SHORT COMMUNICATION

IGNORANCE AS A FACTOR INFLUENCING THE PREVALENCE OF ONCHOCERCIASIS IN SOME VILLAGES IN OYO STATE, NIGERIA

ANONG C.I.N., AKINBOADE O.A. AND UWALAKA E.C.*

Department of Veterinary Microbiology and Parasitology, University of Ibadan, Nigeria

* Corresponding author: emmauwalaka@gmail.com

ABSTRACT. Most studies on Simulum damnosum in Nigeria has focused mainly on the problem of onchocerciasis from the ecological standpoint. However, this study is aimed at viewing it from the human angle, with focus placed on the ignorance of the rural dwellers about the influences of their environment on the increasing incidences of onchocerciasis in their population. The premise is that, as the government and the scientists are working towards finding a lasting solution to the epidemic, the rural dwellers need to wake up to the realities of their own destiny. They need to come out and collaborate with other good efforts to form a strong united force that will rid their society of this menace. A study on the level of ignorance was carried out. It is assumed that their ignorance has kept the villagers relatively inactive and passive about freeing themselves. A descriptive method was used for this research and about 450 villagers were randomly selected and verbally interviewed. A questionnaire was designed and used as the instrument of the research. The research was carried out in two different villages of Asejire and Asepari. Findings were encouraging. Some of the villagers did not know about the existence of the disease even when some of their close relatives showed the symptoms. This

high level of ignorance shows that it will be difficult to attain any cooperation from them in any attempt to make their environment unfavourable for the vector.

Keywords: ignorance, onchocerciasis, rural areas, Oyo state, S. Damnosum

METHODS AND RESULTS

The Osun River flows through the group of villages presenting the free flowing water needed for the arthropod vector to lay its eggs and hatch into larva and pupae before becoming the vector itself. Secondly, the vegetations have been allowed to form notable canopies over the villages, with houses coming under and very close to the thick vegetation. The entire area is characterised by light forest at the Ibadan end, gradually thickening southwards from Ibadan. Approaching the Aseperi and Onkeke village area are thick forests. The climate of the area is moderately hot at 23 °C - 26 °C, an annual rainfall between 40-80 inches and relative humidity of 80%.

A descriptive methodology was adopted for this study. The methodology was engaging selected villagers in verbal interviews, through which firsthand information was gathered about how the insect have tormented them. The verbal

interview was adopted since most of the villagers are illiterate. A verbal induced questionnaire was developed, through which data was collected, analysed and carefully interpreted to provide useful findings about the villagers' ignorance on onchocerciasis and its vector.

It must be noted that though this particular research about the *Simulum damnosum* is highly scientific, because of the socioeconomic implications and relevance

of the expected result and application, the nature of data collection must be systematic, the analysis and the later interpretation statistical. This will make the eventual findings useable at providing the needed solution to the problem (Adeoye *et al.*, 2010). The research method adopted, was preceded by some preliminary investigations, during which the minds of the respondents were prepared for the exercise, in which they were the major actors. This participatory

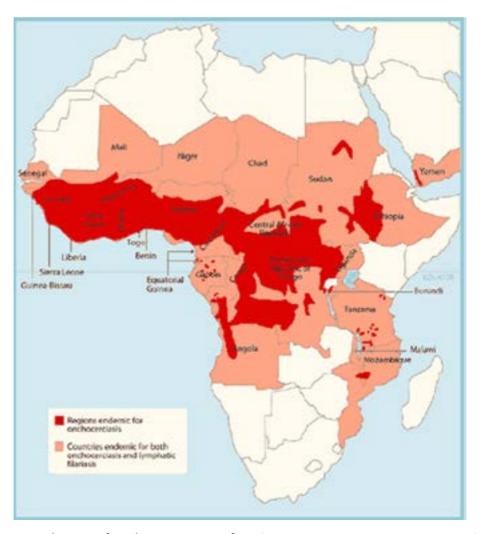


Figure 1. Distribution of onchocerciasis in Africa (Mectizan Donation Program, 2006)

	•	, ,			
	Ase	jire	Aseperi		
Age (years)	Freq	%	Freq	%	
16-24	80	26.67	20	13.33	
25-40	30	10.00	50	33.33	
41-50	100	33.33	30	20.00	
50-60	50	16.67	20	13.33	
60 above	40	13.37	30	20.00	
Total	300	100	150	100	

