



## Situation of the Gynecological Cancer in Latin America and the Caribbean

**Vargas Hernandez Victor Manuel\***

Department of Gynecology, Hospital Juarez of Mexico, Mexico

**\*Corresponding author:** Dr. Vargas Hernandez Victor Manuel, Department of Gynecology, Hospital Juarez of Mexico, Mexico, Tel no: (55)55746647; Email: vvargashernandez@yahoo.com.mx

**Received Date:** May 11, 2018; **Published Date:** June 15, 2018

### Abstract

Latin America and the Caribbean (LAC) is made up of 41 countries, which vary in size and population, 8 of 24 Caribbean countries had less than 100 000 inhabitants in 2009. Brazil the largest territorial and population and Mexico the second, with 191 and 110 million inhabitants in 2010 respectively. The Federation of Saint Kitts and Nevis the small country, with less than 50 thousand inhabitants. The population of LAC has tripled from 1950 to 2010, from 167 million to 588 million inhabitants, constituting 8.5% of the world population and it is estimated that it will reach 730 million in 2050, with 13.7% of the population in extremely poor [1,2]. According to the new multidimensional poverty index (MPI), there are large variations 2% in Uruguay to 57% in Haiti.

**Keywords:** Cancer; Latin America and the caribbean

**Abbreviations:** LAC: Latin America and the Caribbean; MPI: Multidimensional Poverty Index; HPV: Human Papilloma Virus; MT: Mortality Rate; LMIC: Low and Middle-Income Countries; HIC: High Income Countries; SCI: Science Citation Index; CACU: Community America Credit Union; QT: Quality Time; VPH: Virus Del Papilloma Human; LAM: Latin America and Mexico

### Introduction

In LAC, the epidemiological transition has occurred unevenly and now infectious-contagious diseases share an increase with chronic non communicable diseases, such as cancer, which represents the second most common cause of death after cardiovascular diseases;

cancer is one of the main causes [3,4]. and if the current incidence rates remain unchanged, it will increase by 75% in 2025; however, the notable demographic changes, which have decreased mortality and fertility rates, from 8.72 to 6.06 per 1000 people and 4.47 to 2.09, respectively, with life expectancy that increased 9 years, from 65 to 74 years; and 6 years apart in favor of women compared to men [5]. The LAC countries are classified by the World Bank as low or middle income countries and reports that being indigenous increases the probability that a person lives in poverty with less education and access to medical care [6,7]. Cancer affects more than one million in LAM each year; worldwide more than half of new cases and more than two thirds of cancer deaths occur in emerging countries [7]. Cervical cancer (CaCu) is the leading cause of death in these women, which is

common in women without social security, in other groups, due to the association with the higher prevalence of human papilloma virus (HPV) infection, earlier age at first sexual intercourse, greater number of births and low socioeconomic level.

The mortality rate (MT) and incidence of cancer in LAC is 0.59, higher than the European Union (0.43) and the United States (0.35), indicating these regions have greater support for cancer management compared to LAC where it is more unequal worldwide, practically unmovable since 70's, being 65% higher than in developed countries, 36% above the Far East and 18% above sub-Saharan Africa; Brazil, Mexico and Colombia, the most populated countries of LAC, have poverty rates of 8.5, 4 and 9.2%, respectively [2,8-12]. Differences in wealth, education and health correlate with greater exposure to infections and the risk of developing cancers [13]. Adequate financing is a global challenge, only 6% is for cancer, it causes the TM and incidence; is responsible for 46.1% of new cancer cases worldwide; health expenditures are low in many countries, in LAC; historically, these expenditures were directed to infectious and contagious diseases, leaving chronic non communicable diseases, such as cancer, in a secondary position. In Mexico in 2008, of the total spent on health, 52% went to the private sector, which covers only 5% of the entire population [14]. Chemotherapy the cost of medicines varies from one country to another; in emerging countries (LMIC) they charge higher prices than in HIC, and corruption within the system is common, most drugs must be imported, and this is determined by who orders the drugs and who pays them [15-18].

The consequences of the increase in cancer incidence and TM increase the economic burden that affects health systems. Unequal allocation of resources, concentration of specialists and cancer centers in large cities and lack of investment in equipment and infrastructure, lead to socioeconomic inequalities in cancer care. The rural population travels to these for comprehensive oncological management; the cultural differences of LAC indigenous patients within the health system is well documented, such as lack of transportation and adequate housing, impede access to cancer care and treatment services [14,15], that generate diagnostic and therapeutic delays, affecting their prognosis compared with patients in urban centers; you need organized and planned cancer services in these countries, decentralization will reduce access inequalities important strategy to reduce the incidence, there are still several obstacles to ontological management, such as primary prevention, secondary prevention or early detection, diagnosis, treatment, rehabilitation, monitoring and palliative care; mainly lack

of national health plans that establish public policies for cancer control.

