicable diseases (NCDs): physical inactivity, unhealthy diet, tobacco usage, and alcohol consumption, along with a mental health component. Approval was conveyed by the Ministry of Education to conduct the Program over a three-year period (2017-2020).

From the screenings of a total of 1,117 primary school students in 2018, the referrals for needed follow-up were as follows: 27 to dieticians, 24 to dentists, 12 to medical officers, and 2 to ophthalmologists. Out of a total of 906 students screened from 14 secondary schools, there were 159 referrals: 131 to dietitians, 24 to medical social workers, 14 to dentists, and 9 to ophthalmologists.

The chronic disease screening and prevention program provides an effective model that can be expanded to address health needs across the entire population.

In addition to chronic disease screening, the School Unit also facilitated School Career Fairs, Community Outreach Activities and a session for students on Healthy Lifestyle Choices.

In collaboration with the Ministry of Health, “TTMoves” a Health Bazaar for primary schools, was initiated. The activities included essay writing on healthy choices and a poster competition on locally grown fruits. A total of 215 students from two schools took part in these activities. The objective of this event was to educate and sensitize students and teachers on the importance of practicing healthy lifestyle choices, the importance of drinking lots of water daily, daily exercise, and how all this works together to enjoy a healthy balance in life.

The Chronic Disease Screening—Secondary School Health Prevention Program is just one facet of the Comprehensive Coordinated School Health model which has been implemented by school health nurses along with a multidisciplinary health care team. The imminent launch of the National School Health Policy will allow the Program to be expanded to facilitate more integrated school-based services. The Program has leveraged the knowledge and skills of nurses to lead interprofessional teams in meeting primary health care needs of school children in their Region. It is an effective model that can be expanded to address health needs across the entire population.

Images: © Glenda Lynch-George

Model of care management and provision of human resources in nursing

Rosana Tessa Giménez, Zoraida Fort, Luciana Picardo, Pilar González Ortuya, Adriana Corsiglia, Ricardo Temer, Carmen Camacho

Uruguay

In Uruguay, maternal and child and perinatal health care has been a strategic priority since the creation of the National Comprehensive Health System in 2007 (Law 18,211), on the path towards achieving health as a right and a public resource.

As part of this effort, in recent years the National Advisory Council on Nursing (CONAE), which advises the Ministry of Health, has been working to develop a consensus model for managing nursing in the country's maternity hospitals. The aim is to establish the necessary standards on human resources for nursing to provide safe, quality care. This care should be based on the best evidence and clinical practices, crucial elements of which are teamwork and increased services so that health as a right for all can be realized.

The provision of human resources for nursing is a critical link in the model of care. The shortage of nurses and their unequal distribution across the country (more than 60% work in the capital, Montevideo) means that it is more difficult to plan and establish a model of care.

Four workshops were held to outline a consensus on a model of care and to estimate the necessary staffing levels in human resources for nursing.

To meet this objective, it was necessary to carry out a situation assessment of the country's maternity hospitals, with the participation of all actors. An action plan was prepared, whose first step was to form a team of nursing experts to guide and promote the project.

Next, a literature review was conducted. An instrument was designed to assess "good practices" in the personalization of maternal and child care, encompassing the concepts of protecting the rights of the mother, newborn, and accompanying family or friends; the role of these companions in providing support to the woman giving birth; admission to hospital; and promotion of physical contact, mother-newborn bonding, and breastfeeding.

When the basic instrument was ready, regional advisory workshops were held for members of nursing teams from public and private maternity hospitals around the country. The inclusion criteria were based on geographic location and operations. Among other subjects addressed, the instrument presented by the coordinating team was evaluated, and some proposals were made for its improvement.

A total of four workshops were held, according to the previously established geographic criteria. Participants included nurse technicians and university graduates in nursing, who began by presenting the model of care, as applied in the service in which they were working. After the presentation they met in subgroups to analyze and discuss the instrument provided by the coordinating group. The aim was to reach a consensus on the model of care, and to estimate the necessary provision of human resources for nursing. Finally, in a plenary session these proposals and agreements were ratified.

The participation of nurses from both public and private institutions was noteworthy. The four workshops brought together over 100 nursing professionals working in maternal and child health (first and second level of care), representing more than 20 institutions in Uruguay.

In general terms, the workshops showed a high degree of consensus on compliance with most of the indicators presented in the instrument designed by the coordinators. Of the 180 indicators concerning personalized care for pregnant women, delivery, newborns, and their families, more than 70% of the participants agreed that these practices were “always followed”.

Weaknesses were also identified with regard to training, staffing, professionalization, and working conditions. The witnesses cited were consistent in all the workshops.

The need to increase the number of nurses and improve their training was highlighted, with a special emphasis on communication echniques, changes in attitude, and empathy. It was agreed that it is necessary to achieve a model of care that strengthens teamwork, and to draw up clinical protocols or guidelines on good practices that enhance the provision of care.

A significant result for the team that carried out this project was confirmation of the nursing community’s willingness to get involved, and their commitment to improving and offering safe and timely care.

Images: © Rosana Tessa Giménez

Training program for "sentinel nurses" in maternal and neonatal health

Elizabeth Delgado Rodríguez, Yenny Gómez

Venezuela

This program was launched 13 years ago as part of the master plan of the Ministry of People's Power for Health in September 2006 (*Proyecto Madre,* Project Mother). The project included two areas of activity: 1) communities and 2) networks involving "sentinel nurses" (*enfermeras centinelas*) in the principal maternity hospitals.

The figure of the sentinel nurse is part of a strategy launched by the State of Carabobo, through its sexual and reproductive health program, and the Regional Directorate of Nursing (Insalud). Its aim is timely reporting of maternal and neonatal deaths and data collection that enables action. The program also organizes prevention activities that strengthen the quality and personalization of the care provided to mothers and their children, integrating the mother's partner, family, and community in the health centers that provide care to pregnant women. The ultimate goal is to reduce maternal and neonatal morbidity and mortality, and it is currently part of the regional plan known as Maternal Pathway (*Ruta Materna*).

The sentinel nurse is a nursing professional who has received specific training to provide more personalized care during pregnancy, childbirth, and puerperium to the mother, the child, and even to the mother's partner and extended family. Sentinel nurses:

- Help to reduce maternal and infant morbidity and mortality
- Raise alerts, using a non-conventional monitoring system
- Are present when there are events or risk factors that could threaten the health of mother or child
- Take timely action to promote health and prevent illness
- Manage complications in a timely manner, helping to avoid delays
- Manage hospital infections.

Mission, vision, and objectives of the project

Mission: Improve the quality and personalization of care given to mothers and their children in health centers, maternity hospitals, general hospitals, and outpatient clinics.

Vision: Reduce maternal and neonatal morbidity and mortality through early diagnosis and personalized care in outpatient clinics, hospitals, and community networks.

General objective: Contribute to comprehensive, personalized care of mother and child from the preconception stage. Strategies for early detection of risk factors that could affect the health and quality of life of mother and child include disease prevention and health promotion at the community and hospital levels aimed at reducing maternal and infant mortality.

Specific objectives

1. Confirm compliance with official standards for comprehensive sexual and reproductive health care at the three levels of care.
2. Reduce risk factors for maternal and infant morbidity and mortality through early detection during prenatal visits, supported by laboratory tests and timely checkups by specialists to avoid delays.
3. Train and raise awareness of health workers, families, and communities regarding the importance of personalized care in the reduction of maternal and infant morbidity and mortality, and its causes, consequences, and impact on society.

Duties: Administrative, treatment, teaching, and research.

Necessary activities: Confirming compliance with standards of care in sexual and reproductive health in the antenatal room, delivery room, puerperium, and prenatal and postnatal visits; care for adolescents, and family planning; monitoring and control of high-risk obstetric cases and serious maternal cases; analysis of morbidity and mortality; health promotion through educating patients, other care users, families, and communities; and keeping a record of the activities carried out.

Achievements of sentinel nurses

1. Participated in statistical and strategic analysis at Maternal Pathway program meetings aimed at reducing maternal and neonatal morbidity and mortality.

The sentinel nurse is a nursing professional who has received specific training to provide more personalized care during pregnancy, childbirth, and the puerperium to mother, child, and even the mother's partner and extended family.

2. Drafted a plan for specialization and certification in sentinel nursing.
3. Participated in the creation of workshops for pregnant women, to promote natural and personalized delivery at health centers and in the community, integrating the women's partners and families.
4. Organized and participated in seminars on prevention of unwanted and teen pregnancies, promoting family planning visits to health centers.
5. Participated in home visits and verbal autopsies for high-risk obstetric cases and maternal deaths.
6. Trained seven cohorts of sentinel nurses.
7. Participated in community trainings on maternal and newborn health, as well as prevention of teen pregnancy.
8. Participated in meetings of the committee that analyzed maternal morbidity and mortality, to support the agreed strategies.

Image: © Elizabeth Delgado Rodríguez

PART II

ELIMINATING THE BARRIERS TO UNIVERSAL ACCESS TO HEALTH

Mobile health unit: Health care in your neighborhood

Viviana Rosana Schneider, Pablo Adrián Grunewald

Argentina

The "Mobile health unit: Health care in your neighborhood" program mainly targets a population of 21,987 inhabitants in a rural area and in 11 localities around the city of Olavarría (20% of the district's population), as well as the inhabitants of 54 neighborhoods within the city.

The program was created to guarantee that the population of Olavarría has access to the health system. The program has a mobile health unit (MHU) in a van (known as the UMdS, or *Unidad Móvil de Salud*) that brings to these areas a team of nurses who provide direct care and conduct field investigations to assess the specific needs of the population. The team also includes general physicians, obstetricians, psychologists, health promoters, drivers, cleaning and maintenance personnel, and an operations coordinator.

The week before the unit visits an area, the team leader (from the primary care nursing office) makes the necessary contacts to become familiar with local needs, set up the operational conditions, and coordinate work with the local authorities. The team leader also manages the purchase of material and equipment, and contracts any repairs that might surpass the MHU maintenance staff's capacity. On the first day of the operation, the entire team is informed about local characteristics, main problems, and proposed interventions; the available human resources are distributed and a joint decision is taken regarding the tasks that each member of the team will carry out. The team leader also holds a meeting at the end of each working day.

The program has a mobile health unit enabling nurses to provide direct care, and also carry out field investigation to assess the specific needs of the population.

Each weekly visit is planned, designating in advance the locality or neighborhood where actions will be carried out. Then the composition of the working groups is defined, considering the specific needs of each place. Activities are held on Saturdays from 8 a.m. to noon, with the focus on of providing care to the general population. If a health professional considers that an urgent intervention or follow-up is necessary, guidance or referral is provided to the patient regarding the names of professionals, care centers, or necessary contacts. Where there is excess demand, care for children is prioritized.

Nurses and health promoters form part of the team that provides care when the MHU arrives. They assess the needs of the population, contact neighborhood organizations, inviting them to participate in workshops and help promote the MHU visit.

These workshops are usually held in community dining halls, schools, or civil society facilities. They address many different issues related to population health, such as promoting the right to health, the importance of play in healthy child development, migrant rights, the reuse and recycling of waste, healthy vegetable gardens, oral health and hygiene, physical activity, household accident prevention, sexual and reproductive health, responsible procreation, and use of contraceptive methods.

MHU nurses provide the following services:

- Monitoring and control of vital signs
- Vaccination (checking children's immunization records and adult vaccination cards)
- Weight, height, and body mass index checks
- Adult checkups
- Prenatal checkups
- Monitoring of chronic diseases, including diabetes and high blood pressure (in the case of diabetics, monitoring blood sugar with test strips)
- Workshops on health promotion and disease prevention
- Women's health and cervical cancer prevention
- Access to universal child allowance
- Education on the importance of breastfeeding
- Prevention of HIV/AIDS, gender violence, diarrhea and dehydration, and bronchiolitis and other acute respiratory infections

- Design of educational and awareness-raising materials (leaflets, posters, fliers, etc.)
- Orientation on the local health system and on national, provincial, and municipal programs
- Record-keeping on activities, both written and photographic
- Survey design and administration, and interviews to determine community needs

Images: © Viviana Rosana Schneider

Men's health in Otoxha

Herson Blandon

Belize

The Men's Health Project is a community-based educational and screening intervention that was launched in June 2019. Its aim is to improve long-term health in the community of Otoxha and selected communities in Toledo District, where there have been persistent adverse health outcomes due to preventable conditions. The sessions in Otoxha were the first of a series led by the Toledo District Health Services through the San Antonio Primary Care Provider and in collaboration with the Village Council and the primary school in Otoxha.

Given the cultural norms in the selected communities and having a male nurse among its cadre who also showed interest in supporting community-based interventions, the team decided to implement the Men's Health Project. Being a nurse and male, it was decided that nurse could further the reach and purpose of the sessions and was made the lead facilitator and "face" of the intervention.

The District Health Educator was effective in mobilizing and liaising with stakeholders within the village, e.g. mayor, school principal and Community Health Worker, in finalizing, setting dates and encouraging the community to participate in the sessions. The village leaders were of the highest influence in the community and succeeded in encouraging most men to partake in the first of the sessions – itself of significance in the community, given the topics addressed.

The meetings with men in the community shattered some of their negative beliefs and concepts about health and health services.

The project created a great opportunity, fostering empowerment of the communities through awareness and knowledge, both of which are essential for potential behavioral change. The village of Otoxha is one of the most remote in the Toledo District and in Belize, and traditionally, men have the most influence and make most decisions relevant to the access and uptake of health care services in the target communities. Although there have been ongoing health promotion programs with women and girls within these communities, men have not been accessing health care or participating in previous outreach activities. Particularly as men's decisions underpin a number of the improved health outcomes

being sought, it was decided that a men's outreach program would be undertaken and prioritized in 2019 and 2020.

This series of interventions aims to raise awareness, educate, and promote health care services, with an emphasis on family planning methods, a service that has not been readily made use of in the community of Otoxha. The team decided that this intervention strategy would need to be adapted to reach the male audience, because the males in these communities are the primary decision-makers regarding family planning needs and female contraceptive use. Furthermore, family planning is not a topic that has openly been discussed by men in these communities. To this end, the team prepared a series of wellness sessions which integrated family planning with other topics and highlighted the importance of the individual's ownership of health and wellbeing through the mantra "Prevention is better than cure".

The intervention in Otoxha was comprised of four interactive sessions and covered five topics:

1. Men's health – An overview of the leading causes of death in men
2. Family planning
3. Sexually transmitted diseases with an emphasis on HIV/AIDS
4. Vector-borne Illnesses - Dengue
5. Child health – Growth and nutrition and stimulation

The nurse-led health team travelled to Otoxha and met with an average of 28 participants during each of the four sessions, a large number given the total male population in the community. Participants who joined the sessions ranged in age from adolescents to age 60. A major outcome of the intervention was that the participants agreed to undertake screening tests at the venue, including HIV screening. This was a first within the community of Otoxha and in many communities in the South of Belize.

Of much significance was the community members' feedback to the health team, indicating that the sessions' topics addressed their many direct and open questions, including about sexually transmitted infections. The experience in many ways shattered some of the negative beliefs and concepts about health and health services previously held by the community. Through understanding of the cultural values and needs of their communities, nurses can effectively empower community members to take ownership of their own health, thus improving health outcomes across the lifespan.

Images: © Herson Blandon

Expanding access to the services of a family health unit in Rio Grande do Sul

Sharon da Silva Martins

Brazil

The Maringá Family Health Strategy was implemented in the city of Santa Maria, Rio Grande do Sul, 15 years ago, in an area with high social vulnerability. The first residences there were built as part of a public housing project, which drew families from different districts in the municipality to move there. A significant number of these residents worked in the informal economy, including waste collection and recycling.

