Evidence on the age-specific incidence of disease offers important clues to etiology. While migraine prevalence has been extensively described, relatively little is known about its incidence and considerably less about variation in incidence by age. Prospective studies of migraine incidence are uncommon and usually confined to selected age groups, with no single study describing various age groups across all ages. Moreover, because the number of new onset cases tends to be small, estimates of age-specific incidence are highly unreliable. As an alternative to longitudinal, cross-sectional data on the reported age of onset at active prevalence and onset, we have used to estimate incidence. In these cross-sectional studies, incidence cases have not been ascertained while active cases over-express those with a longer duration of illness. Cross-sectional studies have also been used to obtain a lifetime history of migraine (i.e., age of onset, current status, etc.). Ascertainment of inactive cases is likely to be related to a younger age, duration of illness, and time since last attack. Underascertainment is apparent, for example, in cumulative risk does not vary by age or the cumulative risk estimate for an older age group is lower than that of a younger age group. We previously developed methods to estimate age-specific incidence estimates from cross-sectional surveys that adjust for ascertainment (i.e., under-representation of short duration cases) and recall bias. We applied this incidence estimating methodology to a population sample of older age group is lower than that of a younger age group.

Separate estimates were derived for males and females since the incidence of migraine (i.e., age of onset, current status, etc.) varies by sex. Migraine diagnosis was limited to past-year headache sufferers who met the criteria for migraine, with and without aura. Studies have used different methods to calculate the prevalence of migraine among adults. However, few have focused on the cumulative incidence of migraine. Therefore, we conducted a study to estimate age-specific incidence estimates from cross-sectional surveys that adjusted for ascertainment (i.e., under-representation of short duration cases) and recall bias.

The results are consistent with previous reports that the cumulative risk of migraine is substantially higher among females than males. However, the results suggest that cumulative risk of migraine is not substantially higher among females than males.

Comparison of "naïve" age-specific estimates to "diagonal" estimates (recent onset cases only) reveals the influence of recall and survey errors on incidence estimates. For example, In Figure 1b, the female age-specific diagonal estimates are substantially higher than the corresponding age-specific naïve estimates. The "naïve" based estimates suggest that cumulative lifetime risk of migraine is substantially higher than estimates of one-year prevalence and that the median age of onset occurs long after puberty for both males and females.

The sharp contrast between the "naïve" and "diagonal" methods suggests the active cases represent only a small proportion of the total migraine cases. However, it is not clear if this is due to a larger proportion of recent cases or lower than what has been reported in previous prospective studies of migraine incidence.

The results of this study suggest that cumulative risk of migraine is substantially higher among females than males. However, the results suggest that cumulative risk of migraine is not substantially higher among females than males.

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**REFERENCES**