# Debate

# IS CONSANGUINEOUS MARRIAGE HISTORICALLY ENCOURAGED?

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I read with great interest Akrami and Osati's article entitled 'Is consanguineous marriage religiously encouraged? Islamic and Iranian considerations' published in the March 2007 issue of the *Journal of Biosocial Science* (Akrami & Osati, 2007). The authors showed that in many Islamic sources, there is no sign that could be described as encouraging cousin marriages. I would like to make a few comments about it.

It is well established that consanguinity is associated with loss of biological fitness for both communities and individuals (Bittles, 2001; Saadat & Mohabatkar, 2003; Saadat, 2007b). For countries such as Iran, where consanguineous marriages are common (Saadat *et al.*, 2004), the reasons behind consanguinity are highly important for public health programmes.

Very recently, I reported on consanguineous marriages in Iranian folktales (Saadat, 2007a). Also, I reported that there was a very strong correlation between the mean inbreeding coefficients ( $\alpha$ ) estimated for the eleven different Iranian (ethical and/or geographical) populations based on records of folktales and  $\alpha$  estimation of the populations at the present time. Surprisingly,  $\alpha$  estimation using data derived from folktales can explain more than 56% ( $r^2=0.5625$ ) of the differences between populations for consanguineous marriages at present (Saadat, 2007a). Because folktales represent the historical basis of knowledge, attitude and practice about consanguinity, consanguinity has been a long-standing social habit among Iranian populations.

Considering that Akrami and Osati reported that there was no encouragement of consanguineous marriages in the Islamic context, it might be suggested that the historical background is very important in the attitudes and practice about marriages between relatives.

Finally, Imam Ali and Fatima were first cousins once removed (not second cousins, as mentioned by Akrami & Osati, 2007).

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#### References

- Akrami, S. M. & Osati, Z. (2007) Is consanguineous marriage religiously encouraged? Islamic and Iranian considerations. *Journal of Biosocial Science* **39**, 313–316.
- Bittles, A. (2001) Consanguinity and its relevance to clinical genetics. *Clinical Genetics* 60, 89–98.
- Saadat, M. (2007a) Consanguinity in Iranian folktales. Community Genetics 10, 38-40.
- Saadat, M. (2007b) Consanguinity associated with child and adult mortality in 24 Asian and African countries, an ecological study. *Iranian Journal of Public Health* **36**, 35–39.
- Saadat, M., Ansari-Lari, M. & Farhud, D. D. (2004) Consanguineous marriages in Iran. Annals of Human Biology 31, 263–269.
- Saadat, M. & Mohabatkar, H. (2003) Inbreeding and its relevance its early and prereproductive mortality rates in Iran, an ecological study. *Iranian Journal of Public Health* 32, 9–11.