Over time, the number of families living in the region has increased considerably. Even though they have been able to gain access to housing, education, and health services, many lack access to a sewage system, water supply, and electricity in their homes. Some dwellings are made with recycled materials; the streets are unpaved, and many do not have a garbage collection service. Moreover, public transportation is insufficient to meet the needs of people in that location, far from the city center.

On the other hand, the area has seen a considerable increase in formal employment, which is positive because family incomes improve. However, it has had a negative impact on access to health care. All primary health units in the municipality previously operated during regular business hours: eight hours a day, from Monday to Friday. Some activities were carried out on weekends, such as vaccination campaigns and specific actions—for example, to promote women's health services. However, these activities were sporadic and, in general, aimed at prevention and health promotion, i.e. they excluded curative actions and monitoring chronic conditions.

All primary health units in the municipality used to operate on regular business hours; when the schedule was expanded to Saturdays, people went to the unit who had previously only been able to go during their days off.

After listening to the users and the reports of the community health workers, a unit nurse proposed to her team that they expand their service to alternative hours, in an attempt to take into account those who worked during

the week. They all agreed that even though a medical certificate was provided to substantiate workers' medical visits, many of them continued to avoid going to the health service for fear of having their salaries docked, losing basic food benefits, or even being fired.

The proposal was discussed and formulated. Then a request was made to the municipal authorities for permission to implement the alternative schedule, which was presented along with a proposal to compensate health staff for the extra workload. In 2018, the Maringá Health Unit began opening its doors one Saturday every month, for a full working day. The community was notified in advance of the Saturday on which the unit would be open so that people could make appointments, and in order to organize the workload of the health professionals.

At present, the unit opens on Saturdays and closes the following Monday, as agreed with the municipal secretary for health. It offers patient reception, nursing procedures, vaccination, collection of samples for testing, prenatal consultations, pediatric care, medical consultations, and rapid testing for pregnancy and sexually transmitted infections. Educational activities, roundtables, and house calls are also organized.

Priority is given to care for people who work during the week, although everyone who visits the unit is seen. Community health workers schedule appointments with the physicians and nurses for workers or their families, either in person or by telephone during their free time. Any remaining appointment slots are offered to the general public. Walk-in services are also available, including referrals, when necessary.

During the project's two years of existence, approximately 2,200 procedures were carried out on Saturdays. However, much more important than the number of visits was that people were receiving care who had previously only been able to visit the health unit during their days off. There were reports of women who had not had a Pap smear or a mammogram for years, of patients with high blood pressure or diabetes who had not been monitored, and of children who were behind on their vaccination schedule because their mothers were unable to bring them for care during regular business hours. Some people had never gone to the health center before.

Although the results are promising and the intention is to continue Saturday service, the project does have a weakness: some users have jobs that prevent them from having access to health services even on weekends. People who worked in shops, supermarkets or beauty

salons reported that they could not go to an appointment on a Saturday because of the high demand in their workplaces on that day. Based on that information, the system services were further extended during the week.

The provision of evening service is similar to the programming on Saturdays, and also generally by appointment. Two shifts for vaccination have already been offered, during which 148 doses of vaccines were administered. The evaluation of this initiative has been so positive that the municipal authorities sent a letter to other teams in the municipality, suggesting that they also expand their service hours.

Images: © Sharon da Silva Martins

The Anti-Falls Squad: Elderly safety in primary health care

Nancy Nay Leite de Araújo Loiola Batista,
Edna Albuquerque Brito, Sandra Cecília de Souza Lima

Brazil

The Dr. Antônio Benício Freire da Silva Basic Care Unit (UBS de Poty Velho, Teresina) is located in an area with a large elderly population. This led to the development and implementation of a project to prevent falls in older adults, called *Only Ripe Fruit Falls*. The three teams from the Family Health Strategy assist 943 older persons. In April 2015, during a period of torrential rains in the municipality, the absence of several older persons was noticed in activities which they were expected to attend, such as an exercise or dance group, or a workshop.

Upon looking into the reason for these absences, it was discovered that the older persons had missed their appointments because they had fallen. This was what indicated the need to work on preventing falls in the home.

Due to the number of falls among the elderly reported by community health workers and the team nurse, a meeting was held to seek strategies for solving or alleviating this problem. The result was a workshop, organized to prevent falls through raising public awareness. Monthly meetings were held in which the elderly and their caregivers participated. Issues addressed were proper diet to boost bone strength, types of appropriate footwear, stretching exercises, the best way to get out of bed in the morning, how to arrange furniture, what changes to make in bathrooms, and what points of light are necessary in a room.

During the rainy season, from January to April, meetings were held every month, with 30 attendees, including elderly persons and caregivers. Fall prevention information was also given by community health workers, and by physicians and nurses during medical visits. However, even with this initiative, the number of falls did not decline. In 2017, there were 19 falls among older persons cared for by the team. Between January and March 2018, five falls were recorded.

The team reflected further on this problem, discussing possible solutions, and struck upon the need to act in individuals' homes, because that is where the vast majority of falls occur. This is how the Anti-Falls Squad (*Hold Me, or I'll Fall*) was born, to visit the homes of elderly persons to identify risks of falls and work with their families to make the necessary adjustments. A folder was prepared with suggestions and guidelines for possible adaptations, such as grab-bars for the bathtub or toilet, and non-slip tape for smooth floors. At the time of writing these lines, 35 homes have been visited.

Results

The principal achievement was a reduction in the number of falls, which shored up the primary health care team's resolution: in 2017 there were ten falls of elderly persons during the rainy season; in 2018, five; and in 2019, only two.

Other noteworthy results included greater awareness among the families of the elderly regarding the importance of household adaptations to avoid falls in their elderly relatives; the need to adapt several of the homes visited; ties forged between care professionals and the families; better compliance with hypertension and diabetes treatment; the participation of older adults in activities of the basic care unit, such as dance and exercise groups and workshops on stretching and healthy nutrition; and methods to prevent depression and isolation among the elderly.

The project is also being promoted on radio, television, and social networks. Moreover, this issue is constantly raised in academic institutions, rest homes, and to the general public.

Final considerations

The methods of the Anti-Falls Squad have proven effective in reducing the number of falls in the elderly. The initiative creates opportunities for reflection, and for designing and implementing a safety protocol for primary care users. Moreover, it is a program that can be adapted for use in other areas that provide care to a large number of older persons. It does not require any additional expenses with regard to the use human resources and materials available in a medical care network. Meetings can be held at the basic care unit or in other locations in the community.

The principal achievement of the Anti-Falls Squad project was a reduction in the number of falls: in 2017 there were ten falls of elderly persons during the rainy season; in 2018, five; and in 2019, only two.

Since home visits already form part of the working process of primary care professionals, they neither overload the system nor lengthen the work day; all that is required is for care professionals to be aware and to keep an eye on the issue. Furthermore, this kind of program promotes and improves compliance with treatment for such ailments as high blood hypertension, diabetes mellitus, dyslipidemia,

and labyrinthitis. It also leads to reduced expenditure on hospitalization and medical materials, and less suffering for individuals and their families. It is effective in mitigating social isolation, sadness, and depression, since many of the actions are carried out as group activities. And, finally, it helps to improve the quality of life of the elderly, and to expand their access to health promotion activities.

Images: © Nancy Nay Leite de Araújo Loiola Batista et al.

Implementation of obstetric triage at Temixco General Hospital

Viridiana Mariely Solís Díaz

Mexico

In the municipality of Temixco, 56.8% of the population lives in a state of poverty, with 9.5% in a state of extreme poverty.

According to the National Council for the Evaluation of Social Development Policy, 28.6% of the population is in a situation of vulnerability due to lack of social services. They lag behind in education; they have insufficient access to health services and social security, and to such basic services as housing and food; they also suffer a lack of quality and space in their housing.

According to the Population and Housing Census, in 2010 there were 27,513 households in the municipality of Temixco. In 27% of them, the household was headed by a woman, and in 73% it was a man. The age of the head of household generally ranged from 30 to 54 years. However, 12.8% of homes had a head of household between 20 and 29 years old; and 0.8% were headed by someone who was 19 years or younger. Furthermore, 13% of these heads of household did not have any schooling at all; 64% had received a basic education; 13% had gone to secondary school; and 10% had some higher education.

The municipality has 12 medical units serving the population. In 2017, the pertinent authorities were presented with a project for improving obstetric triage, based on the first edition (2016) of the technical guidelines Obstetric Triage, Mater Code, and Obstetric Immediate Response Teams, designed and issued by the Ministry of Health, and the Special Action Program for Maternal and Perinatal Health.

The project to implement obstetric triage made it possible to reduce unnecessary admissions and the anxiety of the patients and their family members, who now know where to go to receive effective care and vital information about their condition.

The application of this obstetric triage system is a new strategy that makes it possible to provide timely care to users through classifying their condition. This reduces waiting times so that qualified staff may continue to manage them and, if relevant, activate the Mater Code, which contributes to lowering the rate of complications.

To design this project, after determining the proposed objectives, a situational diagnosis of the Mater Module service was conducted using an analysis of strengths, weaknesses, opportunities, and threats (SWOT), and a cause/effect diagram. A theoretical and conceptual framework took shape, and a specific assessment instrument for clinical nursing records was created, with its corresponding instructions for use.

This information was disseminated amongst nursing staff, through fliers and message boards. A training program was also designed for staff from every shift. The objective was to disseminate information on the subject, raise awareness of its importance, and apply and fill out the assessment instrument.

Assessment data analysis showed that prolonged waiting periods were a problem. The result was late assessments and delayed diagnoses due to an inadequate or non-standardized treatment protocol. This was compounded by under-staffing, the low level of theoretical and operational proficiency, and the lack of updated information on obstetric triage and of personnel-in-training assigned to that service, as well as insufficient equipment or poor conditions.

One achievement was that nursing staff participated in and contributed to the entire care process. Consequently, response times were optimized, the quality of care for patients improved, and early warning signs were detected in a timely manner, as were risk factors or complications that could risk the life of the mother or child. All of this stimulated and promoted the collaborative work of the multidisciplinary team in cases where the Mater Code had to be activated, since obstetric immediate response teams for each shift were also instituted.

After implementing the project, the hospital was accredited to manage low-level obstetric emergencies. Consequently, its infrastructure and biomedical equipment were improved. The obstetric triage service was then expanded, and equipped with the necessary resources to receive, manage, and monitor patients who were waiting to receive care. The obstetric emergency kits were designed, and deliveries were made, including Doppler ultrasound equipment, a glucose meter, a stethoscope, a sphygmomanometer, a platform scale, and the necessary furniture, in addition to monitoring equipment, a stretcher, a heart monitor, and an oxygen tank.

This enables obstetric patients and their families who present at this hospital to enjoy several benefits:

- Reduced waiting periods to receive care.
- Larger, better equipped spaces.
- An optimization in the practices of nursing professionals.
- A reduction in unnecessary admissions and in the anxiety of the patients and their family members, who now know where to go to receive effective care and vital information about their condition.

Images: © Viridiana Mariely Solís Díaz

The Care Brigade

Alan Eduardo Cayetano Sánchez

Mexico

The target population were young people from Mexico City between the ages of 12 and 29 years, at risk of vulnerability. More than 500,000 of these young people live in the different townships, neighborhoods, and villages of the Federal District. According to a juvenile trends survey conducted in 2018, 30% are between 12 and 17 years old, and 70%, between 18 and 29. The majority are female (64%), and only 36% are male. Of these youth, 27% had only basic education, 45% had finished secondary school, 24% had a university degree, and only 2% had graduate studies. The majority are students (53%), and 13% work. The others engage in another type of activity.

Their family units mainly comprised first-degree relatives: brothers, sisters, and parents in 32% of cases; 24% with parents only; 10% with the mother and at least one sibling; and 6% lived alone. The rest had some other age-appropriate family situation.

The Care Brigade was born to respond to the need for health care among young people at the grassroots level, including disease prevention and health promotion.

The project of training young people as agents for health change arises from a detected, confirmed need. These agents of change are for the most part university and technical degree students at public and private institutions in Mexico City, studying nursing, medicine, psychology, nutrition, dentistry, physiotherapy, environmental engineering, physical education, or health promotion.

In the last five years, the applied knowledge of these young people in these areas, their experiences, and their theoretical and practical training have assisted young people and adolescents in basic education, secondary school, and higher education in neighborhoods and districts of Mexico City and at the Directorate-General for Adolescent Treatment. Their role has been to promote healthy habits, to provide information, to disseminate information on the wide range of available health services at the different levels of care, and to make referrals to different institutions.

The Care Brigade *(Brigada Cuídate*) was born in response to the need for health care among young people at the grass-roots level, including disease prevention and health promotion, with the following objectives:

1. Consolidate protective actions, health promotion, and disease prevention
2. Ensure effective access to quality health services
3. Reduce the risks that jeopardize the health of the population, in any life activity
4. Close the health gaps among different social groups
5. Ensure the availability and effective use of health resources

The adolescent and young adult population of Mexico City has been a beneficiary. But others have benefited, as well, through the following lines of action:

- Risky behavior prevention, such as:
    a. Addictions
    b. Compulsive behavior
    c. Harmful eating habits
    d. Sedentary lifestyle
    e. Suicidal tendencies
    f. Anxiety and stress
    g. Depression and apathy
- Early detection of chronic or degenerative diseases
- Prevention of gender violence
- Prevention of unplanned and teen pregnancies
- Sexual health promotion and prevention of sexually transmitted infections
- Emotional health care

The following results were achieved:

- Training 100 young agents of change for health in Mexico City
- Organization of health seminars for young people
- Organization of seminars in basic education, secondary, and higher education centers
- Organization of forums for dialogue
- Provision of Care Brigade buses devoted exclusively to providing first-line care services to young people
- Organization of a youth health week in Mexico City
- Campaign to promote the program
- Emotional health diagnosis
- Creation of the Health, Balance, and Youth Wellbeing Network in Mexico City.

Images: © Alan Eduardo Cayetano Sánchez

PART III

TRAINING THE NEW CADRE OF NURSING PROFESSIONALS

Theater as an active methodology in the teaching/learning process

Ivonete Vieira Pereira Peixoto, Marúcia Fernandes Verçosa, Paula Souza da Silva Rocha, Felipe Costa Soares

Brazil

Incorporating theatrical performances into the teaching/learning process enabled a group of university nursing students to recognize changes in the provision of health care from the beginning of the history of nursing until today.

The experience showed empirically that the nursing discipline has always formed a crucial aspect of the art of providing care at every level. Its progress, all the way up to modern nursing, has shown the different facets of addressing health issues, and imagining a healthy environment.

The teaching method was put into practice with 33 nursing students during the first semester of 2019 at a higher education institution in Belém, in the state of Pará. Groups of students were formed, and each one assumed responsibility for a specific period and identified its special characteristics (instinctive health practices, magical-priestly period, Hippocratic, post-monastic, modern nursing, nursing in Brazil).

The scripts were written with special attention to the levels of medical care. Besides the fact that they had to study in order to create their scripts, it was necessary to understand how this methodology interacts with students' learning process. A performance was held for the academic community and the employees of the educational institution, in an auditorium. The costumes were made of recyclable, low-cost materials.

To use theater as a learning technique, students had to understand the history of nursing (since that was the plot). This method also enabled them to identify the levels of health care, and to reflect on their practices in the context of community health care.

