

Demographic Features, Consanguinity, Marital Distance and Cultural Traits of Kurichians, a Matrilineal Tribe in Kerala State

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ABSTRACT

Data from 149 Kurichian couples was collected during 1996 from Mananthavady taluk in Wayanad district of Kerala with an objective to elucidate the demo-genetic structure of the matrilineal tribe. They observe touch pollution with other communities. Their economy is primarily based on agriculture. They live in exclusive settlements called mittoms. Therattu kalyanam is performed to girls on attaining menarche. They maintain endogamy and prefer consanguineous marriages. They are 4 sub tribes: Jati Kurichians, Kannan Kurichians, Anchilla Kurichians and Paathiri Kurichians. Monogamy is the common practice. The mean age disparity in spouses is 8.07 years. Consanguineous marriage is the preferential form of marriage. The total consanguinity rate is 47.65% in Kurichian. The mean inbreeding coefficient in Kurichian (0.0300) records the highest value in Kerala populations. Nearly 5 per cent couples married within the village. The mean marital distance of Kurichian is 21.07 km. Maximum mean marital distance is recorded in Karuvancheri (31.75km), while the lowest marital distance is recorded in Palliyara (13.88km) mittoms. Couples in 20-59 years preferred mates from shorter distances compared to couples in older ages. Maximum mean marital distance (27.55 km) is recorded for couples aged 60-64 years, while the lowest mean marital distance (13.00 km) is recorded for couples aged 80-84 years.

INTRODUCTION

The structure of a population is determined by the nature of the gene flow with in a geographical area, through its breeding structure and marital movement, in addition to the biological makeup of the group. Human populations are differentiated into smaller groups because of their ethnicity, religion, language, spatial distribution apart from their

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genetic composition. Mating patterns, inbreeding, gene flow and geographical isolation are some of the factors, which act on the gene pool of a population, in addition to the operation of evolutionary forces that brings upon changes in allelic frequency of a population. The primitive tribes inhabiting varied environments in peninsular India with peculiar socio-cultural features, provides an excellent opportunity for Anthropologists in investigating their population structure. Some researchers have reported on the mating patterns and the level of inbreeding among Kerala populations (Ali 1968, Chakravartti 1968, Saheb et al 1989). Thavanati et al (2007) reported that higher mortality among consanguineous couples, and higher levels of inbreeding among Kurichians have eliminated the deleterious genes leading to increase in homozygosis of many genes that might have adapted to those conditions would explain the increased survival of the individuals under inbreeding. Studies on demographic aspects were limited to Kanikkar (Nag 1954) and Kurichian (Devi and Saraswati 1985). Except a few studies by Saheb et al 1989 and Saheb (1999) the Kurichiyans have not been thoroughly investigated for demo-genetic studies. This paper elucidates the demo-genetic structure of Kurichians of Mananthavady taluk in Wayanad district of Kerala.

Topography & History

The name Wayanad is derived from Wayalnadu, meaning land of paddy fields. The altitude of Wayanad plateau ranges from 700 to 2100 meters above sea level. Wayanad lies between $11^{\circ} 27'$ and $15^{\circ} 58'$ N latitude and $70^{\circ} 27'$ and $75^{\circ} 47'E$ longitude. The district is bounded on the east by Udagamandalam district of Tamil Nadu and Mysore district of Karnataka, on the north by Kodagu district of Karnataka, on the south by Mallapuram district and on the west by Kozhikode and Cannanore districts of Kerala. Wayanad plateau is hilly with tropical humid climate. Archeologists opine that organized human life existed 10 centuries BC in Wayanad region. Numerous evidences about new Stone Age civilization can be evinced in Wayanad hills. The two caves of Ampukuthimala located in between Sultan's Battery and Ambalavayal, with pictures painted on their walls and the pictorial writings there provide ample evidence for the bygone life and civilization. In ancient times this land was ruled by the Rajas of the Veda tribe. In later days Wayanad came under the rule of Puzhassi Rajas of Kottayam royal dynasty. When Hyder Ali became the ruler of Mysore, he invaded Wayanad and brought it under his sway. In the reign of Tippu Sultan Wayanad was restored to the Kottayam royal family. But Tippu Sultan handed over entire Malabar to the British after the Srirangapattanam truce that he made with them. This was followed by fierce and intrepid encounters between the British and Kerala Varma Puzhassi Raja of Kottayam dynasty. When the Raja was driven to wilderness of wayanad hills, he organized Kurichian inhabitants into a sort of people's militia and engaged the British in guerrilla type encounters. The British could get only the dead body of the Raja, who killed himself somewhere in the interior forest. Thus Wayanad fell into the hands of the British and with it began a new turn in the history of this area.

