

# **The Sustainability of Clinical Pharmacy Services**

**Beirut, June 24<sup>th</sup>, 2018**

**Dr. Aldo Alvarez-Risco**

Health systems in each country have different characteristics. However, a typical aspect is that resources are always limited, which is why they must be efficient in spending allocated for health services to citizens.

## **SUSTAINABLE DEVELOPMENT**



The 2015-2030 Sustainable Development Goals existing government commitments for global sustainability.

Thus, goal 3 is focused on health and wellbeing and specifically goal 3.4 states that *"By 2030, it reduces by one-third premature mortality from non-communicable diseases through prevention and treatment and promotes mental health and well-being"*.

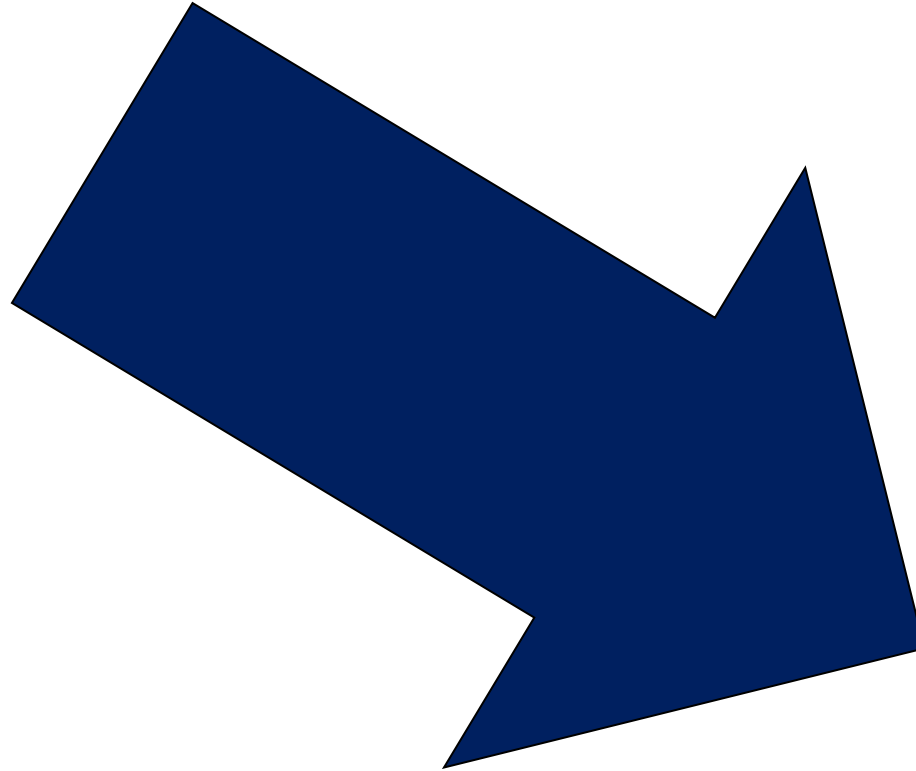
With this urgent need for concrete actions that impact the lives of the citizens of a country, pharmacists have different opportunities to transcend.

At the primary care level, there is access to patients in community pharmacies who, due to their low level of understanding of the use of medicines, urgently need the pharmacists' clinical interventions.

These actions will reduce the economic impact due to misuse and reduce the social impact by decreasing absenteeism and work presentism, apart from the quality of life.

**Receipt medicines**

**Dispensing**



**Pharmacotherapy  
Outcomes**

**Dr. Aldo Alvarez-Risco**

# Receipt medicines



## Dispensing

**Health literacy**

**Work with primary and secondary schools and parents**

**Pharmacist Knowledge**

**Global training to improve healthcare of patients**

**Technology available**

**Maximize use of personal devices and Internet**

**Pharmacy Regulation**

**Evidence of clinical pharmacy interventions**



**Pharmacotherapy Outcomes**

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**Work with primary and secondary schools and parents**

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**Health literacy**

Early Childhood Educ J  
DOI 10.1007/s10643-015-0751-0

### **The Effectiveness of a Brief Asthma Education Intervention for Child Care Providers and Primary School Teachers**

Stacey Neuharth-Pritchett<sup>1</sup> · Yvette Q. Getch<sup>2</sup>

**“A brief intervention for community partners may assist in informing nonmedically trained personnel about asthma. Such an intervention may ultimately reduce the frequency and severity of asthma episodes in young children”.**

Neuharth-Pritchett, S. & Getch, Y.Q. Early Childhood Educ J (2016)  
44: 555.