To use theater as a learning technique, students had to understand the history of nursing.

University students need to learn about nursing practices in a way that is fun, accurate, and scientific. In this way, beginning with their academic nursing training, they can think about their own future practices, providing and promoting primary health care with the aim of reducing and solving today's public health problems that interfere with quality care.

Images: © Felipe Costa Soares et al.

A multidisciplinary training program in hypertension and diabetes mellitus

Carla Regina de Souza Teixeira, Adrielen Aparecida Silva Calixto, Rute Aparecida Casas Garcia, Maria Teresa da Costa Gonçalves Torquato, Sinval Avelino dos Santos, Joceli Mara Magna

Brazil

This project was launched in 2004 in the city of Ribeirão Preto, in the state of São Paulo, Brazil. Known as PAMHADM (its acronym in Portuguese), it is a multidisciplinary training program in hypertension and diabetes of the Municipal Secretariat of Health and the Municipal Secretariat of Administration, the Ribeirão Preto Nursing School of the University of São Paulo (EERP/USP), and the Ribeirão Preto Paulista University.

PAMHADM is a fellowship program aimed at recent graduates in the areas of nursing, psychology, nutrition, occupational therapy, pharmacy, and physical education. It aims to complement and adapt university education to provide health services centered on comprehensive care and population health, especially in the areas of hypertension, diabetes mellitus, other noncommunicable chronic diseases, and their risk factors. Students' objectives in the program are to:

- Develop the capacity to work in an interprofessional team and assess this performance
- Develop such collaborative skills as interprofessional communication, patient-centered care, the clear definition of professional roles, teamwork dynamics, conflict resolution, and collaborative leadership
- Improve the way information is entered in the health information system

This fellowship program—aimed at recent graduates in the areas of nursing, psychology, nutrition, occupational therapy, pharmacy, and physical education—aims to complement and adapt university education to provide health services centered on comprehensive care.

- Carry out matrix support actions for basic and specialized health care teams
- Take part in health services administration with regard to such aspects as the control of returns, rooting out absenteeism, and monitoring scheduled appointments
- Raise awareness of professional ethics problems in their professional practices and multidisciplinary performance
- Develop a committed, professional attitude towards work
- Think about patients' subjective viewpoint, trying to understand their social and psychological situation and its relationship to their disease process, promoting better compliance with treatment
- Carry out activities related to the thematic contents of the Noncommunicable Chronic Diseases Surveillance Program, for professional refresher training in the different health units
- Participate actively in awareness campaigns to prevent noncommunicable chronic diseases, particularly hypertension and diabetes mellitus, and their risk factors
- Develop health management skills for public policies on noncommunicable chronic diseases
- Promote retraining courses on hypertension, diabetes mellitus, and their risk factors for professionals in the health unit
- Develop tools and devices to further the continuous improvement of the clinical management of hypertensive and diabetic patients.

We know that the involvement of several professional specialties influences the improvement of health conditions for hypertensive and diabetic patients, promoting better compliance with treatment (with or without drugs), and healthier life habits (such as regular physical exercise and changes in diet).

To date, the program has trained approximately 150 health professionals. This has involved activities in more than 15 health units per academic year, and individual and group care with a multidisciplinary approach. In 2019, the latest year, 2,176 visits to patients were registered (nutrition, 1,022; psychology, 483; occupational therapy, 416; nursing, 179; and physical education, 76). On average, 208 visits are made per month.

This association also resulted in the design of care protocols for people with diabetes mellitus, and the updating of care protocols and guidelines in the municipal health network.

This program has been transforming medical care, and is becoming steadily consolidated as a key action of the Ribeirão Preto Municipal Health Secretariat.

Images: © Carla Regina de Souza Teixeira

Nursing School Clinic of the Federal University of Rio Grande do Norte and Health Science School of Trairi

Daísy Vieira de Araújo, Fábia Barbosa de Andrade

Brazil

The Federal University of Rio Grande do Norte and the Health Sciences College of Trairi launched the Nursing School Clinic. The clinic began to implement student internships into the curriculum of the classes on semiology and semiotechnical aspects of nursing and on primary care and family health. It was conceived as a laboratory, where students and professors could gain everyday experience with the health-disease process. Experiencing these aspects in real-life situations would enable them to better understand the reality of the community, and therefore its social needs.

These are the highlights of the actions carried out at the Nursing School Clinic:

1. **Health education actions in the Coexistence and Bond-Strengthening Service, at schools, day-care centers, and other institutions of the municipality.** These actions focused on the most common health subjects in everyday life. The objective was to promote health, and prevent disease and harm. The most important issues for children included body and oral hygiene, enteric parasitosis, malnutrition, obesity, infections, and dehydration. In the case of adolescents, these included diseases or risks associated with vulnerability; psychological disorders that are more frequent than in other age groups, such as depression and anxiety; consumption of drugs and alcohol; teen pregnancies; violence; and prostitution. For the elderly population, they were quality of life issues; prevention and control of hypertension and diabetes mellitus; Alzheimer's disease; depression and other mental illnesses; the risk of violence; and exposure to situations of vulnerability.

The Nursing School Clinic gave students and teachers an opportunity to practice, strengthening of the integration between teaching, service, and the community.

2. **Nursing consultations.** These included taking a case history and conducting a cephalocaudal physical assessment. Based on the results, laboratory or imaging tests were requested, and subsequent therapy and outpatient treatments were recommended. The nursing consultations were carried out by a team comprising grant-holding students and teachers, in collaboration with the Municipal Health Secretariat (that is linked to the Basic Health Units, Municipal Secretariat for Social Welfare and Municipal Secretariat for Education).

The care actions conducted between 2011 and 2015 totaled 2,586, of which 1,342 were nursing consultations for children and adolescents, 721 were patients seen for treatment of enteric parasitosis, 240 were group activities, and 283 were other events.

3. **Outpatient treatments.** These were carried out in accordance with patient needs and the presence of infections, such as enteric parasitosis, pediculosis, and bacterial and fungal skin infections. Regarding enteric parasitosis, the full treatment was carried out for the parasites *Ascaris lumbricoides*, *Giardia lamblia* and *Entamoeba histolytica*, according to the protocols established by the Ministry of Health of Brazil.

   Furthermore, treatments were administered for pediculosis, scabies, other skin infections, and such common ailments as pain, cramps, and pulmonary and other infections that can be resolved at the primary care level, in accordance with the primary care protocols established by the Ministry of Health.

4. **Group activities.** These were the most frequent activities carried out by the members of the project. Such interventions needed to be more frequent, so that children and adolescents could understand the necessity and importance of adopting healthy life habits. These actions include cutting their nails, washing their hands, taking showers, washing their hair, and removing lice. Health education was also promoted.

   Group activities with older adults were also included in the project. These meetings were held weekly for each group, covering different health issues in a dynamic manner to promote a relaxed, easygoing atmosphere that would foster knowledge exchange and delivery of personalized experiences.

5. **Home visits**

6. **Women's health.** Between 2013 and October 2015, care was provided to 87 women—71 from a rural area and 16 of them urban—and 133 adolescents. There were 220 care visits devoted to one-on-one consultations on women's health, including treatment of vulvovaginitis and sexually transmitted infections.

The Nursing School Clinic of the Health Sciences College of the Federal University of Rio Grande do Norte assisted children, adolescents, older adults and their families, providing health guidance as well as treatment, monitoring, and referrals to health services in the city. Therefore, the Clinic was considered part of the health network of the municipality of Santa Cruz, while also giving students and teachers an opportunity to practice, strengthening the integration between teaching, service, and the community.

An additional legacy was also left to the nursing, physiotherapy and nutrition students who took part in the project. This included opportunities to develop decision-making, leadership, planning, organization, teamwork and multidisciplinary action, and respect for others and their differences.

Currently, the Nursing School Clinic is in the process of revamping its internal and external structure, and will no longer be part of the Coexistence and Bond-Strengthening Social Welfare Service.

Images: © Daísy Vieira de Araújo

The Eldercare School

Cecilia Zavala Guzmán, Carolina Arias Vivanco,
Pilar Ureta Fernández, Paula Jaman Mewes, Melissa Zimmermann Vildoso

Chile

The professors teaching the subject of Gerontological Nursing at the University of the Andes Nursing School designed an initiative called the Eldercare School. It was launched in April 2019, as part of an agreement with two municipalities in the Santiago de Chile metropolitan area, and a nursing home.

The training lasted a total of 42 hours (20 in-person and 22 independent learning). Self-study methods were used, as well as workshops and clinical simulations. Those responsible for giving the classes and acting as advisors were 106 fourth-year nursing students, both men and women, between 21 and 28 years old. They were directed by professors of gerontological nursing.

Fifty-eight people from the community took part in this project, nearly all of them without any previous formal training in eldercare. There were 57 women and just one man, aged 26 to 66 years. The majority were from Chile, but fewer from Colombia, Haiti, Peru, and Venezuela.

Some of these people were working as caregivers at a long-term facility, and others provided informal care to elderly people; 86% did not have a family relationship with the person in their care. As to educational levels, 25% had not completed school.

The Eldercare School is incorporated into the academic activities in gerontological nursing.

After participating in this training, the caregivers reported improvements not only in the quality of life of the older persons in their care, but in their own, as well. They felt more confident when they had to make decisions and carry out procedures, and when they faced more complex situations, they were motivated to seek advice earlier. They added that the training had also enabled them to generate support networks, and to gain access to high-quality technical material that they could consult at any time if they had doubts.

Testimonies of some caregivers

"I take care of my mother… For me, it has been crucial because I can care for her better. I believe that now I'm treating her better than before, because I didn't know then…. It has been a great source of relief to me, now that I know how to manage the situation." M. L. C. C. (caregiver)

"It opened up a whole world for me… I felt a humane instinct… it was as if a window had opened up that goes beyond being a caregiver—love and tenderness towards older adults… love with commitment that doesn't expect a reward." J.E.L (caregiver)

The Eldercare School is incorporated into the academic activities in gerontological nursing. Using the method of clinical simulation, students take on a teaching role that is characteristic of nursing. This helps to reinforce the contents of the curriculum, and to develop communication skills and self-confidence.

The majority of the students said that the experience helped them to gain more knowledge and to become empowered in their social education role. The caregivers highlighted that they felt grateful for the opportunity to acquire skills for providing humanized care. When the caregivers ended their training and passed the final evaluation, the Eldercare School issued a formal diploma at a graduation ceremony attended by families, officials, professors, and students.

Images: © Cecilia Zavala Guzmán et al.

Public health nursing practice in vulnerable urban communities

Yolanda Vallejo Pazmiño

Colombia

The community of Los Mártires is recognized as one of Bogota's most important commercial, residential, tourism, cultural, heritage and historical hubs.

This locality has a population of 95,000 people, living in 35,200 households, whose dominant age bracket is between 25 and 29 years. The transient population consists of buyers and sellers from different sectors.

The University Foundation of Health Sciences (FUCS) launched a program called FUCS in the Park, designed to improve the health status of, and prevent disease in, vulnerable communities.

The health campaigns created by this program have been planned with the approval of municipal officials and other administrative entities. Its main thrust is to organize health care awareness-raising seminars, thus improving individual and community health. The proposed actions carried out by students and teachers from the School of Nursing are creative and innovative, and supported by the other health sciences schools of the University Foundation of Health Sciences.

To achieve an impact on the community, healthy lifestyles were promoted and people were motivated to exercise to reduce the high number of sedentary people with very bad eating habits.

The promotion and early detection activities created at the School of Nursing have been conducted directly with the hospital communities. They have been essential for the development of the public health competencies that nursing students must acquire.

The locality of Los Mártires is committed to strengthening good government, and is focused on serving the public and evaluating different options for improvement. Self-care and

prevention actions are being promoted in the community, giving a higher profile to community integration. The idea is to transform and expand public spaces, respecting the environment, and activating itineraries for providing community care.

Actions carried out by the University Foundation of Health Sciences, involving 669 users

- Twelve Health Days: Taking care of our neighbors
- Cardiovascular and renal risk assessment
- Early diabetes detection
- Early detection of skin, cervical and uterine, breast, colon, testicular, and prostate cancer
- Two sampling days for Pap tests
- Women's Protection Day: breast self-examinations workshop.
- Prevention of Spinal Column Risks and Injury Day
- Two days of exercise and Zumba for health
- Personalized health care recommendations: How do I take care of myself?

Expected results of this intervention are that there will be more:

- Babies fed exclusively with breast milk
- People with adequate nutritional status
- People without mental health problems or disorders
- People without avoidable morbidities
- People without avoidable mortalities
- People and communities with the capacity to care for and protect their environment
- People with early detection of health risks and disorders

Risks identified in the population

Los Mártires is a vulnerable area with major social problems, among them people subject to forced displacement, displaced indigenous populations, immigrants, street gangs, prostitution, and child abandonment. Furthermore, a large number of people live in the street (approximately 2,800), facing issues of the invasion of public space, auto exhaust and noise

pollution, and inadequate waste management. In this locality, the sale and consumption of psychoactive substances was also detected.

Based on the identified risks, advisory services were offered to everyone who attended any of the Health Days, to prevent diabetes mellitus, hypertension, and acute and chronic kidney disease. Advisory services were also offered during the various screenings, targeting risks based on subjects' age. According to the results found during these screenings, cardiovascular risk factors were high in this population, as was the possibility of early mortality and of illnesses caused by untreated chronic hypertension, morbid obesity, diabetes, and chronic kidney disease. Specifically, in 2019 more than 60% of screening subjects were found to be overweight and at risk for diabetes and heart attack.

Beneficiaries

To achieve an impact on the community, healthy lifestyles were promoted and people were motivated to exercise to reduce the high number of sedentary people with very poor eating habits. The impact on mental health is very high, and requires timely intervention within the family setting.

These events will continue to be organized throughout 2020, with support of medical and dental units.

Images: © Yolanda Vallejo Pazmiño

Promoting blood donation in the province of Santa Elena

María Dolores Suárez Villao, Doris Marcela Castillo Tomalá, Sonnia Apolonia Santos Holguín

Ecuador

Despite the growth of the Ecuadorian population during the five-year period between 2010 and 2014, the percentage of active blood donors has barely budged, standing at only 1.4%. According to data from the local Medical Transfusions Service of the Ministry of Public Health (MPH), the number of transfusions rose between 2013 and 2017 in the province of Santa Elena (from 975 to 3,314), but voluntary donations did not cover these requirements.

Intersectoral action by the nursing program at Península de Santa Elena State University (UPSE), by the MPH, and by nongovernment blood banks helped to increase regular, altruistic volunteer donors in the province. This was achieved by improving health promotion strategies, using specially trained university students as promoters of the program.

A university committed to its society accepted the challenge of working in blood donation, organizing intersectoral projects with inherent urgency and risk.

The long-term objective was to have sufficient blood units to reduce the risk of mortality in pregnant women, the chronically ill, and multiple-trauma patients. To this end, a system to monitor and follow up on repeat donors was created, using a Java-based app, with an online database server.

The project was designed in association with the School of Information Technology, which made it possible to manage the database of donors who had participated in blood drives. The number of regular, altruistic volunteer donors increased, and myths and misconceptions about blood donation were revealed that had previously discouraged a rise in donations.

Using primary health care strategies, public awareness was raised through interpersonal dialogue, recreational activities, and social networks. Surveys were conducted after blood donations to optimize the different aspects of the process, promote participation in blood drives, and foster cultural changes by

addressing the myths and deeply-held beliefs that had kept people from donating. Clubs were formed among first-year nursing students, aimed at carrying out qualitative and quantitative participatory action research.