Population Dynamics

Kurichians inhabit Wayanad and Kannur districts of Kerala. In Wayanad district, they are concentrated in Mananthavady taluk and are sparsely distributed in Vythiri and Sultan's Battery taluks. According to Census 1901 and 1911, Kurichians numbered 9642 and 9722 persons respectively; while in subsequent decade their population declined to 7465 persons (Census 1921). During 1921- 1941 period, Kurichian population sharply declined to about 1214 persons. They showed steady increase in 1951, 1961 and 1971 decades. As per 1961 Census the total population of Kurichian was 11849 with 968.9 females per 1000 males. Majority of Kurichian reside in rural areas. During 1971 census there were 15700 Kurichians comprising 7996 males and 7704 females, forming 963.5 females per 1000 males. According to Census 1981 the Kurichian total population was 22, 215 persons, of whom only 54 persons were living in urban areas, while rest were residing in rural areas. According to census 2001 Kurichian population was 32,746 in the state. They numbered 20,412 in Wayanad district forming 17.38% of the total tribal population of the district. The sex ratio in Kurichian has declined alarmingly, as there were 886 females per 1000 males (Census 2001). There were 62 % joint families as per the sample survey 2006. The average family size is 8.12. Majority of them reside in rural areas.

Society and Cultural traits

Kurichian trace their legendary origin to *Bhagavathi* deity and *Chenthamarapakshi* (Luiz 1962). They claim descent from Thekku Perumbadam Villolikari Nairs, who were brought as archery soldiers from Perumbadam by the Kottayam Raja to fight the Veda kings. They were known as Villolikari Nairs. Kurichian population was 32,746 (Census 2001) and they inhabit Wayanad and Kannur districts of Kerala. They are also known as *Malai* (Hill) Brahmins. The name Kurichian was derived from two words, *kuri* (target) and *chivan* (people), indicative of their expertise in shooting at the target in archery (Luiz 1962). Kurichians are monolinguals and speak Malayalam. Kurichians eat the flesh of sheep, goat, rabbit, wild boar, deer etc animals, while Paathiri Kurichian consumes both beef and pork. Rice is their staple food. Traditionally Kurichian woman wear a cloth between right arm pit and left shoulders, with a knot over the left shoulder. Kurichians are tall statured, long armed, robust and have curly hair. Their complexion varies from light to very dark brown. Some of the elderly men tie their hair on the left side as *kuduma* (Luiz 1962). They observe pollution with all other tribes and castes except Nambuthiri Brahmin and Nair. Kurichian are divided into 4 sub tribes, basing on their social, territorial and religious affiliations: Kurichian of Wayanad hills are called Jati Kurichian; Kunnam Kurichian inhabit Kannavam forest; Anchilla Kurichian, who reside in Thirunelly were the descendants of excommunicated members of Kurichian society for violation of customary norms and for committing incest; Paathiri Kurichian are those who embraced Christianity. Inter-marriages between sub tribes are prohibited, but commensal relations are allowed between Jati Kurichian and Kunnam Kurichian. Jati Kurichian considers

Anchilla Kurichian and Paathiri Kurichian as untouchables (Singh 1993). Kurichian follow matrilineal traditions, matrilineal descent and inheritance, but practice verilocal residence after marriage, except the Paathiri Kurichian. They are divided into several exogamous lineages (*mittoms*) / clans and have separate worship places for their lineage deities. All the houses belonging to the *mittom* are located in clusters and form one settlement is also known as *tharavad*. About 148 *mittoms* are reported among Jati Kurichian, but only 54 *mittoms* have been traced (Saheb et al 1989). Each lineage / *mittom* is headed by *karnavar* to supervise all social rituals, ceremonies and economic activities. Joint families (*tharavads*) are common among Kurichian. The *karnavar* performs the duties as administrative head and all persons in a *mittom* have to abide by his decisions. Kurichian claim superior status and rank in the tribal social hierarchy and concede higher status to the Nambuthiri Brahmin and Nair. They observe touch pollution with other communities. Jati Kurichian adheres to tribe endogamy and prefers cross-cousin marriages. The institution of *thalikattu kalyanam* was abolished from their society, but *therattu kalyanam* is performed for girls on attaining menarche. The mean age of menarche of Kurichian woman is 14.83 ± 0.15 years (Shibu & Gangadhar 2011). The maternal uncle, *karnavar* is the supreme functionary in this ritual and *karnavar*'s wife takes the lead in performing these rites. The age at marriage for males is around 20 years and it is 18 years for females. Generally marriages are arranged through negotiations by *karnavar* and elders of the maternal *tharavad*. Kurichians are monogamous, however sporadic cases of polygyny is reported. Divorce is permissible with the consent of tribal council headed by *Nadu Moopan*. The divorced woman lives in her maternal *mittom* with her children. Remarriage is allowed for both divorced and widowed. Nuclear families are emerging as a result of modernity and development. Ancestral property is inherited in female line, as they follow *marumakkathayam* rule, wherein the nephew has the right on the property. Kurichian tribal council composed of *Karnavars* of different *tharavads*, headed by *Nadu Mooppan*, who wields authority over all matters pertaining to the tribe. Kurichians are Hindus and have several clan/ lineage deities, *Bhagavathi*, *Malakkari*, *Monnan*, *Athrappan*, whom they worship periodically. They celebrate *Thulampattu*, *Theyyamthira*, *Puthari*, *Onam* and *Vishu* festivals. *Naripattu* and *Kumbhampattu* are their folk songs. Kurichian are tall statured, long armed, robust and have curly wavy hair. Their complexion varies from light to very dark brown (Singh 1993). Majority of them are Hindus and followers of Hinduism. Kurichian economy is primarily based on agriculture and labour. 73.79% of them own lands with an average land possessed by Kurichian are 2.80 acres. They cultivate paddy and grow cash crops like coffee, pepper, ginger, turmeric, tapioca and banana. Majority of them are cultivators, and some are engaged in livestock, forestry, hunting etc. Traditionally Kurichians are shifting cultivators and hunters.

