

## **Lathyrism in Ethiopia: an unaddressed problem.**

**Haileyesus Getahun. MD, MPH.**

**South Gonder Health Department, Ethiopia and  
PhD Fellow at the Department of Public Health,  
University of Gent, Belgium.**

**Email: ghaileye@hotmail.com**

Lathyrism occurs following heavy consumption of the grass pea (*Lathyrus sativus*) in times of food shortages following flooding or famine. <sup>(1,2)</sup> Lathyrism causes a grave physical disability on its victim, a crippling spastic paralysis. Peak occurrences of the disease have been observed during mobilisation of the rural communities in villagization and land diversification schemes <sup>(3)</sup>. In the villagization scheme rural farming communities were displaced from their original locations into newly established socialist 'co-operatives', which were demolished soon after the overthrow of the regime. Lathyrism often affects the male productive segment of rural farming communities, both in Ethiopia and the Indian sub-continent, whom otherwise bear the responsibility of feeding the family. The victims of the disease are affected by psychosocial problems ranging from matrimonial break ups to social ostracism and neglect <sup>(3)</sup>.

The disease can occur both as an endemic problem and as an epidemic. In history there are well-documented epidemics of lathyrism that left thousands of people disabled. The most recently reported epidemic occurred in north east Ethiopia following a drought <sup>(4)</sup>. Within one year this epidemic affected more than 2000 people in one district and affected two other districts in the same region. In Ethiopia the occurrence of drought and famine is not unusual. The earliest documented famine, believed to be caused by drought, dates back to the ninth century. During the famine of 1888-92, locally known as *kifu ken* (the evil days or harsh days), one third of the population perished <sup>(5)</sup>. The famine in 1984/85 killed almost 1 million people <sup>(6)</sup> and early in 2000 nearly 7 million people were in need of relief food supply. <sup>(7)</sup> One can argue that severe famine and drought and increasing popularisation of the grass pea as a drought resistant pulse in Ethiopia worsens the magnitude of lathyrism in the country.

Most victims live in very remote areas where there is no communication at all. When they develop the disease they do not usually seek medical attention, this combined with the fact that the disease by itself does not kill a victim leads to ignorance of the disease both by the public and the relevant authorities. Following the recent epidemic of the

disease in Ethiopia, newer pictures of the disease are appearing amid a high level of ignorance in the 'untouched' parts of the country. It was found that lathyrism victims migrate to nearby big cities, fleeing the social pressure and stigma in their rural communities. It is axiomatic that during times of food shortage the migration to towns in search of employment is the last self-insurance coping strategy to ensure the future income generating capacity of rural communities <sup>(8)</sup>. It is ironic then that the lathyrism victims with their crippling disability are migrating to bigger cities to escape unjust and prejudiced community treatment.

Today in Addis Ababa, the capital city of Ethiopia, more than 500 km from the epidemic area, many victims of lathyrism are making their living by begging. Migrated patients were also identified in other big cities of the northern part of the country while engaged in begging. Major occupations are begging door to door, roaming for food around residential quarters and asking for changes along busy streets, they are living on streets mostly in temporary shelter. Life for these people in the very competitive begging field is not an easy task. Despite enjoying an apparent passion from the general public, it is common for lathyrism victims to be assaulted by fellow beggars and robbed of whatever they have acquired. Most have abandoned their families, although they inform relatives of their whereabouts.

In Ethiopia, where the prevalence of lathyrism is increasing alarmingly, practising health professionals are not aware of the disease or the available home based detoxifying methods that could lower the incidence of lathyrism. Basic medical training does not incorporate courses that address lathyrism and among health professionals in rural communities there are many misconceptions about the cause of the disease. Despite the grave consequences for the victims and the resulting economic problems from affecting the productive segment of the farming community it has not received due concern from the public and health authorities in Ethiopia. Moreover, it equally seems that it is not getting attention from the scientific community, the medico-social aspects of lathyrism research seem to be neglected.

It seems there is an increasing tendency not to fund research activities which are not of economic importance to developed countries. Lathyrism research is a case in point, despite having many gaps that need filling; it is a problem of rural, underprivileged and poor farming communities in remote areas of very poor countries. Conducting research in developing countries often requires monumental dedication and single mindedness in the face of the day to day difficulty <sup>(9)</sup>. In order to reach lathyrism epidemic areas, the author needed to travel 6 hours by mule off the road. Researchers in

developed countries rarely face such difficulties. Lathyrism researchers must be persuasive toward donors in order to be able to address the untouched aspects of the disease. Researchers need to target a better understanding of the pathogenesis of this unfair disease and highlight its social effects in order to increase its priority amidst the current official ignorance. The continued effort to make the pulse toxin free, while maintaining its desirable qualities, is also necessary to provide a solution to the problem. Lathyrism researchers must collaborate and communicate more now than at any other time. This is in the face of continued neglect of the importance of the disease by the public and authorities in the problem areas, and a seeming reluctance to fund researchers in developing countries.

### References

1. Tekle Haimanot, R., Kidane, Y., Wuhib, E. et al. (1990). Lathyrism in rural northern Ethiopia: A highly prevalent neurotoxic disorder. *Int J Epidemiol* **19**, 664-72.
2. Tesfaye, G.A., Zewide, W., Mario, M., Zein, A., Teklemariam, A., Haile, F. (1978). Neurolathyrism. A review and report of an epidemic. *Ethiop Med J* **16**, 1-11.
3. Getahun, H., Tekle Haimanot, R. (1998). Psycho social assessment of Lathyrism patients in rural Estie district of south Gonder, northern Ethiopia. *Ethiop Med J* **36**, 9-18.
4. Getahun, H., Mekonnen, A., Tekle Haimanot, R., Lambein, F. (1999). Epidemic of neurolathyrism in Ethiopia. *Lancet* **354**, 306-307.
5. Degefu, W. (1987). Some aspects of meteorological drought in Ethiopia. In 'Drought and Hunger in Africa', Glantz, M.H. (Ed.). Cambridge University Press.
6. Kloos, H. (1998). Primary health care in Ethiopia under three political systems. Community participation in a war torn society. *Soc Sci Med* **48** (4-5), 505-522.
7. News, Walta Information center at [www.walta.telecom.net.et](http://www.walta.telecom.net.et) May 21, 2000.
8. Household food security, concepts, indicators and measurements. Save the children Fund (UK). Document, 1999.
9. Shamebo, D. (1994). Epidemiology for public health research and action in developing society. *Ethiop J Health Dev* **8** (special issue), 8-11.