The target set by the World Health Organization was blood donation by 2% of the eligible population of the province; the final figure achieved was 1.68% (2560 donors) in eight blood drives held as part of the program developed by the university students. The awareness-raising program reached 49,124 people. It was found that the actions carried out had 60% impact: the number of failed donors was reduced by 6.88%, self-care and healthy lifestyles were promoted, there was a 29% increase in regular donors. This proved to be an effective strategy to reduce morbidity and mortality due to lack of blood, while supporting the students' learning process.

The program promoted good practices in primary health care in the following ways:

- It began in 2015 as a response to low rates of regular, altruistic volunteer donations in the province. The Medical Transfusions Service in the Dr. Liborio Panchana Sotomayor General Hospital was established the same year.
- The program raised the profile of blood donation, not only in the nursing training program, but among all students and teachers. Of these, approximately 50% became donors during the different drives that were organized, generating a database that currently surpasses 2,000 donors.
- The students used different community strategies, such as fairs, open houses, information stands, conferences, radio campaigns, one-on-one talks, different interactive media, and online social networks. Events were also held in public and private companies, in churches, parks, and shopping centers.
- This field was comprehensively and practically incorporated into the training of nursing students, who were encouraged to understand the importance of regular, altruistic volunteer donating as a means of reducing mortality caused by blood shortages.

Results

A university committed to its society accepted the challenge of working in blood donation, organizing intersectoral projects with inherent urgency and risk.

Complications related to pregnancy, childbirth, and puerperium (16%), as well as traffic accidents (8%), are among the leading six conditions requiring transfusions in the province of Santa Elena.

A crucial factor in the campaign was the recommendation for the students who carried out the program and the sensitized community to adopt healthier lifestyles. This encouraged participants to be in the best possible condition to become regular, altruistic volunteer donors.

Recommendations to replicate the initiative

Due to its impact, the program was extended for two more years as a project to forge closer ties between UPSE and the community, from 2015 to 2019. The new training phase brought in first-to-third-semester students as blood donation promoters, maintaining the university's strategy. They continued this program as part of their Community Nursing class, an experience that can be applied in other universities as a contribution to public policy.

Images: © María Dolores Suárez Villao et al.

Community nursing interventions

Didier Francisco Aké Canul, Sheila Mariela Cohuo Cob, Martha Patricia Dzul Centeno, María del Sagrario Vargas Espadas, Russell Izael Trujeque Zavala

Mexico

The School of Nursing of the Autonomous University of Yucatán (UADY) and the Public Health Research Group—a multidisciplinary group working in public health, government and public policy, oncology, nursing, and social work—contribute to training nursing professionals and to primary health care strategy through research projects and community nursing interventions. The following summarizes a program carried out in a community north of the city of Mérida, with a total population of 707 people. The local economy is mainly based on manufacturing and services.

The program arose from the findings of an eco-health study carried out among inhabitants of the community and teachers and students of the School of Nursing in December 2018. The problems identified were prioritized jointly and interventions were implemented to improve community health and the community work experience of future nursing professionals.

A joint intervention was carried out with the community to address the problem of pediculosis capitis at the local primary school, whose principal had reported an infestation among the children.

Nursing house calls

In this intervention, priority was given to 60 families who, during their health diagnosis, had reported not being affiliated with any health service. From August 2018 to December 2019, 160 home visits were made to 40 of these families. The actions and care provided included health promotion, nutrition consultations, disease prevention and control, disease detection, and orientation on reproductive health.

In February 2019 the results of the health diagnosis were reported to the community. Attendees at the meeting requested a strategy to help people who were not affiliated with any public insurance. An enrollment brigade was organized in the community to sign people up to the program. The commis-

sioner prepared the request, a local resident hired a sound truck to advertise the initiative, and a social work student hung posters around the community and went house to house to publicize the event and distribute the necessary enrollment forms.

On 30 March 2019, the brigade met at the agreed-upon place; in a 3-hour period, they obtained the following results: 10 affiliations, 12 renewals, and one person who was added to a family that was already affiliated. In total, there were 23 cases processed, involving 62 beneficiaries.

Actions to promote the prevention and control of pediculosis capitis

A joint intervention was carried out with the community to address the problem of pediculosis capitis at the local primary school, whose principal had reported an infestation among the children.

Nurses and social workers examined 66 schoolchildren and detected 23 cases of pediculosis. On a second visit, a qualitative analysis was made with the ongoing cases to determine the effectiveness of the different forms of treatment received. Then a non-pharmacological treatment was designed to control head lice, based on three components: density, heat, and manual extraction. The same procedure was carried out 30 days after the first to increase the effectiveness of the treatment. A total of 13 families participated in this intervention, with positive results.

During the intervention, awareness-raising activities were held, such as meetings with parents, with teachers, and with local officials to manage the spaces, times, and authorization to work with the children and their families.

Creating healthy environments: Pro-hand-washing schools

The health diagnosis identified respiratory and diarrheal diseases as having the worst impact on schoolchildren in the community. Residents asked for an intervention targeting children at the primary school. Its design included:

- Before-and-after evaluations of hand-washing knowledge
- Evaluation of the school infrastructure to enable hand-washing
- Infographics on proper hand-washing techniques, benefits, and critical moments
- Dirty-hands detector

- Soap-making workshop
- Visual aids placed in strategic places
- Recreational activities to strengthen the hand-washing habit

The school signed a letter with the following commitments:

- Strengthening hand-washing techniques
- Keeping a record of children who miss school, broken down by type of illness
- Providing hand-washing materials

Sessions were also organized with the primary schoolteachers and parents to explain the importance of hand-washing and encourage them to join the Clean Hands Squad, a project developed in October 2019, whose collaborators were students and professors from the School of Nursing. The project's mission was to promote hand-washing habits in Yucatán schools. To date, 765 schoolchildren and adolescents have been trained in hand hygiene, and one school has joined the Pro-Hand-Washing School challenge.

Images: © Didier Francisco Aké Canul et al.

Future Nurses for a Global World

Jennifer Dohrn

United States of America

For the past six years the Columbia University School of Nursing (CUSON) has transformed its approach to nursing education by offering a rigorous global program focused on health equity. In assessing what existed, we discovered that we had siloed our global work into many departments, each unaware of what another was doing. Faculty conducted research with collaborations in many countries, but there was no central place that knew and could connect them for mutual support and impact. Nor was there a basic course on global health in the curriculum. We needed to change that.

Where did we start? We built a team in the Office of Global Initiatives (OGI) and developed a strategic plan with a central focus on student education. A new required course was developed for all incoming students, Global Health Equity and the Responsibility of the Nursing Profession, given in their first semester. By offering it at the beginning of their studies, students are quickly exposed to the importance of thinking globally and the interconnectedness of countries and regions and health crises. They learn how nurses under varied health care settings, the majority with limited access to resources, find ways to provide primary health care to their communities and serve as advocate and educator for the community within the larger health care system.

Changing awareness of global health is changing our students' outlook and interactions with their world.

This changing awareness of global health is changing our students' outlook and interactions with their world. When the Ebola pandemic first emerged in 2014 in Sierra Leone, Liberia and Guinea, we developed a weekly timeline to document response. When the Ebola virus was transported to the US via a passenger unaware of being infected, the students took information and posters to their clinical sites to educate their patients. A group of graduate PhD students sold gloves with a large E for Ebola on them along with an informational sheet on Ebola, and gave the proceeds to the Sierra Leone Nurses Association. Nursing education here was connecting in a live way to contribute to a pandemic response. When hundreds of thousands of people from the escalating war in Syria were

forced to migrate, we again built a timeline and learned about the health care needs of those forced to flee from war, government fragility, and climate change.

To complement this didactic change, the OGI team looked at how we could build a student global clinical experience for the last six-week practicum for master's degree students. We developed criteria for sites based on our aim of students learning in environments of disparity. These included: the site was in low-resourced country or country with different type of health care system; there was a relationship with faculty that connected us to them; the type of experience offered would be community/hospital based; our partner sites were willing to host students for clinical experiences. Many of the sites originated with nursing leaders with whom I had worked over the previous years in my global work. If a site expressed interest, we then did a site visit to build the relationship and achieve clarity on what was expected during a clinical practicum. Now faculty liaisons travel with students to do site visits and meet with the nursing leadership there for closer mentorship and interaction.

Reciprocity has been central to building this program and developing faculty members as global health leaders. Reciprocity means that we ask each international clinical site that hosts our students to identify a professional area where it would like to develop a collaboration with us. These collaborations have taken many forms: in the Dominican Republic, it is contributing to research capacity; in Jamaica, it is development of an advanced curriculum for midwifery; in Mexico, it is transitioning to develop a master's program. Each collaborative project has allowed us to involve more faculty who have relevant expertise in the identified area and the transformation at CUSON gets deeper. Through this program, both students and faculty are learning to broaden their scope of global health practice and deepen their commitment to universal health.

Images: © University of Columbia

PART IV

PROMOTING THE USE OF TECHNOLOGY AND INNOVATION

The game of Violetas: Cinema and Action to Combat Violence against Women

Rosa Maria Godoy Serpa da Fonseca, Lucimara Fabiana Fornari, Maria Raquel Gomes Maia Pires

Brazil

This report describes the experience of using a game called Violetas: Cinema and Action to Combat Violence against Women to train nurses and other public health care professionals. It is cooperative, strategic board game that promotes learning and sharing of experiences among professionals. The ultimate goal is to raise awareness on how to detect and understand violence against women, and how to plan comprehensive opportunities for care.

In the game of Violetas, the board represents violence, and all the players act together to combat its spread. Each takes the role of a character (educator, member of the legal system, public official, health professional, or general public) who has special skills that will come into play as the game unfolds. Violence is confronted by answering questions related to scenes from films, shown on a card, each with a specific relationship to strategic actions to improve the situation. The game poses both multiple-choice and open-ended questions related to concepts, legislation, preventive measures, and interventions in these situations of violence, with the use of film scenes stimulating a more entertaining dialogue amongst the players.

In the game of Violetas, the board represents violence, and all the players act together to combat its spread.

The game requires a minimum of four players, and can include a maximum of eight. To start, each players takes a character card, describing their role and possible range of action. The playing pieces enable the players to move around the board to address violent situations. As they answer questions correctly (individually or as a group), they accumulate cards that they can trade in for chips that mark key words in combating violence against women (voice, light, networks, and shelter), enabling them to win. However, if their answers are incorrect or when a player draws an omission card (with sexist expressions and sayings), violence spreads around the board—and everyone can lose.

Players have reported that the game has had an important role in their training process, since violence against women is barely addressed in the curricula, even though it is an emerging problem in the health institutions' areas of action, and in field-based learning. The game has also been used by primary health care professionals from a number of municipalities at the request of local health managers and of the professionals themselves, because the rise in reported cases demands that professionals become increasingly better trained to recognize and address the problem.

Especially in these cases, the systematic study of gameplay by observing the participants and analyzing their discussions made it possible to identify the professionals' limitations with regard to preventing and combating violence against women. It also suggested skills that can be improved by gaining more knowledge and forging intersectoral networks. And the game enables nurses to reflect on the health needs and social vulnerabilities that are often a barrier to the provision of nursing care and health promotion for these women.

As an educational strategy, the game stimulates communication, integration, networking, sharing knowledge and experiences, developing teamwork skills, and deepening knowledge on the issues involved in violence against women. It encompasses both individual and joint actions, in which the nursing professionals play a leading role and participate collaboratively in measures to prevent and combat the problem. To expand the game's potential benefits, it is important that, after each game, players discuss the major issues that arose.

Image: © Rosa Maria Godoy Serpa da Fonseca et al.

CIPE Violência, a mobile app to combat violence against children

Mylene Gomes da Silva, Emiko Yoshikawa Egry, Karen Namie Sakata So, Érica Gomes Pereira

Brazil

Violence is one of the leading causes of death in Brazil for people in the age group between 15 and 44, and is also growing among the most vulnerable: older adults, women, and children. In 2013, there were 29,784 cases of violence reported nationwide in children from 0 to 9 years, predominantly in the home.

In 2019, a nursing student created a free app in Portuguese for mobile devices, as a class project. Called CIPE Violência (ICNP Violence), it is a support tool for nurses, mainly in the area of primary health care, and for the clinical assessment of children and their families in situations of suspected or confirmed domestic violence. The diagnoses, results, and interventions were designed to prevent violence and harm, and to promote actions by family members and caregivers to break free from it.

The technological production of the CIPE Violência app was based on four of the five phases in the ADDIE model: 1) Analysis, 2) Design, 3) Development, and 4) Implementation. The app adds Diagnosis, Results, and Intervention, focusing on children and families. It can be downloaded on Google Play and the App Store. The home screen offers four main options:

1. **Definition:** Defines the phenomenon of violence against children.
2. **Care:** Using the *Create Care* icon, nursing staff can create an electronic record of the consultation.
3. **Consult Diagnoses:** The diagnoses of the child and their family, subdivided into aspects of strengthening and support.

CIPE Violência is a support tool for nurses to clinically assess children in situations of suspected or confirmed domestic violence, and their families.

4. **Consult Interventions:** Interventions involving the child and their family are divided into interventions for strengthening and support.

In the third option (Consult Diagnosis), choosing the *Child* icon enables the nursing professional to select from strengthening or support interventions, based on the nursing visit made in suspected or confirmed cases of violence. Choosing the *Family* icon, a Diagnosis for strengthening or support can be selected with regard to the caregiver or relatives of the child in a suspected or confirmed case of violence.

Likewise, in the fourth option (Consult Interventions), the *Child* and *Family* icons enable nursing professionals to select different possible interventions for children and their families. The “Consult Diagnoses” and “Consult Interventions” options can only be used to see the list of Diagnoses, Results, and Interventions; however, the Diagnoses, Results, and Interventions related to each specific case can be shown if they are created and selected under the “Care” option.

Use of the CIPE Violência app can contribute to better training for nursing professionals to combat violence against children. Furthermore, it is a method for disseminating the scientific knowledge generated by nurses and for nurses.

Images: © Karen Namie Sakata So et al.

Humanization of care

Elba Francisca Menjivar de Vargas,
María Dinora Alas de Canales

El Salvador

The Benjamín Bloom National Children's Hospital provides health services to children from birth to 12 years old; certain specialties, such as cardiology, see patients until the age of 18. The hospital's cardiovascular surgery program receives support from national and international institutions. In 2017, a surgical intensive care unit was inaugurated, which primarily treats children during the immediate aftermath of cardiovascular surgery.

The nursing division considered it necessary to launch a project to improve the emotional support for children who were about to undergo heart surgery and their caregivers. The Humanized Care Team project was designed to fulfill the National Nursing Care Policy and its strategy on activity planning, organization, and management to achieve humanized, quality care.

The Humanized Care Team provides support for patients and their accompanying caregivers in a structured manner. The project takes into account that the emotional support and care provided during the immediate pre- and postoperative periods are important for patients' recovery. Emphasis is also placed on personalized education for caregivers, from the moment patients are selected for cardiovascular surgery in an outpatient consultation to their admission, through the surgery and the immediate postoperative period. Special care is given to spiritual and psychological issues, treating the child and caregivers as biopsychosocial beings who, throughout the surgical process, have spiritual as well as physical needs.

Lower stress levels were observed in patients and their caregivers before hospital admission, thanks to the spiritual and emotional support receive.