Prevention, early diagnosis and treatment worldwide would reduce new cases and cancer deaths. The improvement of eating habits, prevention of obesity, reduction of tobacco and alcohol consumption, application of vaccines against human papillomavirus (HPV) and hepatitis B, increased physical activity would significantly reduce the incidence and mortality rates. Modern methods of diagnosis, chemotherapy (Qt) widely available would increase the cure rate and reduce cancer mortality [19-21]. Funds, insurance coverage, doctors, health workers, resources and equipment were distributed very unequally between and within countries; the scarcity of cancer registries hampered the design of credible cancer registries [22]. With reference to the quality of care, there are no mechanisms or systems in LAC that allow evaluating or measuring its impact, the three key points for priority actions to improve the cancer control in LAC: first, strengthen screening and early detection of the disease and strengthen the education of health professionals, (levels of primary and secondary care). Second, improve access to treatment within the healthcare systems, ensuring that treatment occurs in the correct and timely manner. Third, to promote holistic care and treatment by defining standards of best practices, protocols or guidelines for diagnosis and treatment adapted to LAC, encouraging multidisciplinary support and introducing and supporting access to palliative care for cancer patients as a public policy. Establish knowledge about the real impact of the incidence, TM and survival in LACe is a challenge. The adopted strategies, outside the rhythm of the increase of the socioeconomic development are programs to improve the control of the Cancer for example for CaCu, even before the vaccine against the VPH is adopted of routine way in all the countries. Early diagnosis and prevention are necessary, but it still requires evaluation, follow-up and reevaluations, through epidemiological measures of population incidence, MT and survival.

## Conclusion

LAC represents 2% of the global investment in research and development; Brazil leads this list of LAC, with more than 31,000 publications in the Science Citation Index (SCI) (representing 2.32%), Mexico (0.64%), Argentina (0.49%) and Chile (0.27%). % These four countries contribute about 90% of the total investment in research and development in LAC and they are close to 2% of the national budget of public health in research [23-32]. In the Human Development Index, it classifies the countries according to a social indicator that includes life

expectancy, education and income, in turn, it is associated with the incidence and prevalence of certain types of cancer; LAC needs to increase knowledge for the implementation and evaluation of preventive policies and early detection. Barriers are bureaucratic obstacles, lack of information and adequate administration, underutilization of available public resources [33-35]. The majority of gynecological cancer information is related to CaCu and this is a general overview of the cancer situation in LAC.

## References

1. Azevedo V, Bouillon C (2009) Social Mobility in Latin America: A Review of Existing Evidence. Inter American Development Bank, New York, pp. 1-51.
2. Regional Human Development Report for Latin America and Caribbean (2010) Acting on the Future Breaking the Intergenerational Transmission of Inequality. 1st San José, CR: Programa de las Naciones Unidas para el Desarrollo (PNUD); 2010 Programa de las Naciones Unidas para el Desarrollo, pp. 208.
3. Bray F, Jemal A, Grey N, Ferlay J, Forman D (2012) Global cancer transitions according to the Human Development Index (2008–2030): a population-based study. *Lancet Oncol* 13(8): 790-801.
4. Munoz N, Franco EL, Herrero R, Andrus JK, de Quadros C, et al. (2008) Recommendations for cervical cancer prevention in Latin America and the Caribbean. *Vaccine* 26(Suppl 11): L96-L107.
5. Javiersegade (2014) Difficulties in accessing cancer treatments in Latin America. *Healthcare*.
6. Cazap E, Costa MM, García AM, Moreno RM, Eva M, et al. (2015) Toward a Latin American Cancer Observatory. *J Glob Oncol* 1(2): 54-56.
7. Moore SP, Forman D, Piñeros M, Fernández SM, de Oliveira Santos M, et al. (2014) Cancer in indigenous people in Latin America and the Caribbean: a review. *Cancer Med* 3(1): 70-80.
8. Best Plummer WS, Persaud P, Layne PJ (2009) Ethnicity and cancer in Guyana, South America. *Infect Agent Cancer* 4(Suppl 1): S7.
9. Perry GE, Arias OS, López JH, Maloney WF, Servén L (2006) Poverty reduction and growth : virtuous and vicious circles. World Bank Latin American and Caribbean Studies, Washington, DC: World Bank.
10. Alkire, Sabina, Maria Emma Santos (2010) Policy – A Multidimensional approach. Oxford Poverty and Human Development Initiative.
11. Human Development Report 2010. The Real Wealth of Nations: Pathways to Human Development. UNDP (United Nations Development Programme), Palgrave Macmillan, New York.
12. Pozo WJ, Casazola FL, Aguilar EY (2006) Bolivia. In: Hall G & Patrinos HA (Eds.), *Indigenous peoples, poverty and human development in Latin America: 1994-2004*. (1st edn), Palgrave Macmillan, Macmillan Publisher Ltd, UK, pp. 40.
13. Larrea C, Torres FM (2006) Ecuador. In: Hall G & Patrinos HA (Eds.), *Indigenous peoples, poverty and human development in Latin America: 1994-2004*. (1st edn), Palgrave Macmillan, Macmillan Publisher Ltd, UK, pp. 67.
14. Thewes B, Davis E, Girgis A, Valery PC, Giam K, et al. (2016) Routine screening of Indigenous cancer patients' unmet support needs: a qualitative study of patient and clinician attitudes. *Int J Equity Health* 15: 90.
15. Moore SP, Forman D, Pineros M, Fernandez SM, de Oliveira SM, et al. (2014) Cancer in indigenous people in Latin America and the Caribbean: a review. *Cancer Med* 3(1): 70-80.
16. Eduardo C, Ian Magrath, Kingham TP, Elzawawy A (2016) Structural Barriers to Diagnosis and Treatment of Cancer in Low- and Middle-Income Countries: The Urgent Need for Scaling Up. *J Clin Oncol* 34(1): 14-19.
17. Alleyne GAO (2001) Equity and Health: Views from the Pan American Sanitary Bureau. Pan American Health Organization; 2001 Health disparities in Latin America and the Caribbean: role of social and economic determinants, Washington, DC 8: 22-49.
18. Plummer WSB, Persaud P, Layne PJ (2009) Ethnicity and cancer in Guyana, South America. *Infect Agent Cancer* 4(Suppl 1): S7.
19. Ferlay J, Soerjomataram I, Ervik M, Dikshit R, Eser S, et al. *Globocan 2012 version 1.0: Cancer incidence and mortality worldwide—IARC Cancer Base No. 11*. Lyon, France, International Agency for Research on Cancer.

