

# Human Papillomavirus Infection in genital Women in four regions of Senegal

El Hadji Seydou Mbaye<sup>1,2,3</sup>, Tarik Gheit<sup>1</sup>, Ahmadou Dem<sup>3</sup>, Sandrine McKay-Chopin<sup>1</sup>, Ndeye Coumba Toure-Kane<sup>2</sup>, Souleymane Mboup<sup>2</sup>, Massimo Tommasino<sup>1</sup>, Bakary S. Sylla<sup>1</sup>, and Cheikh Saad Bouh Boye<sup>2</sup>

- <sup>1</sup>International Agency for Research on Cancer (IARC/WHO), Lyon, France
- <sup>2</sup> Laboratory of Bacteriology and Virology, Aristide Le Dantec Hospital, Dakar, Senegal
- <sup>3</sup>Cancer Institute, Aristide Le Dantec Hospital, Dakar, Senegal

## Abstract:

INTRODUCTION: Cervical cancer is the most frequent cancer among women in Senegal. However, there are few data concerning the HPV types inducing neoplasia and cervical cancers and their prevalence, in the general population of Senegal

**AIMS:** The aim of this study is to determine the prevalence of HPV infection in Senegalese women aged from 18 years and older.

MATERIALS AND METHODS: A study was performed on 498 cervix samples collected from healthy women aged 18 and older in Dakar. 438 other samples were collected from three other regions, Thiès, Saint Louis and Louga. The samples were screened for 21 HPV genotypes using an HPV type-specific E7 PCR bead-based multiplex genotyping assay (TS-MPG) which is a laboratory-developed method for the detection of HPV.

RESULTS: The prevalence for pHR/HR-HPV in the region of Dakar was 20.68%. HPV 52 (3.21%) was the most prevalent HPV type, followed by HPV 16 (3.01%) and HPV 31 (3.01%). In the regions of Thiès, Louga and Saint Louis, the prevalence for pHR/HR-HPV was 29.19%, 23.15% and 20%, respectively

**CONCLUSION:** The study revealed the specificity of the HR-HPV prevalence in Dakar and other regions of Senegal. The patterns differ from the one observed in the other regions of the world and rise the issue of the development of vaccination program in the country. Such a program should take into account the real HPV prevalence for an effective protection of HPV-associated diseases.

#### Biography:

Dr. El Hadji Seydou Mbaye was born in 1978 in Kaolack a region of Senegal. During 2008-2013, he earned his PhD in Biology and Human Pathologies with the col-



laboration of the International Agency for Research on Cancer (IARC) / WHO, Lyon (France); 2006-2007: Master of Life and Health, Specialty Biology of microorganisms, Virology in Louis Pasteur University of Strasbourg (France); 2005-2006: Master of Life and Health, option of Immuno-physiopathology in Louis Pasteur University of Strasbourg (France); 2004-2005: License of Biochemistry in Louis Pasteur University of Strasbourg (France); 2002-2004: General Degree in Sciences and Technologies in University of METZ (France).

### Publication of speakers:

- Mbaye, El Hadji Seydou. (2015). Infrastructure and facilities for human biobanking in low- and middle-income countries: a situation analysis. 10.13140/ RG.2.1.1843.7608.
- 2. Mbaye, El Hadji Seydou & Fb, Sar. (2019). Pesticides and Cancer amongst Farmers in Richard-Toll, North of Senegal. Journal of chromatography. B, Biomedical sciences and applications. 180005.
- 3. Diawara, Silman & Bélec, Laurent & Dem, Ahmadou & Mbaye, El Hadji Seydou & Diop-Ndiaye, Halimatou & Matta, Mathieu & Gueye, Sokhna & Mboup, Souleymane & Kane, Coumba. (2015). Low prevalences of HIV infection and HSV genital shedding in the general adult female population in Senegal. The Journal of Infection in Developing Countries. 9. 10.3855/jidc.6227.

## Webinar on Microbiology and Future Applications

Citation: El Hadji Seydou Mbaye; Human Papillomavirus Infection in genital Women in four regions of Senegal; Future Microbiology 2020; July 22, 2020; London, UK

J Clin Mic Infe Dis

Volume: 3, S(1)