Description of the project

Patients admitted for surgery and their caregivers may feel stress and fear when faced with any procedure. Therefore, the hospital's surgical intensive care unit has a program of seminars for cardiovascular surgery patients, sponsored by

different foundations and carried out by physicians from El Salvador and abroad. Fredlee Ann Kaplan, a psychotherapist from the United States, collaborates with the Humanized Care Team project, sharing her relaxation techniques, which are used to provide support for patients and caregivers. She also shares experiences on the humanization of care, so that the team can implement them.

Spiritual, psychological, and human support is important, but so is play, so staff from the hospital playroom are also involved in the project, providing psychological support and organizing games, with positive results for patients and caregivers. A team of five nurses and two psychologists coordinate with the medical chiefs and head nurses involved in outpatient consultation, internal medicine, and the surgical intensive care unit to carry out these activities. Together, they form the Humanized Care Team.

Children who have undergone cardiovascular surgery are admitted to the surgical intensive care unit, where they usually stay for 3 to 5 days. In the postoperative stage, only limited access is given to caregivers, due to the intensive care that these patients require and the need to balance the risk of hospital infection while trying to promote a pleasant environment to diminish the anxiety of the parents or caregivers, and the children themselves.

Results

During the informative talks given before, during, and after treatment, the patients and their caregivers showed great interest. Furthermore, lower stress levels were observed in patients and, especially, their caregivers before hospital admission, thanks to the spiritual and emotional support received. After analyzing these results, it was clear that there was indeed a need to help parents during such an uncertain time, given their concerns about their children in the operative process. The care provided by the Humanized Care Team has made a difference.

Images: © Elba Francisca Menjivar de Vargas

Promoting health on a radio program

Osmar Efrén Figueroa Palomino

Mexico

Between 2018 and 2019, the Department of Nursing of the University of Sonora broadcast a weekly 30-minute radio program on health promotion, made possible by support from Sonora University Radio. Its title was *Todos juntos por la salud* (All Together for Health). More than 60 of these information programs on health issues were broadcast. Furthermore, a number of infographics were uploaded to the program's social media feed.

As a nursing professional and social services provider, my role was to direct, produce, and present this information program. We had more than 50 professionals as guests, from Mexico and abroad, most of them from the nursing profession. This radio show was broadcast into homes to inform the audience about disease prevention and educate them on a variety of health topics.

Today, the communications media are some of the most influential forces affecting community behavior. The radio plays a major role in influencing and interpreting health promotion policy, not only as a means of disseminating information. Use of the media is also a strategy for carrying out basic analysis of the behaviors that constitute people's habits and lifestyles.

The activities carried out through this radio program have facilitated a reflection on how to create new, more democratic and participatory models of communication that have been studied to strengthen health communication. The program had a positive impact on the lives of its listeners. While broadcasting the program we received calls and text messages thanking us for addressing these issues, and for giving access to everyone tuning in to the show.

Radio is a high-impact strategy for health promotion. It is inexpensive and easy to understand.

The program was simple, and easy to carry out. We went into the recording studio, did our sound checks, and talked about the subject of the day's show. We showed our guest how to manage the equipment, and then, when we were all sure about what we were supposed to do, the microphones were turned on, we heard the pre-taped introduction, and then there were 30 minutes of magic during the recording session.

Afterwards, we would thank our guest and give them a gift in appreciation of their participation. The program's audio recording was reviewed, edited, and stored for broadcast two weeks later. Although it became a routine process, each recording was an exceptional experience.

Using radio is a high-impact strategy for health promotion, a truly valuable tool available to anyone interested in playing a role in health promotion who is familiar with the concepts involved in communicating for health. Radio is also an inexpensive strategy and it is easy to understand how it works.

Images: © Osmar Efrén Figueroa Palomino

Information for monitoring tuberculosis treatment

Daniel Urrieta Salazar, Ana Rimac Arrieta, Patricia Fernández Sánchez

Peru

Since 1990, Peru has successfully applied the short Directly Observed Treatment (DOT) strategy, reducing the incidence and mortality of tuberculosis (TB) by more than 50%. Despite this achievement, the country still has 12% of all TB cases in the Americas, and is one of the top eight countries in the world with the greatest burden of multidrug-resistant tuberculosis (MDR-TB).

Supervised treatment of TB infection is necessary, and should not be interrupted. In Peru, more than 80% of treatment dropout is not due to the course of the disease or the kind of treatment regimen, but to the patient's difficulties in accessing the health facility. In 2018, the San Juan de Miraflores Primary Care Center (CAP III) reported a dropout rate of 1%. Some of the factors identified included difficulty in reaching the center, travel costs, adverse drug reactions, stigmatization of the disease, and the health facility's rigid schedules.

DOT is the most effective strategy to ensure that TB patients complete their treatment. Since this type of therapy can take a great deal of time and resources, some programs have expressed an interest in more economic, alternative methods to administer DOT, such as electronic DOT (eDOT), both to treat TB and to administer isoniazid preventive therapy (IPT).

An adapted version of eDOT used in this study was Video DOT (vDOT), which we called TeleDOT. This type of therapy has been in use for nearly 20 years and is recommended for patients who work, and for health facilities with a large number of TB patients to supervise.

The patients who joined this pilot program used a smartphone to communicate with the facility nurses. During a live Tele-DOT visit, the nurses and patients arranged specific dates and times to meet virtually. During these appointments, the

TeleDOT is more convenient for patients and nursing staff, has a lower cost and lower dropout rate, requires less staff travel time, and provides personalized care to patients.

professional watched the patient take their medication in real time. This made it possible to monitor the patient's taking the medication, and also to ask them:

- How do you feel?
- Did you check to make sure you had the right drug before taking it?
- Did you experience any side effects?

Above all, the nurse answered any questions that the patient might have had. This made it possible to continue building a good relationship with the patient, despite the barrier of distance.

The observed benefits of this method were the following:

- Convenience for the patients and the nurses
- Lower costs and travel time for staff
- Reduction in the dropout rate
- Personalized care

Ten patients with TB participated in this study after signing a document of consent. Their ages were between 18 and 60 years, and they met the following inclusion criteria:

- Diagnosis of drug-susceptible tuberculosis
- Ability to use mobile technology
- Possession of a smartphone with Internet access
- Willingness to participate in the study and respect its characteristics
- Agreement to make video calls

Before beginning this video calls project, the professional interviewed the patient during a week of training to make sure that when video calls were being made no one would be able to see the patient or hear their voice through the professional's laptop. Headphones were used to guarantee the patient's privacy, and the video calls were carried out in a place designated by the patient. The nurse selected a private space within the health facility to establish this contact. The video calls were carried out with the best possible image quality, taking into account the effect of lighting angles, shade, and other details.

Results

Although 37 CAP III patients were invited to participate, 27 were excluded because they did not meet the inclusion criteria. The 10 remaining patients signed up for a two-phase monitoring, following the standard TB treatment.

Of these 10 patients, 1 was ineligible, due to infection with a multi-drug resistant strain of TB. Of the 9 who began TeleDOT monitoring, 1 was transferred for travel; only 8 completed the treatment. Nursing staff using TeleDOT arranged for a total of 727 video calls, each one lasting between 5 and 10 minutes. During the first phase, there were 246 calls, lasting 10 to 20 minutes. In the second phase, there were 481 video calls. The compliance rate was 100%, as was the rate of cure.

There were two mild adverse events, both detected in time for intervention. Moreover, one patient had a case of mild depression, managed by a good nurse-patient relationship on each video call. The financial study showed that savings per patient during the TeleDOT-monitored treatment were 500 soles (about 140 dollars) and 210 hours.

TeleDOT is applicable to patients with drug-susceptible tuberculosis, achieving a cure with full compliance. In this pilot study, it was found to be preferred by patients due to the good relationship established with the nurse, and the savings in time and money.

Images: © Daniel Urrieta Salazar et al.

PART V

DEVELOPING PROGRAMS THAT CONSIDER HUMAN DIVERSITY, INTERCULTURALISM, AND ETHNICITY

Primary health care in the penitentiary system

Ana Rita de Faria, Vanessa Cristina Bertussi, Nubia Cassia Camargo Carvalho, Vanessa Ceravolo Gurgel da Silva, Elizabeth Akemi Nishio, Nacime Salomão Mansur, Gladstone Rodrigues da Cunha Filho

Brazil

In the municipality of Uberlândia, the Paulista Public Health Association (which manages part of its primary care system), the public ombudsman, the municipal health secretary, and the Municipal Department of Health all expressed concern over the state of comprehensive and continuous care for the prison population. To address this concern, they organized the *Beyond the Bars* project to offer a point of primary care in the Uberlândia penitentiary system.

To guarantee access, two health teams were set up and are currently working in prison settings, along the lines of a family health strategy. Each team comprises a physician, a nurse, a dentist, a nurse technician, and an oral hygienist, as well as a psychologist and a social worker. The team has the support of advisors, whose aim is to evaluate care humanely and decisively, supporting the teams in the social construction of primary care. The advisors are a psychiatrist and an infectious disease specialist who intervene according to the needs of the core team.

By deploying these health teams in the prison system, and turning prisoners into health agents, the provision of care was strengthened and the penitentiary population was included in the health system.

In addition to this group of professionals, the prison's other health workers are inmates who are serving time, and whose duties are similar to those of a community health agent. Health agents are chosen by the health team, based on their communication skills, interest, and motivation to do the job, as well as their ties with other prisoners and their good behavior. These agents serve as the link between the cell blocks and the health team.

The key idea is that the work these health agents carry out leads to a reduction in their jail time, which is a right under criminal law. Every three days worked means a day taken off their total sentence. This strategy also aims to

offer these health agents training and experience to enable them to find work outside of the penitentiary in the future.

By deploying these health teams in the prison system, and turning prisoners into health agents, the provision of care was strengthened and the penitentiary population was included in the health system. In turn, this safeguarded prisoners' rights as citizens to access more effective, quality, equitable health care.

In the last six months, the *Beyond the Bars* health teams carried out 3,288 interventions and referred 60 patients—1.82% of the prison population—to another point of assistance (prompt attention). Besides individual care involving a variety of prevention and health promotion issues, several health education actions were carried out.

An admissions health protocol was also developed to get to know new prisoners at their time of arrival and to offer them comprehensive health care. At first contact they are administered rapid tests for HIV, hepatitis B and C, and syphilis, and an acid-fast bacilli (AFB) test is also offered to those with respiratory symptoms. They are also given a general health check, vaccination certificates are updated, and any use of medication for chronic conditions is recorded, with future appointments being scheduled, if necessary.

In addition to promoting the humanization of the penal system and the inclusion of prisoners, the *Beyond the Bars* program aims to reduce absenteeism in outpatient consultations and increase savings. Savings were realized by reducing the need to transport prisoners to outside health units, which requires specialized teams and secure transportation. Another objective is to organize the health information system through risk stratification in the penitentiary system, including the number of compulsory notifications, and developing guidelines for monitoring medication and inputs.

Results

The *Beyond the Bars* project led to a humanized, more comprehensive approach to health care for the imprisoned population, as well as offering a skilled ear and a broader knowledge of the health problems affecting patients deprived of liberty. Furthermore, it brought greater savings in different areas: transport to other points of care dropped significantly due to the effectiveness of local care, and there was better management of hospital supplies and consumables through more organized, personalized prescription and administration. The conclusion is that the *Beyond the Bars* project is making a difference, and that the results point towards a reduction in harm.

Images: © Ana Rita de Faria et al.

First-line services by nurses working in an isolated region

Maude Poirier, Nicolas Bouffard, Marika Desjardins, Claudette Gagnon, Christiane Théberge, Ernesto Hernandez

Canada

The First Nations community of Pakua Shipi is situated on the Lower North Shore, an isolated region in the North-East part of the province of Quebec, Canada. The Innu Community of Pakua Shipi is located in the middle of the Lower North Shore. The region is inaccessible by road and only accessible by air six (6) days per week, and by passenger/freight boat once a week (from March to January). This freight/passenger boat delivers all food staples, construction materials, goods etc. to the villages along the shore.

Pakua Shipi has a population of 350 people, and is one of the smallest, most isolated and the last settled community in the province of Quebec; the first homes were built in 1972-1973. Yet today Pakua Shipi still has no grocery store, post office, bank, gas station services, etc. These basic essential services are situated in the neighbouring non-native village of Saint-Augustin on the opposite side of the river. However, there is no road or bridge linking the two communities. To access these necessary services, the population of Pakua Shipi and professionals alike must contend with crossing the river, rendering access to these services restricted at best. The population's first language is still Innu, with French and English as second and third languages.

Nurses serving Pakua Shipi have succeeded in synchronizing and adapting their nursing approach, thereby ensuring that each patient feels that they are important as a person and a community member.

The nursing station of Pakua Shipi (Centre de Santé Pakua Shipi) offers a complete range of first line services, including 24/7 emergency clinical services, as well as comprehensive and culturally adapted community health services. There is a small hospital situated in the region, located in the village of Lourdes de Blanc Sablon (East Sector), 80 KM from Pakua Shipi and accessible only by air. All the doctors who offer medical services in the region are stationed in Lourdes de Blanc Sablon and periodically

visit other communities to offer short-term medical services. They provide approximately 18 visits per year to Pakua Shipi, for a period of 1-1.5 days.

Since 1999, through a transfer agreement with Health Canada, the Band Council in Pakua Shipi is responsible for the management and delivery of its health services in the community. The Band Council has a health director in place who manages, plans, and organizes all of the administrative, human, financial, material, and infrastructure operations of the nursing station and health services sector. The health director works under the authority of the Band Council's General Director.

The nurses work in an expanded role and provide (on call) 24/7 services for emergencies. Their work schedule is on a rotation basis of one month in/one month out of the community. The Head Nurse works 10 months per year and is out of the community for the months of July and August.

Expanded role nursing services in isolated communities like Pakua Shipi are required, because the population only has access to nurses for all of their medical needs. There are no doctors stationed in the community; even when a doctor is visiting, to access their service you must be referred by the nurse. Consequently, when the nurse receives the patient, they must be able to carry out a complete physical and mental health evaluation.

Nurses are responsible and take charge of the full treatment of the patient to the fullest extent within their nursing role. For example, our nurses suture wounds, conduct antenatal care and pregnancy follow-ups, manage chronic diseases; carry out pediatric follow-ups, provide palliative care, etc. In the absence of ambulance services, using a variety of adapted emergency vehicles, nurses respond to all medical emergencies, whether in the home or on the side of the road. In emergencies, they are the front-line providers of trauma care, whether for acute care such as heart attacks, or drowning situations. Our nurses are required to be exceedingly resourceful and efficient, as they have to coordinate many aspects of the medical treatment process.

Over the years, nurses serving Pakua Shipi have succeeded in synchronizing and adapting their nursing approach, thereby, ensuring that each client or patient feels that they are important as a person and a community member. Each nurse accepts and is humbly conscious of the fact that they bring whoever they are as a person to the therapeutic experience. In this way, our nurses have the innate capacity to move beyond any possible personal biases to connect with the client and ensure that they feel understood and cared for. This is especially important in the context where significant language barriers exist (despite the presence of translation service). The population we serve has had to adapt to drastic lifestyle changes in one generation, while the rest of the province and country has had 3-4 or more generations to gradually adapt.

Our nurses are very cognizant of the accelerated rate of transition and adaptation required by the population, the linguistic barriers and the overwhelming challenges these present for the Innu people to efficiently adapt and navigate the health care and other systems. Hence, in order to leverage their impact and ensure positive outcomes and capacity building skills, our nurses readily offer their support, such as accompanying clients navigationg through local, provincial and federal systems or advocating on behalf of the client/patient. It is not at all unusual to see our extraordinarily devoted nursing team working voluntarily after hours finishing files of advocacy and system navigation. Yet each client is greeted with a smile, and is "treated" with an empathetic ear, respect and efficient attentiveness.