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## Dispensing

1. Sense - making
2. Social intelligence
3. Novel & Adaptive thinking
4. Cross-cultural competency
5. Computational thinking
6. New-media literacy
7. Transdisciplinarity
8. Design mindset
9. Cognitive load management
10. Virtual collaboration

Global training to improve  
healthcare of patients

Pharmacist Knowledge



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Outcomes



Dispensing

Pharmacist Knowledge

# 1. Sense - making

Ability to determine the deeper meaning or significance of what is being expressed

Haramiova et al. *Trials* (2017) 18:334  
DOI 10.1186/s13063-017-2063-8

Trials

STUDY PROTOCOL

Open Access

The effectiveness of daily SMS reminders in pharmaceutical care of older adults on improving patients' adherence to antihypertensive medication (SPPA): study protocol for a randomized controlled trial



Zuzana Haramiova<sup>1\*</sup>, Michal Stasko<sup>1</sup>, Martin Hulin<sup>2</sup>, Tomas Tesar<sup>1</sup>, Magdalena Kuzelova<sup>3</sup> and Donald M. Morisky<sup>4</sup>

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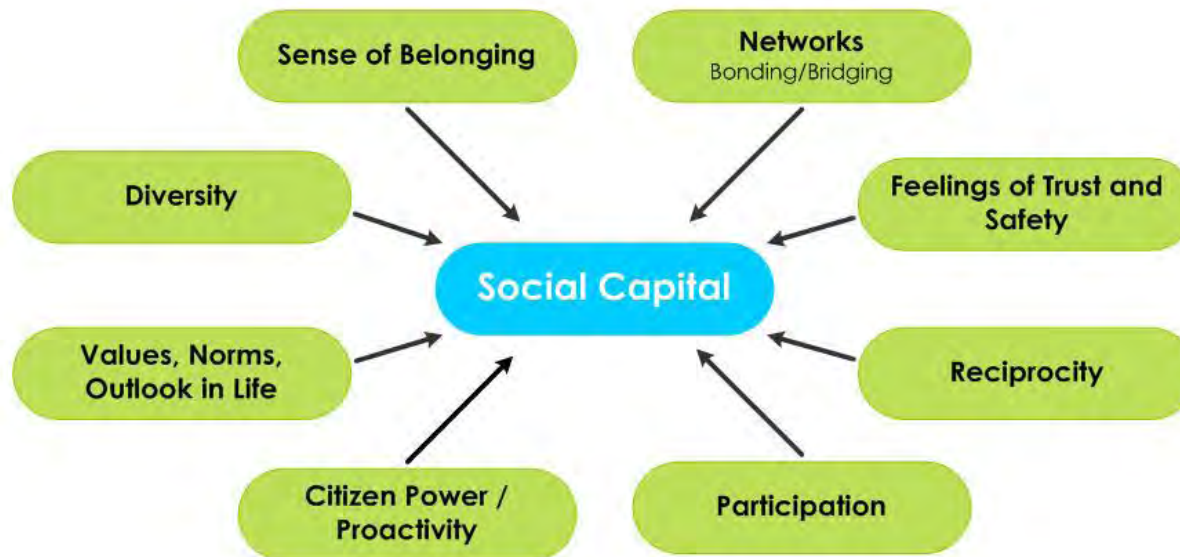
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**Dispensing**

**Pharmacist Knowledge**

## 2. Social Intelligence

Ability to connect to others in a deep and direct way, to sense and stimulate reactions and desired interactions



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### 3. Novel & Adaptive thinking

Proficiency at thinking and coming up with solutions and responses beyond that which is rote or rule-based

Montag et al. *BMC Res Notes* (2015) 8:331  
DOI 10.1186/s13104-015-1280-z

BMC  
Research Notes

SHORT REPORT

Open Access



#### Smartphone usage in the 21st century: who is active on WhatsApp?

Christian Montag<sup>1,3\*</sup>, Konrad Blaszkiewicz<sup>2</sup>, Rayna Sariyska<sup>1</sup>, Bernd Lachmann<sup>1</sup>, Ionut Andone<sup>2</sup>,  
Boris Trendafilov<sup>2</sup>, Mark Eibes<sup>2</sup> and Alexander Markowetz<sup>2</sup>

Montag, C., Blaszkiewicz, K., Sariyska, R., Lachmann, B., Andone, I., Trendafilov, B., ... & Markowetz, A. (2015). Smartphone usage in the 21st century: who is active on WhatsApp?. *BMC research notes*, 8(1), 331.