Table 1. Distribution of respondents by age

Table 2. the level of ignorance exhibited by respondents on knowledge of vector and disease

	Asejire					Aseperi				
Age	Total respon-	No with positive answer	0/	No with positive answer on	0/	Total respon-	No with positive answer	0/	No with posistve answer on	0/
(years)	dents	on vector	%	disease	%	dents	on vector	%	disease	%
16 -24	80	30	23.07	0	0.00	20	0	0	0	0
25-40	30	20	15.38	20	33.33	50	0	0	0	0
41-50	100	60	46.15	40	66.67	30	10	100.00	10	100.00
50-60	50	20	15.38	0	0.00	20	-	-	-	-
60 above	40	-	-	-	-	30	-	-	-	-
Total	300	130		60		150	10		10	

procedure, dealing with illiterates, has a great advantage and best in this type of social research as reported by (Kassam et al., 1982). It is an idealist procedure, which agrees with human nature, because it uses the fundamental nature of human relationship, helping the researcher and respondents become friendly, exchanging knowledge and experiences without feeling shame or negative apathy. It will therefore help the study to gather the most fruitful information from the respondents.

A sectional research survey was used in addition to the participatory research method. Six weeks were spent in each of the two villages, during which this researcher interacted freely with the villagers to make friends with them.

The research could not incorporate interviewing all the village population, only selected members of the village households were randomly interviewed and by adopting a questionnaire, reliable results were obtainable, good enough for the study.

DISCUSSION

Onchocerciasis, one of the neglected tropical diseases (NTDs), has raised issues of research in recent times (Ikpeze et al., 2014). Studies have been done on the prevalence, the related biology, and bionomics of its vector (Umeh et al., 2010; Njoku et al., 2013). Onchocerciasis is a tissue parasitic disease caused by the genus Simulum and of a major public health problem in Nigeria (Opara et al., 2008). The conditions that support the breeding, hatching and survival of this arthropod vector has been studied (Nwoke, 1990; Anong et al., 2015). Some of these conditions include the environment under which the vector thrive and develop so easily. It has been found that bright light accompanied with high humidity and temperature help them to survive (Anong et al., 2015).

Infection with this disease can trigger life-long disabilities, disfigurement, and social stigma (Utzinger et al., 2006). It is therefore important that factors contributing to the increase of these infections be addressed. The importance of assessing community knowledge about the disease as a prerequisite before establishing an effective control programme is justifiable (Nwoke et al., 1992; Kamga et al., 2012). To date, there is little information on how much the communities in Oyo state know about the disease. Such data, if available would contribute towards better implementing control policies.

Ignorance is a discursive construct as much as it can be an objective reality, and this is clearly evident in the global health narratives surrounding neglected tropical diseases one of which is Onchocerciasis (Odeoye et al., 2010). Much of the existing research in ignorance studies shows the way in which facts have been made hidden. remained unexplored, or subverted. This tends to see ignorance in terms of hiding the objective reality of the 'truth' around a given policy issue (Abeysinghe, 2015). From the result above, it can be noted that knowledge about the vector is relatively poor at both sites while knowledge on the disease is very poor as most of them could not link the disease with the vector. This is similar to studies carried out in Osun state and Edo state by some researchers (Odeoye, 2010; Wagbatsoma et al., 2004).

The findings show that the ignorance of the people about *S. damnosum* has prevented them from taking adequate care of their environment, thus leaving their environs, favourable and conducive to and for the vector (Obiukwu *et al.*, 2006). This finding is in consonance with other reports of work in Anambra and Cameroon (Ikpeze *et al.*, 2014; Kamga *et al.*, 2012). Because the influence of the vector does not include river blindness, mostly found in the Northern Nigeria, those villagers did not count it to be more than mere fever and sought cure with local herbs.