The community of Pakua Shipi has the highest nursing retention rate of all the Lower North Shore Region (16 communities) and is recognized for its impressively high quality of nursing services and its approach. In May 2016, Pakua Shipi became the first independent nursing station in Canada to be accredited by Accreditation Canada using the newly established remote and isolated standards. As a matter of fact, the Pakua Shipi nursing station succeeded with 99.80% compliance rate for meeting the Patient Safety and Required Organizational Practices. Nurses are making "universal access to care" so much more than a slogan—their contributions are making it a reality for the Pakua Shipi community and many others around the globe.

Images: © Marika Desjardins et al.

Risk of HIV in transgender women of the Monterrey metropolitan area

Alma Angélica Villa Rueda, Dora Julia Onofre Rodríguez

Mexico

The research objective was to identify the risk of contracting human immunodeficiency virus (HIV) in transgender women. The study avoided focusing on high-risk sexual behavior and tried to evaluate all of the structural and social elements that, taken together, generate social and health inequities that increase this community's risk of acquiring HIV.

This transdisciplinary approach was crucial in order to include these transgender women not only as subjects of the study, but also as decision-makers and a source of feedback for research. The idea was for the research results to be useful to them personally, as well as to academia and the nursing community.

During the study, transgender women and men gave forums and workshops at the School of Nursing, so that their experiences could raise awareness among the students and their teachers.

Systems were put in place for monitoring and sanctions at the social and structural levels. For example, these individuals experience rejection and stigma in the public health services because their gender expression does not align with their biological sex. Whether nearly invisible or highly obvious, this kind of abuse has an impact on the self-image, self-esteem, and health of these women.

To understand HIV risk factors in transgender women, semi-structured interviews were designed, beginning with when the interviewees became aware that their gender identity or expression was not the one that those around them expected: that of a man. The interview then dug deeper into memories from the "street hunt" that institutions and health professionals embarked on at the beginning of the HIV epidemic. This was when transgender women were required to show HIV test results in order to be able to move about "freely" without risk of incarceration. For older adult transgender women, this was a crucial antecedent to their negative feelings about health services.

There was agreement that multiple simultaneous factors had motivated participants to avoid health services. These ranged from fear of being called by a man's name, even if they had legally changed their identity, to being pressured to take an HIV test, regardless of their reason for seeking a health consultation.

The participants believed that health professionals associate transgender women with HIV and sex work, and therefore pressure them to undergo HIV screenings. Transgender women who felt more empowered about their human rights and had a sense of pride in their gender identity said that they felt more comfortable using health services.

As a part of the study's transdisciplinary approach, transgender women and men gave forums and workshops at the School of Nursing, so that their experiences could raise awareness among students and teachers. There was a debate regarding which strategies could be implemented to make health care more accessible to transgender communities. For example, teachers asked how nursing practice could be transformed to make it inclusive and non-discriminatory. The transgender women's view was that it was crucial to steadily open up these kinds of spaces in academia, enabling trans women to speak out and share their experiences, and to be the ones educating students and teachers on subjects relating to transgender communities. They pointed out that collaborative work between the communities and academia is important to get research, strategies, and results that reflect their realities.

At the end of the research project, an event was organized to share the results with the community of transgender women and to receive their feedback. There was a discussion on the rights of trans communities when they participate in research, with a view to avoiding the exploitation of their experiences in future studies. It was explained to them how research findings could be used in their favor, such as generating policy proposals and raising awareness of the abuse they experienced. Another issue addressed was that of HIV-related health regulations that legitimize the criminalization and persecution of people living with HIV and those susceptible to contracting it.

Images: © Alma Angélica Villa Rueda

Nursing in the Paraguayan Chaco

María Luisa Castillo de Sánchez

Paraguay

I am a 53-year-old nurse. For the last 23 years, I have lived in a small community in the Paraguayan Chaco, 330 km from the city of Mariscal Estigarribia, and 500 km from Asunción, the nation's capital. I work at a health post in the community of San Andrés, just 30 km from the border between Paraguay and Bolivia. My catchment area also includes other communities: Luque Occidental, Colonia Histórico, and Sierra León. An auxiliary nurse and I are the only health workers available to meet the needs of the entire area.

Most of the year, roads in the Chaco are difficult to drive on. The climate is harsh, with six dry months and six months of rain and floods that turn the everything to mud because the soil cannot absorb all the water. To do my health promotion work, I need to travel around my catchment area by bicycle or motorbike. Sometimes I run into cougars or jaguars, which are very big cats.

This situation complicates my routine travel from Asunción to the area, which led me to build a wooden house behind the health post, with a solar panel to generate electricity. Technology became my best working ally; in the beginning I communicated by radio, but now I have a mobile telephone which I can use to reach everyone who needs me.

To do my health promotion work, I need to travel around my catchment area by bicycle or motorbike; sometimes I run into cougars or jaguars, which are very big cats.

When a patient presents health problems that I cannot solve, I speak by telephone with the emergency physician at one of the closest health centers. I report on all of the patient's data, clinical state, and vital signs. After being told the proper treatment, I keep the physician updated on the patient's condition. This is the procedure that I use to manage most of my cases.

Then, there are the more complex cases. For example, when a woman was attacked by an animal, I had to send her to the Mariscal Estigarribia hospital in an armed forces aircraft, which was possible thanks my excellent relationships with other actors in the region.

For the last two years, I have had access to an ambulance that my husband drives. Whenever I have to move a patient, whether by land or air, I take advantage of the opportunity to stock up on medical supplies for the health post that are otherwise unavailable in such a remote area.

In my view, primary health care means commitment and service to the community.

Images: © María Luisa Castillo de Sánchez

The Sun-Colored Lives program

Gianina Farro Peña, Lisbeth Consuelo Albújar Paico,
Renzo Rubén Quezada Echenique, Diego Alonso Ubaldo Farro

Peru

The Sun-Colored Lives (*Vidas Color Sol*) program, a social responsibility initiative of Cayetano Heredia University (UPCH), arose from the initiative of an interprofessional team of nurses, psychologists, dentists, physicians, professors, graduates, and students of the university with ties to its target population, the Chorrillos prison community, in Lima.

The Sun-Colored Lives program focuses on the comprehensive physical, motor, psychosocial, and emotional development of children under age 3 living with their mothers, who are inmates at the Chorillos prison, part of Peru's National Penitentiary Institute (INPE). Their work encompasses a variety of actions, including education; provision of treatment, preventive care and health promotion; psychological counseling; recreational strategies; talks, conferences, and group workshops.

The program focuses on the comprehensive physical, motor, psychosocial, and emotional development of children under age 3 living with mothers who are prison inmates.

Using an interdisciplinary approach, the program has created different platforms for the participation of nursing, dentistry, and psychology students and professionals. This enables them to concentrate their efforts on a wide range of intervention areas: growth and development, early stimulation, preventive oral health, psychological counseling, alternative interventions (such as *biodanza* and guided relaxation), and occupational health. The latter area targets INPE employees working in treatment, security, and administration.

The approach is based on ethical principles, decent treatment, and respect for the children and their mothers. Although the prison program was launched in the Chorrillos district of Lima, it has since expanded to other centers around the country, including Tarapoto, in the Peruvian jungle; Trujillo, in the north; and Ica, on the coast. The intention is to bring this program into every women's prison in Peru. Initially, request for autho-

rization was made to INPE and to the authorities managing each penal facility. The mothers of the program's beneficiaries were also informed, assuring them that it posed no risk to their children. Then the interprofessional activities were held in the spaces provided by the penal facilities.

The Sun-Colored Lives program is also devoted to individual and group training for mothers on such important topics as basic first aid, hygiene, health conservation for themselves and their children, balanced diet, coping with stress, emotional intelligence, self-esteem, and social skills to optimize how they act and react in everyday circumstances.

Results

With regard to community participation, 100% of the children and their mothers participated in the areas of growth and development and of early stimulation, in the nursing and dentistry consultations, and in the interventions to facilitate children's motor development and physical coordination.

In the area of psychology, 50% of the members of the penal facility participated. This proportion has grown over the years, as a result of the promotion of these counseling sessions and the consolidation of a trusting relationship with the community.

The short- and medium-term goal is to increase community participation in mental health services.

Regarding occupational health, prison staff participate on a rotational basis, taking into account their available time, their shift schedules, and the high risks they face in their daily work, where they are constantly responsible for maintaining security in the establishment.

Conclusions

- Imprisoned mothers accept, receive, and actively participate in the support that the program provides, and are committed to providing maternal care for their children.
- Through the rules established in the different centers where the program has been conducted (Chorrillos, Trujillo, Ica, and Tarapoto), INPE authorities join the national ethical commitment to promoting and providing decent treatment to these children of imprisoned mothers, respecting the universal guidelines on rights of the child.

- The security, care, and administrative workers are an important part of the prison community because they are in constant contact with the women and their children. This is why the program also plans activities and trainings for them, promoting benefits for all community members.
- The activities in the areas of growth and development, early stimulation, psychology, dentistry, *biodanza*, relaxation, and occupational health promote the biopsychosocial and emotional wellbeing of the population and have the acceptance and participation of the prison community.

Images: © Gianina Farro Peña et al.

Persons with disabilities

Peggy P. Da Silva

Saint Vincent and the Grenadines

The strengthening of nursing and midwifery is pivotal for the achievement of the Sustainable Development Goals in St. Vincent and the Grenadines. Our focus is on persons with disabilities and, recognizing the critical importance of inclusion, we came up with the theme: "We are here; include us."

We circulated letters to churches in commemoration of the International Day of Persons with Disabilities (Tuesday, December 3, 2019), under the theme, **"Promoting the participation of persons with disabilities and their leadership: Taking action on the 2030 Development Agenda."** As such, we requested that church leaders recognize and say a special prayer for persons with disabilities during their service. We offered three tips that they could utilize during the church service in recognition of these special persons:

1. My ability is stronger than my disability.
2. The special needs child will strive with your love and appreciation, not your pity and rejection.
3. Take some time to look at me and see how amazing I can be.

Among other actions, we have:

- Liaised with the principal of Saint Vincent and the Grenadines School for Children with Special Needs to design a course in sign language specifically for nurses and other healthcare professionals (nursing personnel, doctors, pharmacists). We are in the process of finalizing the details.
- Conducted mapping of persons with disabilities in each health district.

Nursing professionals focus on persons with disabilities and, recognizing the critical importance of inclusion, we came up with the theme: "We are here; include us."

- Collaborated with the Health Promotion Unit on health education for the general public (health word, health microscope, newspaper articles etc.).
- Planned (to begin with, once per month at each health centre) a specific clinic day set aside for persons with disabilities (this should be a coordinated effort between nurses, doctors, pharmacists, dentists where applicable, counsellors, dieticians, etc.) where pap smears can be done, health education sessions, etc.
- Collaborated with the dental department (Ministry of Health, Wellness and the Environment) for the establishment of once-a-month clinic specifically for persons with disabilities.
- Liaised with management and advocated for the use of sign language during televised news segment, and the construction of wheelchair access/ramps and toilet facilities at various health care facilities that were lacking.
- Advocated for and liaised with the Ministry of Education, Ministry of Health, Wellness and the Environment for the provision of wheelchair accessibility at schools, to include toilet facilities throughout the country.
- Advocated for and liaised with various stakeholders/ business places for the construction of disability accessible ramps to their business places, the provision of wheelchair accessible toilet facilities, and where applicable, special/lowered windows/service counters for wheelchair customers. We will be having wheelchair accessibility and a drop-down window/counter at the Centrex Building.
- Advocated for and liaised with stakeholders/business places to provide parking spaces, clearly marked, and reserved for persons with disabilities.
- Advocated for owners of parking lots to designate and demarcate parking spaces specifically for persons with disabilities, and to provide two hours of free parking to persons with disabilities. We already have verbal commitments from the operators of two parking lots on this request.

There is an ongoing dialogue with the Division of Nursing Education at Saint Vincent and the Grenadines Community College to amend the curriculum for registered nurses, professional midwives, nursing assistants, and community health officers, and to include a mandatory basic course in sign language.

Nurses are on the front lines of improving universal access to care. We are joining with community members as advocates and champions, and together, we are empowered to say: “We are here; include us!”

Images: © Peggy P. Da Silva

Sleep disorders and health promotion among minorities, women, and vulnerable populations

Carol M. Baldwin, Lorely Ambriz, Maria Teresa Cerqueira, Cipriana Caudillo Cisneros, Sergio Marquez Gamiño, Stuart F. Quan, Luxana Reynaga Ornelas

United States of America

Poor sleep is a lifestyle factor that plays a significant role in the development of chronic diseases, including type 2 diabetes, cardiovascular disease, increased rates of obesity, poorer mental health and reduced quality of life. Unfortunately, nurses, physicians and other health providers receive little to no training in sleep disorders or sleep health promotion.

The promotores, who work in concert with community health nurses and other community-based providers, apply the training materials to educate individuals and families on the importance of sleep health.

The negative health consequences of poor sleep exacerbate existing health inequalities experienced by Spanish-only speaking individuals residing along the United States-Mexico border. We have developed and implemented *Los trastornos del sueño y la promoción del sueño saludable* (Spanish-language sleep program), the first-ever sleep health program to support community-based health promotion in urban and rural areas on both sides of the United States-Mexico border.

The Spanish-language sleep program incorporates various learning tools to teach community health workers, known as *promotores*, culturally relevant health education and promotion methods to improve sleep health. The program is incorporated into a validated lifestyles promotion manual and companion workbook (Camino a la Salud (Su Corazon/Su Vida)), used to educate the *promotores*. Upon successfully demonstrating their knowledge and understanding of the sleep training, *promotores*, who work in concert with community health nurses and other community-based providers, apply

the training materials to educate individuals and families on the importance of sleep health. As respected community leaders who speak the language and understand the local culture, *promotores* serve as a valuable bridge between neighbors requiring health care and the nurses, physicians and other inter-professionals working to provide it.

Using 600 *promotores* as a representative number trained on an annual basis, 300 working within the U.S. and 300 working in Mexico, the cost savings realized by the sleep training is significant. Along the U.S. border, conservative estimates in cost savings for the care of obstructive sleep apnea (OSA), insomnia and restless legs syndrome (RLS) ranged from $315,000 in 2014 to $3,574,800 from 2014 through 2017. There are no extant studies of per-person costs associated with sleep disorders in Mexico; therefore, cost savings for the sleep program along the Mexico border are extrapolated from many studies linking OSA, insomnia, and RLS with diabetes and hypertension. Cost savings range between $145,500 to $209,700 (2014) and $436,500 to $629,100 (2014-2017).

Cost savings is an important way to reduce barriers to health care and improve universal access to care. But prevention of chronic diseases and improving the health of communities has inestimable value as well. Nurses' role in educating community health workers for health promotion and disease prevention is an essential contribution to both universal health care and primary health care.

Images: © Carol M. Baldwin

PART VI

GENERATING SOCIAL PARTICIPATION MECHANISMS

The Safe Water project

Gerardo Iván Cárdenas

Argentina

Agua Segura (Safe Water) was a project born of the need to discuss good habits in water consumption. The local health team in the city of Plottier was responsible for surveillance of drinking-water quality in the community, and every Monday they carried out routine sampling in nine different places, for chlorine residual testing and bacteriological testing. The latter set of samples was sent to the provincial capital, Neuquén, for laboratory culture. A copy of the results was then forwarded to the Plottier municipal officials and to the Water Cooperative.