20. Frazer IH, Lowy DR, Schiller JT (2007) Prevention of cancer through immunization: Prospects and challenges for the 21st century. *Eur J Immunol* 37(suppl 1): 148-155.
21. Hortobagyi GN, El-Saghir NS, Cufer T, Eduardo C, Roselle de Guzman, et al. (2016) The American Society of Clinical Oncology's Efforts to Support Global Cancer Medicine. *J Clin oncol* 34(1): 76-82.
22. Strasser-Weippl K, Chavarri-Guerra Y, Villarreal-Garza C, Bychkovsky BL, Debiasi M, et al. (2015) Progress and remaining challenges for cancer control in Latin America and the Caribbean. *Lancet Oncol* 16(14): 1405-1438.
23. Falagas ME, Michalopoulos AS, Bliziotis IA, Soteriades ES (2006) A bibliometric analysis by geographic area of published research in several biomedical fields 1995-2003. *CMAJ* 175(11): 1389-1390.
24. Chica C, Skinner N (2010) Looking for a place in the sun: science and technology in Latin America. *Int Microbiol* 13(3): 159-164.
25. Gupta BM, Dhawan SM, Gupta RP (2007) Indicators of S&T publications output: developed versus developing countries. *DESIDOC Bulletin of Information Technology* 27(1): 5-16.
26. Moloney A (2009) Latin America faces hurdles in health research. *Lancet* 374(9695): 1053-1054.
27. Razzouk D, Gallo C, Olifson S, Zorzetto R, Fiestas F, et al. (2008) Challenges to reduce the '10/90 gap': mental health research in Latin American and Caribbean countries. *Acta Psychiatr Scand* 118(6): 490-498.
28. Waitzkin H, Iriart C, Buchanan HS, Mercado F, Tregear J, et al. (2008) The Latin American social medicine database: a resource for epidemiology. *Int J Epidemiol* 37(4): 724-728.
29. Tajer D (2003) Latin American social medicine: roots, development during the 1990s, and current challenges. *Am J Public Health* 93(12): 2023-2027.
30. Waitzkin H, Iriart C, Estrada A, Lamadrid S (2001) Social medicine in Latin America: productivity and dangers facing the major national groups. *Lancet* 358(9278): 315-323.
31. Breilh J (2008) Latin American critical epidemiology: new settings for an old dream. *Int J Epidemiol* 37(4):745-750.
32. Barreto SM, Miranda JJ, Figueroa JP, Schmidt MI, S Munoz, et al. (2012) Epidemiology in Latin America and the Caribbean: current situation and challenges. *Int J Epidemiol* 41(2): 557-571.
33. Goss PE, Lee BL, Badovinac-Crnjevic T, Strasser-Weippl K, Chavarri-Guerra Y, et al. (2013) Planning cancer control in Latin America and the Caribbean *Lancet Oncol* 14(5): 391-436.
34. MC Gonzalez-Robledo, LM Gonzalez-Robledo, G Nigenda (2013) Formulación de políticas públicas sobre el cáncer de mama en América Latina. *Rev Panam Salud Publica* 33(3): 183-189.
35. The World Bank. World Bank health nutrition and population statistics database.