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## 4. Cross-cultural competency

Ability to operate in different cultural settings

Patient Education and Counseling 83 (2011) 310–318



Why don't patients take their drugs? The role of communication, context and culture in patient adherence and the work of the pharmacist in HIV/AIDS

Claire Penn\*, Jennifer Watermeyer, Melanie Evans

School of Human and Community Development, University of the Witwatersrand Johannesburg, South Africa

Penn, C., Watermeyer, J., & Evans, M. (2011). Why don't patients take their drugs? The role of communication, context and culture in patient adherence and the work of the pharmacist in HIV/AIDS. *Patient education and counseling*, 83(3), 310-318.

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## 5. Computational thinking

Ability to translate vast amounts of data into abstract concepts and to understand data-based reasoning



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## 6. New-media literacy

**Ability to critically assess and develop content that uses new media forms, and to leverage these media for persuasive communication**

**SJR**

Scimago Journal & Country Rank

**Scopus**

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## **7. Transdisciplinarity**

**Literacy in and ability to understand concepts across multiple disciplines**

J Urban Health (2017) 94:592–596  
DOI 10.1007/s11524-017-0182-x

**EDITORIAL**

### **Wanted: a Transdisciplinary Knowledge Domain for Urban Health**

Roderick J. Lawrence  • Franz W. Gatzweiler

**Lawrence, R. J., & Gatzweiler, F. W. (2017). Wanted: a Transdisciplinary Knowledge Domain for Urban Health.**

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## 8. Design mindset

Ability to mix business and creative approach

### Mindset: Design Thinking

Business Thinking	Design Thinking	Creative Thinking
Left Brain	Using both sides of the brain to solve problems	Right Brain
Rational and structured	Switching at will between rational & structured to a more emotional & intuitive	Emotional and intuitive
Focused on analysis	Iterating between analysis and synthesis	Focused on synthesis
Dealing with well-defined problems	Dealing with ill-defined problems	Dealing with undefined problems
A problem is something to get out of the way	A problem is the start of the process	There is no problem
Mistakes are not tolerated	Mistakes are learning experience	There are no mistakes
Analyse > decide	Analyse > ideate > prototype > evaluate > decide	Perceive > ideate > decide
Focused on parts of the problem	Zooming in and out, taking the problem apart to reassemble it in a different way	Holistic focus

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# Mindset: Design *Thinking*

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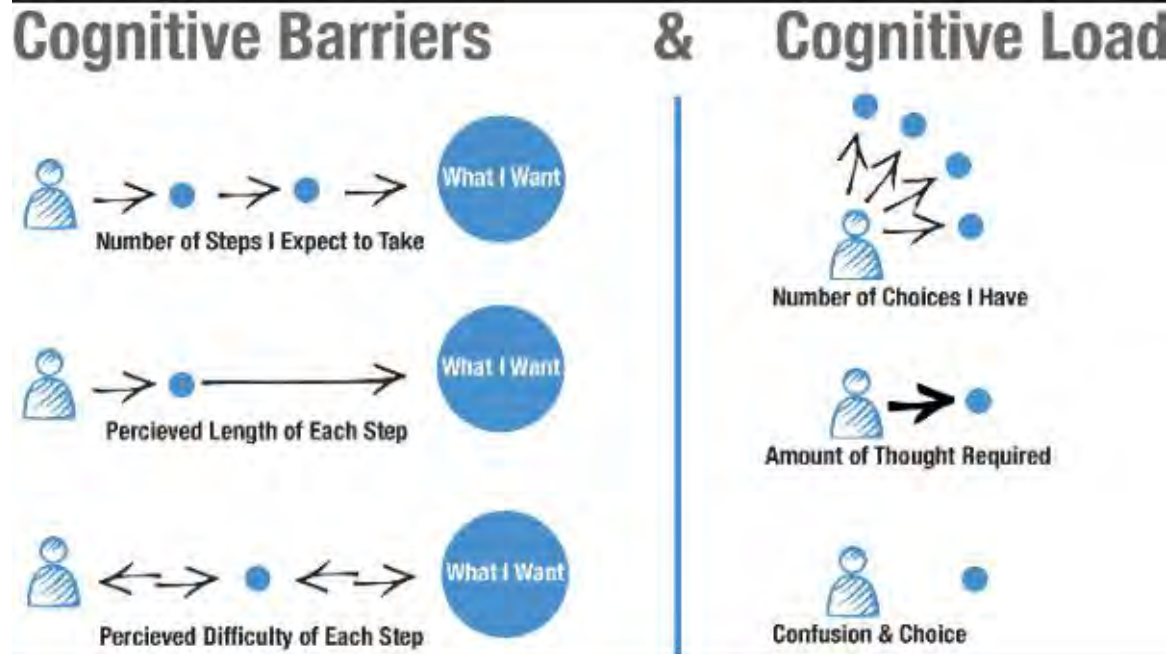


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## 9. Cognitive load management

Ability to discriminate and filter information for importance, and to understand how to maximize cognitive functioning using a variety of tools and techniques



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## 10. Virtual collaboration

Ability to work productively, drive engagement, and demonstrate presence as a member of a virtual team.