In 2018, 292 samples were collected, and in 2019, the number rose to 403. More than 97% of the samples were considered safe water for human consumption. However, the community did not trust the Water Cooperative; hospital workers even blamed the water for cases of diarrhea.

In response to this situation, a project was created for schools and other local institutions that wanted to participate. The project's promoters visited the interested institutions and met with school administrators and with science teachers to explain what they intended to do. An 80-minute seminar would be organized, during which the students would go to three different stands, each one staffed by two people who would show the students data on computers.

The plan was for a coordinator to keep track of time to indicate when the groups should change stands to keep everyone going at the same pace and create a more dynamic experience. The students spent about 15 minutes at each stand, split into small groups so that they had the chance to ask questions.

Communications were improved with other institutions, such as the music academy, scouts, neighborhood groups, and soccer school; it was also possible bring new initiatives into the school, in addition to the frequent focus on school vaccinations and health checkups.

Each of the three stands focused on a key issue:

1. **The benefits of drinking water instead of sugary beverages.** At this stand, the students were told about such topics as the amount of water they should drink every day, and the amount of sugar in fruit and in different commercial beverages. They played a game with one of the best known soft drinks on the market. The students were asked to stack packets of sugar to guess how much sugar was in the drink, and then were shown the actual, very large amount. Moreover, they were taught about the diseases that can be caused by the consumption of processed sugars, such as dental caries, diabetes, and obesity.

2. **How to make water safe to drink.** Here, staff from the local hospital taught students about the area's water surveillance program, something most of them knew nothing about previously. They were also taught how to make water safe to drink, using bleach tablets or boiling it for five minutes. Moreover, they were shown where the local drinking-water came from, and why conserving this natural resource is so important. They also discussed misuse of water, such as leaving faucets dripping, leaky bathrooms, and washing cars on the street. Since more than 97% of the local population has a reserve water tank in their homes, students were shown a slide about the importance of cleaning the tank, which should be done every six months. More than 85% of the children said that the tank in their home was not washed.

3. **Personal hygiene and electronic devices.** This stand focused on the health benefits of good hygiene; for example, how often to bathe, emphasizing the body changes of adolescence. The teachers had specifically requested this topic, because of the problem of body odor in the classroom. In a virtual experience, they were shown the eight different times of day for handwashing and toothbrushing. A very productive topic was cleaning electronic devices, such as mobile phones. The vast majority of children said that they never disinfected them. They were taught that a typical mobile phone has 18% more bacteria than a public bathroom, and represents a major source of disease contagion.

The participating institutions were asked to take part in a contest, making short videos about what they had learned, and they were provided with an example of one from the internet. Three videos were submitted, and a prize was given to the three participating institutions. One

was for the best soundtrack (won by the municipal music band), another for the best actors (Creciendo School) and another for the best script (Primary School No. 60). They received a statuette and a breakfast cake.

Communications were improved with other institutions, such as the music academy, scouts, neighborhood groups, and soccer school. It was also possible to bring new initiatives into the school, in addition to the frequent focus on school vaccinations and health checkups. The organizers' expectations were not just met but were exceeded. They heard students reflect on the changes they made in their habits and how they shared this with their parents, and they saw the effort that the children had put into making videos, and how excited they were to win a prize.

The activity was led by the local head nurse. Participants included health agents who visited more than 700 schoolchildren in the area, teachers who helped the students make their short videos, the author's hospital director, and the head of the health district, who wanted to learn about the project and accompanied the organizers to one of the schools.

Images: © Gerardo Iván Cárdenas

Social empowerment of the members of a recycling collective

Dirce Stein Backes, Bethânia Haag, Amanda Ruiz

Brazil

This project was carried out between March 2018 and November 2019 in a recycling collective. The objective was to describe the contributions of socially enterprising nursing activities to the collective's members. Most of the time, these waste pickers work in unhealthy conditions, exposed to all kinds of risks, including chemical, biological, environmental. Moreover, they live in conditions of stark inequality and have very low social status.

Data were collected before and after the socially enterprising activities were carried out. To begin with, the participants were asked about their perception of what it means to be healthy and to live a healthy life, both personally and collectively. Then they were asked to think about activities that they would like to see planned, and to participate in, to contribute to their own health and to living a healthy life, based on the ideas that came out of the question-and-answer session.

The professors and students who were here spoke simply, clearly, so that people could understand them, participate, and pass it on to the others.

This information was used to create socially enterprising activities, such as a Beauty Day, Princess Day, and Meeting Friends Day, carried out in systematically on prearranged dates and times. Nursing professors and undergraduate and graduate students participated, with the idea of raising the self-esteem of the members of the collective, and to ensure that they had greater visibility and social esteem.

Beauty Day was held in May, with different interactive recreational activities organized over the course of 6 hours. While a group of students, aided by professional beauticians, cut, dyed, and styled people's hair, another group carried out beauty treatments on their faces, hands, and feet. A third group created a relaxed environment with music, dances, and other attractive interactive activities. At the end of day, mem-

bers were invited to participate in a lively parade, and to elect the most beautiful as well as the two most understanding members.

Meeting Friends Day was held in October, on the Day of the Child. The women all had young children, who accompanied them. This meeting was organized in shifts, and livened up with games and folkdances, as well as with food and beverages for children and adults. Members of the collective were notified in December, with a view to celebrating the achievements of the year, and also celebrate Christmas, at a famous steakhouse in the city. For this day, which was a surprise, a special program was organized with the collaboration of several local businesses.

Still working in the "garbage dump", the collective's members were surprised by the arrival of a bus that picked them up for a sight-seeing tour of the city. They were taken, still wearing their work smocks, to a beauty salon, where the employees were expecting them. Besides being given all kinds of beauty treatments, such as having their hair cut, styled or dyed, they were also given party clothes and matching shoes, donated by one of the businesses. Then they were invited to another sight-seeing tour of the city center, where they were taken to a Christmas celebration and, finally, to one of the city's biggest shopping malls.

After these socially enterprising activities, data was collected from the members to analyze the impact on stimulating their health and healthy living, both individually and collectively.

The social contribution of the workers in the recycling collective was reflected in each statement, expression, look, and gesture. With tears in their eyes, they were often heard to say things like, "I am so proud of what I do. I recognize the value of my work." Generally, they are all are aware of the importance of their work for sustainable development, although they do not always understand their rights.

During a speech by one of the collective's leaders, it became evident that the nurses recognized their needs and how to deal with them. This has potential to emancipate the different social groups, especially waste pickers, so that they can lead new spaces in society, considering the fact that some workers feel underrated and even disparaged in their daily work. In particular, one of the participants referred to the basic self-care discussed by the nurses, as such as handwashing, physical activity, and preventive care—with a special emphasis on how these topics were discussed with the workers.

This same participant recognized the effectiveness of the interventions carried out, even the notable changes in the attitudes and habits of colleagues: “The nurses offered us the opportunity to hear about things that were new to us, but not in a fancy way, because it doesn’t do any good to come here to talk about a bunch of complicated things if no one understands a word you’re saying. The professors and students who were here spoke simply, clearly, so that people could understand them, participate, and pass it on to others.”

The principal contribution of this study is associated with bringing an enterprising culture to the area of nursing, and promoting new theories and methods for social intervention, with a view to advancing the science of nursing and the achievement of universal health.

Images: © Dirce Stein Backes

Strategy to reduce teen pregnancies

Gabriela Luz Del Alba Castillo Veras

Dominican Republic

In 1995, the National Comprehensive Health Service Program for adolescents was launched at the Dr. Luis Manuel Morillo King Regional University Hospital, in La Concepción de La Vega, in La Vega province.

During the first phase of the program, a descriptive study was carried out on the situation of teen pregnancies in the province. Retrospective data collected in the local hospitals of the municipalities showed that 43% of pregnancies occurred among adolescents.

Based on these results, an action plan was drawn up aiming to reduce the number of pregnancies in the communities which had the most teen mothers.

The action plan's principal activities focused on:

1. Awareness-raising courses on comprehensive adolescent health were offered to all health staff at the hospitals and primary care units of La Vega province, and to adolescents, parents, school principals, parents' associations, teachers, guidance counselors, psychologists, community leaders, Public Ministry staff, members of civil society, and community organization leaders.
2. A network of municipal and provincial teen "multipliers" was formed. The teen multipliers visited schools, and youth and sports clubs, to give talks on different subjects, hand out pamphlets, and provide face-to-face orientation.
3. Monthly monitoring visits were made to hospitals and primary care units, to evaluate and supervise compliance with the plan, as well as supervisory training visits to the adolescent services of health centers where this was warranted.

With the implementation of these community action plans around the province, adolescent pregnancies have been reduced significantly.

4. An award was offered to recognize institutions showing a reduction in teen pregnancies.

5. Seminars on information, education, and communication were held in schools, youth clubs, housewives' clubs, and during the monthly meetings of the Federation of Neighborhood Councils, and in neighborhood councils in different communities.

6. Monthly meetings were held with physicians and nursing staff to evaluate the planned activities. Every month, a different adolescent sexual and reproductive health issue was addressed, and compliance with scheduled activities from the annual plan for the adolescent population was reviewed.

7. A project was launched to prevent adolescent pregnancies, called *Zero Pregnancies in Schools,* reaching 52 educational centers. Collaborative prevention actions were carried out in coordination with guidance counselors and psychologists.

With this program, a reduction in pregnancies was achieved: from 43% of the total in 1995 down to 31% in 2001, 26% in 2007, and 23% in 2019. A family planning program geared towards adolescents was successfully implemented throughout the entire provincial health network. A collaborative project was created, involving several newscasters who frequently offered participants the opportunity to appear on their programs to talk about the importance of postponing the onset of sexual relations to reduce teen pregnancies. Then, a weekly one-hour television program was created, called *Health, Family, and Adolescence,* which was broadcast in prime time and reached a large audience.

In the communities where the largest numbers of pregnant adolescents went to health centers, 280 families received training. This program was monitored through home visits to the families, and through following up on the behavior in school of their adolescent sons and daughters, who participated of the *Strong Families* course. There was also coordination with guidance counselors and psychologists, who reported weekly on the changes they observed, both in the students and their parents.

Twelve schools were recognized for their efforts to eliminate teen pregnancies. Another 40 schools were recognized for not recording a single pregnancy among their students.

With the implementation of these community action plans around the province, the number of adolescent pregnancies has fallen significantly. This has also helped to reduce maternal and infant mortality, and families have benefited from the courses and workshops. Furthermore, fewer adolescent boys and girls leave school before getting a start in life.

Images: © Gabriela Luz Del Alba Castillo Veras

Initiatives related to prevention and control of cancer

Karen Simone Nelson

Jamaica

Regional Cancer Day is an initiative that was born out of the Southern Regional Health Authority (SRHA) Non-Communicable Disease (NCD) Unit. In Jamaica, cancer is the second leading cause of death in females and third leading cause of death in men, accounting for 8.8 million deaths in 2015.

In response to this threat, the Ministry of Health issued a mandate to reduce NCDs by 25% by 2025. Based on this goal, the NCD Regional Coordinator established a committee (SRHA-NCD) to raise awareness of cancer control and prevention, and to support those suffering from the disease.

SRHA-NCD joined forces with PAHO/WHO to commemorate World Cancer Day on February 4th each year and developed a three-year strategic plan that would allow each parish in the health region to host this event.

The objectives were to:

1. Sensitize and educate the public in terms of cancer prevention
2. Raise awareness of the four major risks factors
3. Sensitize the public in the introduction of the human papilloma virus (HPV) vaccine for cervical cancer prevention
4. Strengthen the utilization of the visual inspection using acetic acid (VIAA) method for cervical cancer screening
5. Increase the uptake of screening for cancer within the region.

The role of nurses in cancer prevention and control was highlighted.

The first event was hosted by the Manchester Health Services Team under the theme “We Can, I Can: Prevent Cancer.” This event was held at the St. Marks Anglican Church Hall, Mandeville where the guest speaker highlighted the role of nurses in cancer prevention and control. A wide range of screening activities to detect cervical cancer were conducted with emphasis on VIAA. More than 80 VIAA screens were done that day.

The second event was hosted by Clarendon Health Services under the theme “We Can, I Can Prevent and Control cancer”. The screening was expanded to three different sites: St. James Methodist Church. Sevens Road, Clarendon; Canaanites Community Centre and St. Luke Anglican Church.

Activities included:

- Health education sessions
- Free body checks
- Cervical cancer screening for over 120 women ages 25 to 54 years
- Booth display of the most prevalent cancers
- Collaboration with other sectors in sharing powerful cancer testimonies
- Nutrition demonstrations and sampling.

The event was a success as 132 VIAA screens, 171 blood pressure and blood sugar screens, 82 HIV tests, 5 physical activity sessions, and over 120 food samplings were accomplished.

The third event was hosted by the St. Elizabeth Health Services at the St Matthews Anglican Church, Santa Cruz under the theme: “We Can, I Can: Be Aware. Show we Care.” A Cancer Symposium was organized with emphasis on support systems for persons living with cancer and their families including mental health. SRHA-NCD partnered with National Health Fund (NHF) to provide mammograms and PSA testing.

Overall, 246 persons were reached:

- 30 mammograms for females over 40 and over
- 50 PSA test for males 40 and over
- 130 cervical cancer screens
- 48 digital rectal examination (DREs)
- 48 breast examination

- 248 blood pressure, blood sugar, height and weight
- 63 HIV tests
- 3 ECGs
- 17 cholesterol checks
- 8 depressions screens
- 2 physical activity sessions conducted and 200 nutritional samplings

Overall, this intervention has provided an avenue for all three parishes to collaborate their efforts in the fight against cancer and has contributed to improving the cervical cancer screening coverage in the region. This annual outreach initiative is a move towards advancing primary health care (PHC) and universal health.

Images: © Karen Simone Nelson

Reduction of maternal and perinatal deaths in the province of Bocas del Toro

Veyra Beckford Brown

Panama

Bocas del Toro is a province on the far western coast of the Isthmus of Panama with a population of 125,461. Panama's national maternal death rate in 2015 and 2016 was, respectively, 3.9 and 3.6 per 100,000 inhabitants. However, for the province of Bocas del Toro, in those same years it was 5.2 and 7.6 per 100,000 inhabitants. The national rate of perinatal deaths in 2015 and 2016 was, respectively, 7.2 and 7.7 per 1,000 live births, but in the province of Bocas del Toro, it was10.5 and 13.2 per 1000 live births.

The aims of this program were to strengthen primary care using a community approach, offer preventive services in accordance with people's needs, improve the performance of the system, and satisfy its users. Through community participation, community diagnoses were drawn up that reflected the state of maternal and perinatal health. Five community diagnoses were drawn up:

1. **Community of Chiriquicito, in the District of Chiriquí Grande:** Diagnosis of early onset of sexual activity. The action plan consisted of forming a team of peer educators and health promoters (adolescents from the community and the school).
2. **Community of Almirante, in the Jurisdiction of Almirante:** Diagnosis of teen pregnancies. The action plan consisted of forming a peer educator team (adolescents from the community and the school).
3. **Community of Finca No. 1, in the District of Changuinola:** Diagnosis of failing to take Pap tests. The action plan was to form a health promotion team.

Community diagnoses were drawn up that reflected the state of maternal and perinatal health, through community participation.

4. **Community of Guabito, in the Jurisdiction of Guabito:** Diagnosis of adolescents with HIV. The action plan consisted of forming a peer educator team (adolescents from the community and the school).