The study was able to discover that ignorance is one of the major factors promoting the prevalence of the onchocerciasis among local people in the villages. The villagers could have built up some preventions around themselves if they had known enough about the vector, the environmental conditions and the disease it causes. With their level of ignorance, the villagers are left open to

the vectors incessant attacks, therefore making the disease highly prevalent among them. If the villagers could be effectively educated, they would definitely rise up to help themselves. Education could be enforced with law enforcement agencies of the government to make sure that they abide by the education guides given. Proper cleaning of environment should also be adhered to. The use of clothing as coverings must be emphasised particularly during the wet seasons. Everyone should be advised to protect their bodies from the bites of the vector.

With proper education, the villagers could be ignited to fight the *S. damnosum* like dreaded enemies and will surely win the battle against the little insects.

REFERENCES

- Ikpeze O.O., Iwueze M.O., Egbuche C.M., Ngenegbo U.C. and Onwuzulike I.F.V., (2014). Knowledge, attitude and practices of residents of Achiagu, Adani and Aguobuowa communities in Nigeria regarding river blindness. Inter J Agri Biosci. 3(3): 115-119
- Umeh R.E., Mahmoud A.O., Hagan M., Wilson M. M., Okoye O.I., Asana U., Biritwum R., Ogbu-pearce P., Elhassan E., Yameogo L., Braide E.I. and Seketeli A.A. Prevalence and distribution of ocular onchocerciasis in three ecological zones in Nigeria. Afr. J. Med. Med. Sci. 39: 267-275
- Njoku O.O., Edoga C.O. and Ozor I.A. (2013). Epidemiological assessment of onchocerciasis in endemic countries of Udi and Igbo Etiti local government areas, Enugu state, Nigeria. Int. Res. J. Medical Sci. 1(8): 8-10.

- Nwoke B.E.B. (1990). The socio-economic aspects of human onchocerciasis in Africa: present appraisal. Journal of Hygiene Epidemiology Microbiology and Immunology.1990. 34(1): 37-44.
- Anong C.I.N., Akinboade O.A., Abiola J.O. and Uwalaka E.C. (2015). Factors enhancing the survival and activities of Simulum damnosum. Nat Sci. 13(4): 102-105.
- Utzinger J. and de Savigny D. (2006). Control of neglected tropical diseases: integrated chemotherapy and beyond. *PLoS Medicine*. 3(5):e112. doi:10.1371/journal.pmed.003011
- Nwoke B.E.B, Onwuluri C.O.E. and Ufomadu G.O. (1992).
 Onchocerciasis in Plateau State; Nigeria.: ecological background, local disease perception and treatment and vector parasite dynamics. J. Hygiene Epidemiology Microbiology Immunology, 36(2): 153-160
- Kamga H.L.F., Assob N.J.C., Nsagha D.S., Njunda A.L. and Njimoh D.L. (2012) A community survey on the knowledge of neglected tropical diseases in Cameroon. Int J Med Biomed Res, 1(2): 131-140.
- "Distribution of Onchocerciasis" Map (1995). Mectizan Donation Program. http://www.mectizan.org/maps. asp, accessed 20 May 2006.
- Adeoye A.O., Ashaye O.A. and Onakpoya O.H. (2010). Perception and attitude of people toward onchocerciasis (river blindness) in south western Nigeria. Middle East Afr J Ophthalmo. 17(4): 310–314
- Kassam Y.O. and Mustafa K. (eds.). (1982) Participatory research: an emerging alternative methodology in social science research. New Delhi: Society for participatory research in Asia.
- 12. Opara K.N. and Fagbemi B.O. (2008). Population dynamics of *Onchocerca volvulus* microfilariae in human host after six years of drug control. *Journal of vector borne diseases* **45(1):** 29-3
- Abeysinghe S. (2015). Ignorance Claims as a Call to Action: The Case of Neglected Tropical Diseases, In: *International Conference on Public Policies*, 1-4 Jul 2015, Catholic University of Milan. http://www.ippapublicpolicy.org//file/paper/1433940937.pdf
- 14. Wagbatsoma V.A. and Aisien M.S. (2004). Knowledge, attitude and perception of onchocerciasis in a hyperendemic community of Edo State, Nigeria. *Afr J Clin Exper Microbiol.* **5:** 235-41
- 15. Obiukwu M.O., Ikpeze I. and Igbodika M. (2006). Human onchocerciasis: current epidemiological and dermatological assessment of the disease in Ufuma Nigeria. *Anim Res Inter.* **3:** 521-526.