

# A proposal based on risk management and collaboration for facing drug shortages in Colombia

Egdda Patricia Vanegas<sup>1</sup>, Nancy Rocio Huertas Vega<sup>2</sup>, Laura Angélica Pineda Velandia<sup>2</sup>, Wilson Adarme Jaime<sup>1</sup>

<sup>1</sup> Research Group SEPRO – National University of Colombia

<sup>2</sup> Medicines and Health Technologies Direction – Ministry of Health

## Introduction

In Colombia like in other countries (1,3) there have been essential medicines shortages explained by different causes. In some cases this situation has not only caused bigger expenses in Colombia's health system budget but also has affected the patient's treatment.

Other cases are just warnings to be confirmed or they require actions and stakeholders participation in order to avoid a shortage.

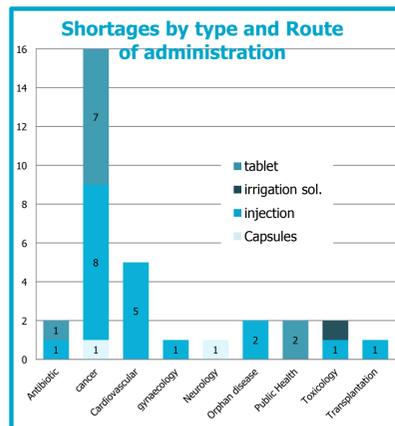
To develop a national approach to face this problem a risk management strategy based on collaboration between agents and government was designed for being implemented by the Health Department.



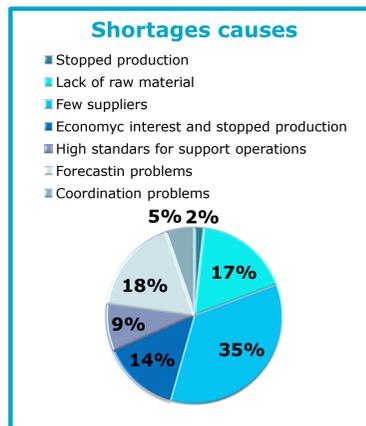
*Carmustine shortage's affect leucemic patients who needs a bone transplantation, it costed US\$69/Unit, complications need to be treated with a medicine with cost of US\$520/unit.*

## Methodology

An initial diagnosis of drug shortage was done over the Medicines Supply Network (MSN), in order to establish the problem importance and also dismiss situations considered as shortages. About 32 cases were studied, there were identified causes, risk severity and possible solutions. Then, a risk model was applied according to the National Risk Management Standard based on the Australian Standard AN/NZS 4360:2004 (5). Finally a framework was developed for the Colombian Health System.



Graphic No.1. Shortages by type and administration's route



Graphic No.2. Shortages causes

## Results

During the last 2 years Colombia, has faced different issues related with medicines shortages that have made authorities to review: which situations must be considered real shortages?, its causes, responsibilities, and solutions. (3)