5. **Community of Las Tablas, in the Jurisdiction of Las Tablas:** Diagnosis of teen pregnancies. The action plan consisted of forming a peer educator team (adolescents from the community and the school).

The outcomes of these community diagnoses were action plans that reflected the needs expressed by the members of the communities, who reported on current issues in maternal and perinatal health.

Once each action plan was established to address the community diagnoses, differences could be detected with regard to the need for an intercultural approach to health from a standpoint of equality and mutual respect. This facilitated community organization aimed at implementing the activities in accordance with the management strategies and the outcomes of the diagnoses.

The success indicators for the assessment of this program to strengthen primary care were:

- 100% of community diagnoses were developed and action plans were prepared.
- 100% of the action plans were implemented, corresponding to the training of three groups of peer educators, with the coordination and participation of the Ministry of Education and of community leaders.

Images: © Veyra Beckford Brown

Conclusions

The purpose of this publication is to lend visibility to 41 examples of activities and best practices by nurses and midwives in the Region of the Americas that strengthen PHC, promote the achievement of the SDGs and advance our region toward universal access to health and universal health coverage. By lending visibility to these stories, this publication aims to foster recognition of the important roles that nurses and midwives play in the health of each person, family, and community.

Many of these stories highlight the care that nurses and midwives deliver to vulnerable people and communities in underserved areas, both in large cities and remote areas. Nurses are the face of health care for populations that have a limited capacity to access health services due to a wide variety of factors.

The leadership of nursing professionals and nursing's capacity for interprofessional teamwork are recognized in several countries of the Region. The capacity and the competence of our nurses to conduct projects that strengthen health care services, public policies and health systems management are evident in many of the stories presented. Furthermore, the reader can observe that many projects were carried out without economic support for the work. This leads to the recognition that the principal motivation behind these initiatives was to improve conditions of health of the population.

The knowledge base and skills of the region's nurses and midwives should continue to be strengthened. The development of professional nurse roles and the regulation of professional nursing needs to become more uniform. The fair distribution of health professionals in remote and urban areas, increased incentives for professional practice and improvements in working conditions are much-needed investments in this cadre of health care professionals. Only then can nurses and midwives transform the health situation of the populations of the Region of the Americas in a short space of time.

The narrated stories are a small sample of the leadership, competence, and contributions that nursing professionals are making every day in the promotion of primary health care, in the improvement of health outcomes for the most vulnerable and in the efforts to achieve the sustainable development goals in the Region of the Americas by the year 2030.

In conclusion, it is recommended that countries review the nursing functions within their domains and support nursing practice to the full scope of their education. Adoption of the role of advanced practice nurses will allow highly educated practitioners to carry out higher levels of care that are so needed, especially in the underserved areas most affected by the maldistribution and shortages of health care providers. As nursing practice moves forward in delivery of primary health care, that will make it possible to expand access to quality health care across the Region of the Americas.

Epilogue

When this book was about to go to press, the World Health Organization (WHO) declared that the outbreak of the novel coronavirus (COVID-19) had become a pandemic (*13*). The Director of the Pan American Health Organization (PAHO), Dr. Carissa F. Etienne, immediately called on all countries in the Region of the Americas to adopt measures to reorganize their health services and protect health professionals (*14*).

To reduce the risk of transmission and protect the population, the countries of the Region have adopted various measures. Some have declared a state of emergency; others have closed their borders and suspended education and business activities; others have imposed social distancing measures.

Precisely at a time that should have been joyful—celebrating 2020 as the International Year of the Nurse and the Midwife—these health professionals have found themselves on the front lines of a pandemic, caring for thousands of patients with symptoms including cough, fever, body aches, sore throat, and severe respiratory illness. This situation is compounded by the fear of contagion and spread of the disease, especially in situations where health care providers are facing a lack of personal protective equipment. Nevertheless, in spite of this world health crisis, nurses have a spirit of service that remains stronger than ever.

The courage, dedication, and compassion that nursing professionals have shown in caring for their patients has been recognized and applauded by communities around the world. Their work is now, more than ever, a vital part of the health care system.

In acknowledgement of their extraordinary and selfless work during the COVID-19 pandemic, PAHO presents a brief story from two US nurses on the front lines of this battle, caring for coronavirus patients.

Nursing in the time of COVID-19: Two advanced practice nurses on the front lines of the pandemic

Johis Ortega, Juan M. González

United States of America

In the metropolitan area of Miami (Florida), a large number of the residents are immigrants from every country in Latin America and the Caribbean. Moreover, the city receives many tourists and business travelers from the Region every year.

Students at the University of Miami School of Nursing and Health Studies do their residencies in the emergency rooms of local community hospitals, under the supervision of their professors, providing care to patients of all ages, genders, races, and nationalities. A typical night shift involves dealing with cases of patients with heart attacks, apoplexy, diabetes, infections, and injuries, among others.

We look into our colleagues' eyes for hope, and the strength to carry on. We are encouraged by knowing that we are united in a worldwide nursing community, all of us fighting to save lives. Our vocation keeps us motivated.

However, three weeks ago that this routine changed overnight, due to the sudden outbreak of the 2019 coronavirus (COVID-19).

Since then, we have seen an exponential growth in the daily number of patients presenting at our emergency room with COVID-19 symptoms. To check the spread of the disease, the hospital has established a strict monitoring system. Patients arriving at the emergency room must wait in an entry area, where they are given a brief medical examination. A nurse checks their vital

signs and takes their temperature. Patients with severe coronavirus symptoms are brought into the emergency room itself.

Triage: organizing care

Patients with severe symptoms of coronavirus infection are admitted to the emergency room. However, those who have only mild or moderate symptoms are referred to one of the tents that the hospital has set up in its parking lot. During this global health crisis, hospitals are offering everyone access and care, regardless of their migratory status or whether they have health insurance.

When these patients arrive at the tent, a team of nurses asks about their medical history, and takes their temperature and checks their vital signs again. They are then sent to the next station for a coronavirus test with a nasopharyngeal swab. They are also tested for influenza and streptococcal pharyngitis and, if necessary, given a chest X-ray. Finally, these patients are moved on to an area where they are examined by advanced practice nurses like us. Before providing them with health care, we have to take very good care of ourselves first.

We wash our hands. We put on our personal protective equipment (PPE): gown, head covering, goggles, respirator, face shield, and gloves. We wear PPE during our entire shift. Between patients we disinfect the stethoscopes with alcohol, wash our hands, and change our gloves.

Patients are diagnosed based on their symptoms. Most patients can be sent home. All of them are given instructions on how to manage this atypical disease by following the recommendations of the Centers for Disease Control and Prevention (CDC). They should self-isolate for 14 days, wear a mask, rest, drink hot liquids, and take paracetamol for fever. They are told to wait for their test results at home. They should return to the hospital only if they have difficulty breathing or their fever does not come down.

When we are working in the emergency room itself, we treat the patients with the most severe symptoms, who are isolated from others to avoid contagion. We observe whether their breathing is too fast or too slow; if they have a cough, or difficulty breathing. Before entering the rooms where they are, we put on N95 or N99 respirators, interviewing them from a distance of 6 feet (1.82 meters). Then comes the moment of greatest risk: when we get close enough to examine them. If they present serious signs, they are admitted to hospital.

During each shift, between the tent and the emergency room of the hospital, we take care of more than 60 patients with COVID-19 symptoms. We know that

we will have to provide health care for more and more patients, because the experience of other countries has shown us that those who are infected begin to worsen within 2-3 weeks.

A new disease for health workers too

For almost all health professionals, this is uncharted territory. We knew that the number of people infected with COVID-19 was going to increase—but not that it would happen so quickly. And we are going to continue to see a very significant increase in the numbers, because many of the patients we send home return a few days later when their symptoms get worse. Those with a preexisting condition can present with symptoms such as low blood pressure or low levels of oxygenation. If they have pneumonia and difficulty breathing, we intubate them. This is concerning, because we may not have enough ventilators. The situation is also difficult for the patients, who are not allowed to have family members accompany them.

These are highly stressful circumstances for all health professionals, and for our patients. We want to provide them with the best possible care, but at the same time we have to protect ourselves to avoid carrying the virus back home to our families, and to avoid becoming ill ourselves. It is especially hard when you see a colleague get sick and need intubation. This is when we remember our own mortality. And we have not seen the worst yet.

It is always necessary to consider health on a global scale. Controlling communicable diseases is complicated, because what happens in one country has an impact on others, through immigration, tourism, and other ways. Therefore, it is important to be prepared for any crisis.

The hours pass quickly in the hospital—8, 10, 12 hours... At the end of a night shift, we are exhausted. We take off our PPE. We wash ours hands. We leave behind the tents, and the patients who keep on coming. They remain in the capable hands of our colleagues; now it is their turn to risk contagion.

Passion, uncertainty, and hope

We return to our homes and to our families, always mindful of social distancing. We wonder whether the coronavirus has come in with us, on our clothes or on our skin. When we get into the house, we clean the soles of our shoes with chlorine bleach. We change our clothes. Before we hug our beloved children, we wash our hands again. We can't remember how many times we have washed them already today. Our skin is dry and cracked.

At night, we are haunted by questions

How many of the patients we saw today will test positive? How many of them will come back in a few days with an uncontrollable fever, or with respiratory failure? How many will wind up intubated? What will become of them? How many more cases will we see tomorrow; in

a week; in a month? Will we run out of PPE? How many of our colleagues will be taken down by this invisible and devastating virus?

We look into our colleagues' eyes for hope, and the strength to carry on. We are encouraged by knowing that we are united in a worldwide nursing community, all of us fighting to save lives. Our vocation keeps us motivated.

But our faith in science encourages us, as well. Right now there are scientists—including research nurses—working in their laboratories, dedicated to finding a solution. After reaching the top of the curve, the day will come when we see the number of cases start to go down. The day will come when we get effective drugs. When we get a vaccine.

In the meantime, whenever we talk to patients, we urge them to take the recommendations of health professionals seriously. We get ready to go back into the emergency room. We wash our hands. We put on our N95 respirators, our head coverings, our gowns, our gloves. We are nurses, and we will continue to face every shift with courage and enthusiasm, with hope and compassion.

Images: © Johis Ortega et al.

References

1. Pan American Health Organization. Strategy for Universal Access to Health and Universal Health Coverage [Internet]. 53rd Directing Council, 66th session of the Regional Committee of WHO for the Americas, 29 September to 3 October 2014, Washington, DC.: PAHO; 2014. (Document CD53/5, Rev.2). Available at: https://www.paho.org/hq/dmdocuments/2014/CD53-5-e.pdf

2. Pan American Health Organization. Strategy on Human Resources for Universal Access to Health and Universal Health Coverage [Internet]. 29th Pan American Sanitary Conference, 69th session of the Regional Committee of WHO for the Americas, 25-29 September 2017. Washington, D.C.: PAHO; 2017. (Document CSP29/R15).Available at: http://www.paho.org/hq/index.php?option=com_docman&task=doc_download&gid=42333&Itemid=270&lang=en

3. United Nations Organization. Transforming our world: the 2030 Agenda for Sustainable Development [Internet]. 70th General Assembly, 25 September 2015. New York: United Nations; 2015. (Document A/RES/70/1). Available at: https://undocs.org/en/A/RES/70/1

4. Pan American Health Organization. Plan of Action of Human Resources for Universal Access to Health and Universal Health Coverage 2018-2023 [Internet]. 56th Directing Council, 70th session of the Regional Committee of WHO for the Americas, 23-27 September 2018. Washington, D.C.: PAHO; 2018. (Resolution CD56.R5). Available at: http://www.paho.org/hq/index.php?option=com_docman&view=document&alias=46573-cd56-r5-e-poa-hr&category_slug=56-directing-council-english-9964&Itemid=270&lang=en

5. Pan American Health Organization. Universal Health in the 21st Century: 40 Years of Alma-Ata. Report of the High Commission [Internet]. Rev. edition. Washington, D.C.: PAHO; 2019. Available at: https://iris.paho.org/bitstream/handle/10665.2/50960/9789275120774_eng.pdf?sequence=6&isAllowed=y

6. Pan American Health Organization. World Health Organization. Expanding the Roles of Nurses in Primary Health Care [Internet]. Washington, D.C.: PAHO; 2018. Available at: https://iris.paho.org/bitstream/handle/10665.2/34958/9789275120033_eng.pdf?sequence=6&isAllowed=y

7. Pan American Health Organization. Strategic Directions for Nursing in the Region of the Americas [Internet]. Washington, D.C.: PAHO; 2019. Available at: http://iris.paho.org/xmlui/handle/123456789/50956?locale-attribute=en

8. Schveitzer MC, Zoboli EL, Vieira MM. Retos de la enfermería para la cobertura universal de salud: una revisión sistemática. Rev Latino-Am Enfermagem. 2016;24: e2676. Available at: http://www.scielo.br/pdf/rlae/v24/es_0104-1169-rlae-24-02676.pdf

9. Suhrcke M, Goryakin Y, Mirelman A. Evidence on the effectiveness and cost-effectiveness of nursing and midwifery: a rapid review [Internet]. In: Buchan J, Dhillon I, Campbell J, eds. Health employment and economic growth: an evidence base. Geneba: WHO; 2016:241-280. Available at: http://www.who.int/hrh/resources/WHO-HLC-Report_web.pdf.

10. Homer CSE, Friberg IK, Dias MAB, Ten Hoope-Bender P, Sandall J, Speciale AM, et al. The projected effect of scaling up midwifery. Lancet. 2014;384(9948):1146-1157. Available at: http://www.thelancet.com/pdfs/journals/lancet/PIIS0140-6736(14)60790-X.pdf.

11. Dawson AJ, Nkowane AM, Whelan A. Approaches to improving the contribution of the nursing and midwifery workforce to increasing universal access to primary health care for vulnerable populations: a systematic review. Hum Resour Health. 2015;18;13:97. Available at: http://human-resources-health.biomedcentral.com/articles/10.1186/s12960-015-0096-1.

12. Aiken LH, Sloane DM, Bruyneel L, Van den Heede K, Griffiths P, Busse R, et al. Nurse staffing and education and hospital mortality in nine European countries: a retrospective observational study. Lancet. 2014;383(9931):1824-1830. Available at: https://www.ncbi.nlm.nih.gov/pubmed/24581683

13. World Health Organization. WHO Director-General's opening remarks at the media briefing on COVID-19, 11 March 2020. [Internet]. Geneva: WHO; 2020. Available at: https://www.who.int/dg/speeches/detail/who-director-general-s-opening-remarks-at-the-media-briefing-on-covid-19---11-march-2020

14. Pan American Health Organization. PAHO Director asks health ministers to reorganize health services to care for COVID-19 patients and save lives [Internet]. Washington, D.C.: PAHO; 2020. Available at: https://www.paho.org/en/news/18-3-2020-paho-director-health-ministers-reorganize-health-services-care-covid-19-patients-and

Perspectives and Contributions of Nursing to the Promotion of Universal Health highlights more than 40 projects, activities, stories, and case studies received from the countries of the Region, illustrating the role of nurses and midwives in advancing toward universal health. It also details these essential health workers' rich contribution to health systems, universities, prisons, communities, governments, and schools in all the countries of the Americas.

An epilogue includes a powerful story of two American nurses on the front lines of the COVID-19 epidemic. It is further proof of the vital role these health workers have in advancing health for all.

PAHO
Pan American Health Organization
World Health Organization
Americas

525 Twenty-third Street, NW
Washington, D.C., 20037
United States of America
Tel.: +1 (202) 974-3000
www.paho.org

ISBN 978-92-75-12218-1
9 789275 122181 >