Reviewer’s report

Title: Prevalence of Diabetic Retinopathy in Tehran Province: A Population-Based Study

Version: 2 Date: 17 February 2009

Reviewer: Rajiv Khandekar

Reviewer’s report:

Dear authors, I congratulate for this important study as added effort on national chronic disease study. The data should be cluster adjusted rather than presenting crude rates. The determinants of DR in a cross sectional study is weak type of study and it should be mentioned in the study. Please look at suggestions given below that would help in improving the manuscript

General:

Please replace word subjects # with #persons# or #patients#.
Please replace word diabetics with #patients with diabetes#.
English editing of manuscript is needed.

Specific comments:

Abstract: in background please replace the word characteristics with determinants
Please mention use of bio-microscope for DR examination. And indirect ophthalmoscope. Please mention findings of maculopathy in abstract.
Last line of result: please include eye before treatment was needed.
Conclusion: #underscores the importance of #word should be replaced by suggested need for adequate. Once you use abbreviation DR in bracket, please use word DR only in entire manuscript except in titles of tables Para 2 of background: mention of type I and Type II is sudden and needs explanation about what is type I DM and Type II DM. Para 4 last line please replace # are among factors that have been shown to affect# with are associated to# Please use progression of DR instead of severity of DR in same line.

Methods:

Please state ethical clearance and consent of participants in first paragraph
Participants who had reported a history of diabetes diagnosed by a physician or health care professional were classified. A case labelled by physician as having diabetes and by other health professional could introduce selection bias. How authors ensure to study its effect.

Definition:

As per American physician association in 2007, in case of diabetes the blood
pressure should be less than 130/80mm Hg. Kindly analyse your data as per this
definition and see if you have association of DR and hypertension. It should also
be mentioned in discussion.

Result:
Please write in word number of persons if thy are less than 10.
Once you give mean and SDV there is no need of median as you had univariate
parametric method of statistical analysis.
Instead of the crude prevalence rates, cluster adjusted rates should be calculated
and presented.
The paragraph about regularity of visits are important but the procedure (close
ended or open ended) questions should be mentioned in method section. While
discussing this issue, you should use updated references from the region.
Page 10 top para graph, by mistake rates are mentioned as 17/5% instead of
17.5% and 26/2% instead of 26.2%
Second paragraph on page 10 is irrelevant and should be removed.
The authors should discuss rates of maculopathy and its intervention, planning
for management of maculopathy both medical and laser.
Visual impairment and DR should be discussed in details in one paragraph
Please mention in limitation how exclusion of cases with hazy media could have
affected the prevalence and association of DR with determinants.
By extrapolating the adjusted prevalence rates how many case of DR among
diabetics in Tehran provinces you project? What public health approach for
primary prevention and laser treatment of cases with STDR you propose the
government should take. This needs mention in your discussion
Acknowledgment: you mean enrolled instead of rolled.
Reference:
Please update your references by including studies in region with population of
Arab tribe (Buraimi, study, Oman study,
No paper on DR is complete unless reference of prevention of Blindness - WHO
Geneva document titled #public health for diabetic retinopathy# and diabetic
retinopathy manuscript in community eye health journal of IECH London School.