

## Letter to Editor

# The Importance of Educating in the Prevention and Treatment of Tuberculosis

**Asis SE\***

Department of Organic Chemistry, University of Buenos Aires, Argentina

\*Corresponding author: Asis SE, University of Buenos Aires, Department of Organic Chemistry, Faculty of Pharmacy & Biochemistry. Junin 956. C1113AAD City of Buenos Aires, Argentina

**Received:** February 28, 2018; **Accepted:** March 09, 2018; **Published:** March 19, 2018

## Letter to Editor

Even in times of technological advances and consequently in communication, it is notable that diseases such as Tuberculosis (TB) are unknown by advanced students or graduates. It is known that our country was a pioneer in the study of this disease in the middle of the last century and progress was made in reducing mortality in specialized hospitals, but this knowledge was strictly confined in the medical field.

Recently I attended a Tuberculosis Conference organized by the Association of Municipal Physicians of Buenos Aires [1]. There the need to search for new drugs for the treatment of the disease was expressed. Currently bedaquiline, a diarylquinoline [2,3], was accepted for the treatment of TB in adults, but for 40 years no new compound had appeared. In this meeting the importance of the prevention of TB and the multidisciplinary work of several actors for the success of the treatment was also highlighted. Likewise, it is fundamental to take care of the patient in a personalized way and not simply consider it as a case or a number.

As Professor of Organic Chemistry and researcher in organic synthesis and medicinal chemistry areas, I organize extra-curricular seminars for students, secondary school teachers and general public since 2014.

The central topics addressed are infectious neglected diseases, such as malaria, Chagas, leishmaniasis and also tuberculosis, most of them endemic in this region of the Americas [4].

These seminars are offered twice a year and although intended for students, they are open to the general public. In each edition the number of participants increased and also their interest in learning about neglected diseases, mainly Chagas and Tuberculosis. Among the speakers there are specialists who work in hospitals and others do in the academic field. The experiences and data provided by the former are very enriching, due to their current perspective of society. In recent years the population of the city of Buenos Aires and the metropolitan area was increased by internal movements and the

arrival of migrants. Many people live in conditions of vulnerability: precarious housing, poor nutrition and education and, on several occasions, inadequate working conditions.

On the other hand, the knowledge offered by the academics opens a panorama to the students about the global and local statistical data, the programs proposed by the WHO for 2030 [5], the recent advances in the discovery of new anti-tuberculosis drugs and the ways of prevention.

After evaluating the opinion of the students attending these seminars, we note their enthusiasm and interest in learning more about these diseases present in our country, especially because they will be professionals in the health area (medical doctors, biochemists or pharmacists). Secondary school teachers also expressed the importance of knowing these topics in order to transmit them to their students.

We trust that the multiplying effect exerted by students and teachers in their families, friends and neighbors, helps to realize that prevention and knowledge about TB (and the other infectious diseases addressed) are very important to reduce the risk of contracting the disease.

For this year we have planned two seminars and we expect a larger number of attendees. Specialists who work in hospitals of the metropolitan area (Gran Buenos Aires) will also be invited.

We believe that university education in the present time should pay attention to the person, to social needs, especially in health issues, and should link students with disciplinary knowledge and the reality that surrounds them. In other words, we intend that they can relate the contents of the different subjects, that they can transmit knowledge in their diverse environments and that they can be sensitive to people who suffer needs.

## References

1. XIX Jornadas Científicas del Programa de Tuberculosis GCABA. Asociación de Médicos Municipales, Ciudad de Buenos Aires. 2017.
2. Andries K, Verhasselt P, Guillemont J, Göhlmann HWH, Neefs JM, Winkler H, et al. A Diarylquinoline Drug Active on the ATP Synthase of Mycobacterium tuberculosis. *Science*. 2005; 307: 223-227.
3. Tanwar B, Kumar A, Yogeewari P, Sriram D, Chakraborti K. Design, development of new synthetic methodology, and biological evaluation of substituted quinolines as new anti-tubercular leads. *Bioorg Med Chem. Lett*. 2016; 26: 5960-5966.
4. Neglected Tropical Disease (NTD) research. 2018.
5. Tuberculosis Fact sheet. 2018.