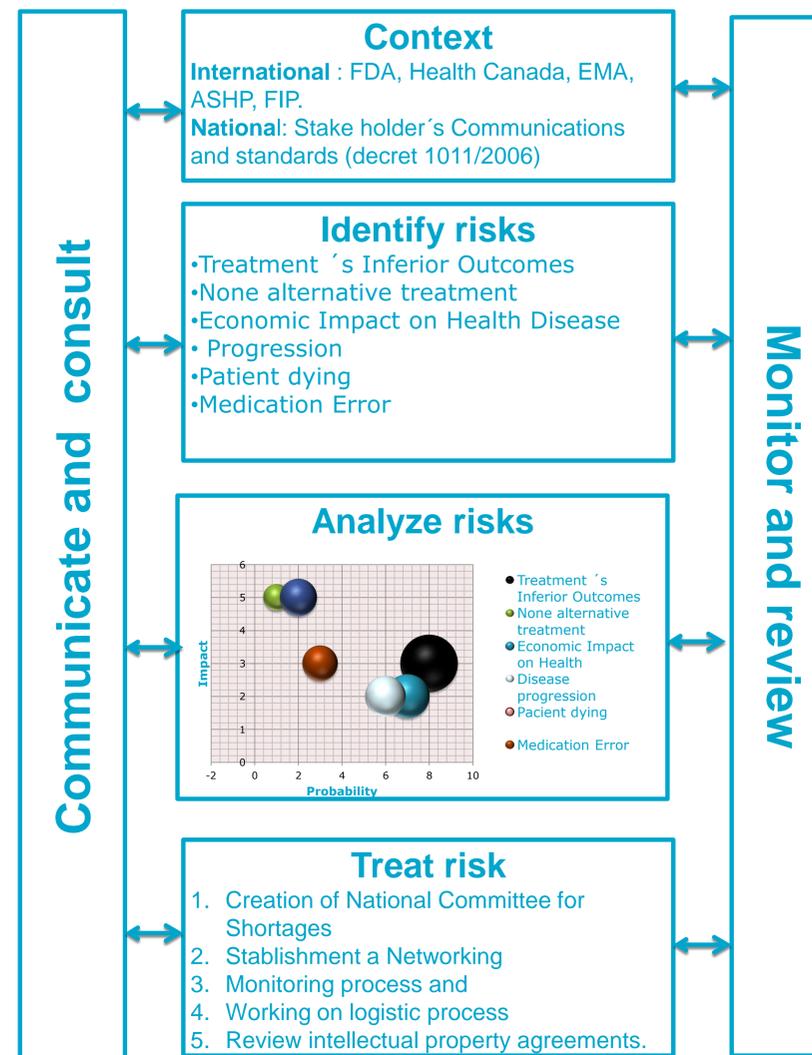


Fig No.1. Risk Management Plan for Colombia's Shortages Based on: (5)

Colombia should guarantee the health access; the MSN is highly fragmented and very complex. So that, It was necessary to establish and manage a National plan for drug shortages based on risk management with focus on communication strategies through supply network.

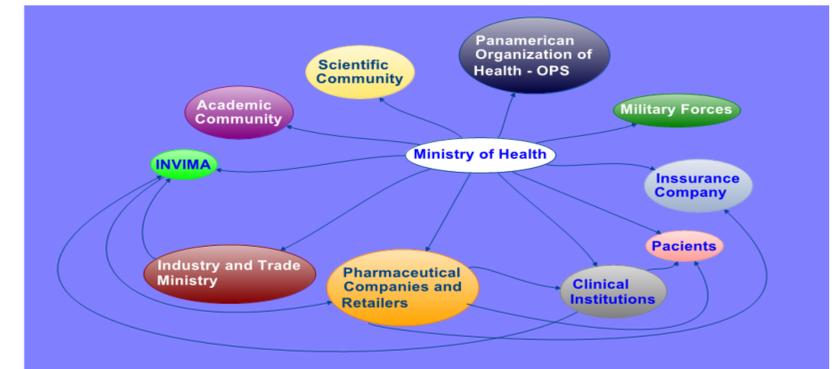


Fig. No.2. A Networking for facing medicines shortages at Colombia

## Conclusions

The shortages in Colombia presents the same behavior described in other countries, also there is a need to improve supply management for medications related to malaria, tuberculosis, leishmaniasis. And others.

The National shortages plan is based on collaboration, involves government offices such as: National Health Surveillance Agency (INVIMA), the Foreign Trade Office, The Cancer National Institute, in this way other supply network agents must collaborate generating early warnings about supply problems due to the offer, in order to find early solutions. Communication and information sharing are fundamental for the strategy. The plan also includes changes in legal issues.



(6)

## Bibliography

1. Ault, A. (2011). Oncology drugs hardest hit by shortages. Community Oncology, 8(12), 575–576. doi:10.1016/S1548-5315(12)70134-1
2. Chabner, B. a. (2011, December 8). Drug shortages—a critical challenge for the generic-drug market. The New England Journal of Medicine. doi:10.1056/NEJMp112633
3. Gray, A., & Manasse, H. R. (2012). Shortages of medicines: a complex global challenge. Bulletin of the World Health Organization, 90(3), 158–158A. doi:10.2471/BLT.11.101303
4. PIMIENTO, PAULA. «Desabastecimiento de medicinas para la leucemia afecta a 70 niños.» Vanguardia liberal, 13 de 01 de 2013: 10.
5. AS/NZS ISO 31000:2009 Risk Management – Principles and guidelines is a joint Australia/New Zealand adoption of ISO 31000:2009, and supersedes AS/NZS 4360:2004.
6. Ministerio de Salud Y Protección Social. 29 de 04 de 2014. http://www.minsalud.gov.co/Paginas/MinSalud-presenta-medidas-para-mitigar-escasez-de-medicamento-para-epil%C3%A9pticos.aspx (ultimo acceso: 05 de 05 de 2014).

Supporting: The information and technical analysis were done by Ministry of Health's Medicines and Health Technology Direction Team.