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# Atención farmacéutica, ecofarmacovigilancia y su aporte en la creación de ciudades sostenibles

Rev. O.F.I.L. 2015, 25;3:183-186

Fecha de recepción: 29/01/2015 - Fecha de aceptación: 18/06/2015

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2 Químico Farmacéutica. Magister en Ciencias Farmacéuticas Mención: Ciencia y Tecnología Cosmética. Coordinador de la Red de Desarrollo Científico Perú

## Pharmaceutical care, ecopharmacovigilance and contribution in creating sustainable cities

■ ORIGINAL

## Impacto de la Atención Farmacéutica en la adherencia de los pacientes con VIH en el Hospital San Pablo de Coquimbo, Chile.

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Impact of pharmaceutical care in adherence of HIV patients in Hospital San Pablo de Coquimbo, Chile.

Silva-Villanueva M<sup>1</sup>, Alvarez-Risco A<sup>2</sup>, Del-Aguila-Arcentales S<sup>2</sup>,

Sanchez-Parra G<sup>3</sup>



# Pharmacists and Mass Communication for Implementing Pharmaceutical Care

**Aldo Alvarez-Risco, MSc, Mg, BPharm; Shyla Del-Aguila-Arcentales, Mg, BPharm; and James G. Stevenson, PharmD, FASHP**

**C**ommunication activities are critical tools for the pharmaceutical profession in order to improve and maintain a positive image among the public. These important outreach efforts should be well-planned in order to successfully reach both a broad and narrowly defined audience. In order to allow more people to follow updates on and become aware of the patient care that is provided by pharmacists, it is important that the media also participate in these types of health-related events and provide details about their findings for the public.

## Pharmacists Day Celebrations

Throughout the year, each region or country has a day, week, or even month to celebrate the contributions and work of pharmacists. These celebratory events present an ideal opportunity

## ABSTRACT

One of the most important responsibilities of pharmacists practicing in a team-based environment is to stay current with news about health (ie, professional services, medicines, and important occasions such as World Pharmacists Day and National Pharmacist Day). Additionally, providing information to the media that highlights the positive outcomes of pharmacist care would help to improve or maintain a positive image among the public. For example, World Diabetes Day and World HIV/AIDS Day both present good opportunities to promote awareness of each disease, as well as disseminate information and highlight the role of pharmacists in care management for these patients. In this article, the authors share their experiences with, and suggestions for, effective communication with the media.

*Am J Pharm Benefits. 2015;7(3):e125-e126*



**Who want to change?**

**How change?**

**START TO DO YOUT  
CHALLENGES BY 21 DAYS  
CONTINUOUSLY**

If the medications used are not effective and safe, how much longer do we want to continue to waste resources?

If medications are used, and therapeutic goals are not met, we must take action to ensure the sustainability of the system.

What are you waiting for?

# What we are working in research?

**Ars Pharm**aceutica

## **Barriers for implementation of cosmetovigilance in Peru: Structural Equation Modeling Using Partial Least Square**

Barreras para la implementación de la Cosmetovigilancia en Perú: Modelo de Ecuaciones Estructurales usando de Mínimos Cuadrados Parciales

**Shyla Del-Aguila-Arcentales<sup>1</sup>, Aldo Alvarez-Risco<sup>2\*</sup>, Santiago Diaz-Risco<sup>3</sup>**

1. Universidad Nacional de la Amazonía Peruana. Iquitos, Perú

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<http://dx.doi.org/10.4321/S2340-98942018000100002>

**Dr. Aldo Alvarez-Risco**


**What we are working in research?**

**Barriers for clinical services in community  
pharmacies in Lebanon**

**Msc. Racha Mourtada, Dr. Aldo Alvarez-Risco**

Filipa Alves da Costa  
J. W. Foppe van Mil - Aldo Alvarez-Risco  
Editors

# The Pharmacist Guide to Implementing Pharmaceutical Care

 Springer

Dr. Aldo Alvarez-Risco



**Keep going, pharmacists, keep going**

# **The Sustainability of Clinical Pharmacy Services**

**Beirut, June 24<sup>th</sup>, 2018**

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