Don't be Blind to Asthma: Open your Eyes; Open your Lungs

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What is the data blind spot?

Global data on trends relating to asthma, such as its prevalence and implications, is scarce (Global Asthma Network, 2018). This is particularly apparent in Africa, where existing asthma-related data is both limited and outdated (Kwizera et al., 2019), resulting in gaps in data on the burdens, implications and complications of the disease.

Research by Adeloye *et al.,* (2013) compared the prevalence of asthma in Africa in 1990, 2000, and 2010. Their findings indicated an increased prevalence of asthma across the aforementioned decades. More specifically, using 45 studies covering most areas of Africa, they found an 11.7% asthma prevalence in 1990, rising to 12.8% in 2010.

Similarly, the prevalence of bronchial asthma in Africa has been researched by Nafti *et al.,* (2009), whom collected data from 30350 households across the North African countries of Algeria, Morocco and Tunisia. Their findings indicated an association between asthma and gender across all 3 countries, where asthmatic prevalence was higher among women.

Asthma Prevelance by Gender

Data Source: Nafti et al., (2009)
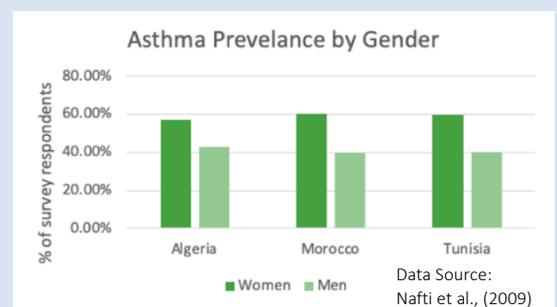
Why should we fill the data blind spot?

Asthma is a major health problem, having implications at every level:

Level	Implications
Global	Asthma is ranked 16th in causes of disability and 28th among the leading cases of burden of disease.
National	"According to the International Study of Asthma and Allergies in Childhood (ISAAC) ... asthma prevalence for 13-14-year olds was 20% in Cape Town". (Global Asthma Network, 2018, p.55).
Individual	Anita, a 24-year old from Benin was unable to access preventative asthma medication due to losing her job and income. Her asthma worsened when she became pregnant and consequentially, she required urgent hospital admission.

Filling the data blind spot also contributes to the United Nations' Sustainable Development Goals (SDGs). Specifically, goal 3 ('Good Health and Wellbeing') and goal 5 ('Gender Equality').

How should we fill the data blind spot?

- Whilst **mathematical models** based on existing data used to estimate the prevalence of asthma in African nations where data is scarce may be useful, this data might not be applicable or sufficiently generalised as Africa is such a diverse continent with differing populations and infrastructures.

- Applying for **funded projects** (e.g. EDCTP or Horizon Europe calls) to increase evidence and collect more data on more African countries, which has a specific focus on the differences in asthma prevalence for all genders and the gender-specific implications this has.

- **Join National Health Programs** implemented for respiratory diseases - e.g. Tuberculosis or specific programs for women (e.g. for pregnant women).

Adeloye *et al.,* (2013) 'An estimate of asthma prevalence in Africa: a systematic analysis', *Croatian Medical Journal,* 54(6), pp. 519-531. Available at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3893990/
Global Asthma Network (2018) *The Global Asthma Report.* Available at: http://globalasthmanetwork.org/Global%20Asthma%20Report%202018.pdf
Kwizera, R. *et al.* (2019) 'Burden of fungal asthma in Africa: A systematic review and meta-analysis', *PloS ONE,* 14(5). Available at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6521988/#:~:text=In%20Africa%2C%20asthma%20is%20one,6%2C8%E2%80%9313%5D.
Nafti, S. et al., (2009) 'Prevalence of asthma in North Africa: The Asthma Insights and Reality in the Maghred (AIRMAG) Study', *Respiratory Medicine,* 103(2). Available at: https://www.sciencedirect.com/science/article/pii/S0954611109700228