



## Tackling an Age-Related Macular Degeneration in the Low and Middle Income Countries

### Raba Thapa\*

Associate Professor of Ophthalmology (NAMS), Vitreo-Retina Specialist, Tilganga Institute of Ophthalmology, Kathmandu, Nepal

**\*Corresponding Author:** Raba Thapa, Associate Professor of Ophthalmology (NAMS), Vitreo-Retina Specialist, Tilganga Institute of Ophthalmology, Kathmandu, Nepal.

**Received:** August 27, 2021

**Published:** October 07, 2021

© All rights are reserved by **Raba Thapa**.

Age related macular degeneration (AMD) is one of the public eye health problem that accounts for the 8.7% of the total blindness in the world [1]. AMD has been the most common cause of blindness among elderly in developed countries [2,3]. Life expectancy has been markedly improved in low and middle income countries like in higher income countries due to facilities in health care services and improved nutrition. With the ageing population, AMD has been the emerging cause of visual impairment and blindness among elderly in the low and middle income countries [4-7]. Population based studies reported AMD as the most common cause of morbidity among the elderly and leading cause of blindness after cataract [5].

Many risk factors have been identified to be responsible for the occurrence of AMD. Risk factors have divided in to modifiable and non-modifiable factors. Both the modifiable and non-modifiable risk factors are responsible for the onset and progression of AMD. Ageing, genetic association, and racial factors are the important non-modifiable risk factors. Smoking, sunlight exposure, poor nutrition are the major modifiable factors [6,8,9]. AMD can be reduced by avoiding these modifiable factors. Consumption of healthy diets that includes green leafy vegetables, sea foods are essential in all age groups.

There are two major types of AMD; dry AMD and wet AMD [10]. Dry AMD progresses slowly. Studies have reported delayed in progression of dry AMD in cases of intermediate dry AMD with the use of anti-oxidant vitamins. The useful vision can be saved on timely

diagnosis and treatment with anti-vascular endothelial growth factors (Anti VEGF) in cases of wet type of AMD. Irreversible blindness results on delayed diagnosis and treatment. The financial constraints prevailed in the low middle income countries has greatly affected the needy people for getting regular treatment using anti VEGF in wet AMD. There is also limited access of many anti VEGF drugs in these countries. The awareness on AMD and its sequelae among the public is very low [11,12].

Awareness campaigns on AMD, routine eye check-up especially after 50 years of age at least once in a year, regular follow up for those with AMD cases as suggested by ophthalmologist, avoiding all the modifiable risk factors and timely detection and appropriate treatment of AMD could save the useful vision from AMD. The emerging threat of AMD in the low and middle income countries should be taken seriously so as to avoid irreversible blindness.

### Bibliography

1. Resnikoff S., *et al.* "Global data on visual impairment in the year 2002". *Bulletin of the World Health Organization* 82.11 (2004): 844-851.
2. Mitchell P., *et al.* "Prevalence of age-related maculopathy in Australia. The Blue Mountains Eye Study". *Ophthalmology* 102.10 (1995): 1450-1460.
3. Klein R., *et al.* "Prevalence of age-related maculopathy. The Beaver Dam Eye Study". *Ophthalmology* 99 (1992): 933-943.

4. Woo JH., *et al.* "The epidemiology of age-related macular degeneration in the Indian Subcontinent". *Acta Ophthalmology* 87.3 (2009): 262-269.
5. Thapa SS., *et al.* "Prevalence and pattern of Vitreo-retinal disorders in Nepal: the Bhaktapur glaucoma study". *BMC Ophthalmology* 13 (2013): 9.
6. Thapa R., *et al.* "Prevalence of and risk factors for age related macular degeneration in Nepal: The Bhaktapur Retina Study". *Clinical Ophthalmology* 11 (2017): 963-972.
7. Gupta SK., *et al.* "Prevalence of early and late age-related macular degeneration in a rural population in northern India: the INDEYE Feasibility Study". *Investigative Ophthalmology and Visual Science* 48.3 (2007): 1007-1011.
8. Krishnaiah S., *et al.* "Risk factors for age-related macular degeneration: findings from the Andhra Pradesh Eye Disease Study in South India". *Investigative Ophthalmology and Visual Science* 46.12 (2005): 4442-4449.
9. Age-related Eye Disease Study Research Group. "Risk factors associated with age-related macular degeneration: a case-control study in the Age-related Eye Disease Study: Age-related Eye Disease Study Report Number 3". *Ophthalmology* 107.12 (2000): 2224-2232.
10. Thapa R., *et al.* "Age-related macular degeneration in Nepal". *Kathmandu University Medical Journal* 35.3 (2011): 165-169.
11. Bird AC., *et al.* "An international classification and grading system for age-related maculopathy age-related macular degeneration. The International ARM Epidemiological Study Group". *Survey of Ophthalmology* 39.5 (1995): 367-374.
12. Thapa R., *et al.* "Population awareness of diabetic eye disease and age related macular degeneration in Nepal: the Bhaktapur Retina Study". *BMC Ophthalmology* 15 (2015): 188.

**Volume 4 Issue 11 November 2021**

**© All rights are reserved by Raba Thapa.**