Material and Methods

Data from 149 Kurichian couples have been collected on predesigned schedules comprising information on age, sex, clan/ lineage, clan deity, birth place, marriage distance, parent's

birth place, type of marriage and residence after marriage, literacy and occupation, from several hamlets/ colonies in Mananthavady taluk of Wayanad district during 1996. Age of couples has been recorded as told by the informant. Sometimes age was estimated with the help of knowledgeable persons/ *karnavar*/ *Moopan* and revenue officials, wherever birth records were not available. Age of children was recorded as per the school records. The distance between birth places of spouse is recorded in Kilometers through well informed and knowledgeable persons of the locality to measure marriage distance. Types of marriages have been recorded with the help of genealogical charts drawn with the assistance of *karnavar*/elders of the *mittoms*, to assess the levels of consanguinity and inbreeding. Data was analyzed applying standard statistical tools and formulae. The mean inbreeding coefficients and statistical constants were calculated following Cavalli-sfroza and Bodmer 1971.

Results and Discussion

Demographic features

The data on 149 Kurichian couples show that male spouse's age ranged from 20-85 years, while that of female spouses ranged from 18-75 years. Most of the male spouses are in 25-70 years age groups, while female spouses fall in 20-60 years age groups. The highest frequency of male spouses is noticed in 40-49 years (26.38%), followed by 50-59 years (21.53%), 30-39 years and 60-69 years (15.97% each), 20-29 years (10.50%) and 70+ years (9.72%). The highest frequency of female spouses is observed in 30-39 years and 40-49 years (24.83% each), followed by 20-29 years (20.81%), 50-59 years (14.77%), 60-69 years (12.75%) and 70+ years (2.01%) age groups. The presence of more male spouses in 70+ years indicate that males survived longer than females and have greater life span. Satyvathi et al (2012) reported that centenarians are common among Kurichia tribe, and they enjoy a lengthy period of longevity relatively free from age associated chronic problems. Three bigamous unions and one trigamous union is recorded among elderly couples, which indicate that Kurichian practiced polygyny till recent times. The younger couples prefer monogamy, while polyandrous unions are reported. Age disparity exists among Kurichian couples; wherein 44.44% couples have age difference up to 5 years, while 36.81% couples have 6-10 years age difference; 14.58% couples have 11-15 years difference; 4.17% couples have 16-20 years difference and 3.47% couples have 21+ years difference. The mean age difference of Kurichian couples is 8.07 ± 0.45 years (SD: 5.50 ± 0.32 ; CV: 68.15 ± 3.95).

Marriage patterns

Out of 149 marriages that are recorded from 28 *mittoms*, 47.65% marriages are consanguineous, while 52.35% are non consanguineous marriages. About 43.62% marriages are between first cousins, where mother's brother's daughter (31.54%) is preferred over father's sister's daughter (12.08%). The preference to marry mother's brother's daughter

is a significant feature of Kurichians. Uncle-niece marriage, the most prevalent form of consanguineous marriage in castes and tribes of southern India (Rao & Saheb 1984) is nonexistent among Kurichians (Saheb & Bhanu 1983, Saheb & Naidu 1994). The frequency of marriages between first cousins once removed is very low (1.34%), where matrilineal cousins (0.67%) and patrilineal cousins (0.67%) are in equal proportion. The frequency of marriages between second cousins is 2.68%. The mean inbreeding coefficient for autosomal gene is 0.0300 ± 0.002347 (SD: 0.028653 ± 0.00166 ; CV: 95.51 ± 5.5327). The mean inbreeding coefficient obtained in the present study is in agreement with the earlier findings of Saheb et al (1989) among Kurichians of Wayanad. Uncle-niece marriage is nonexistent in castes and tribes of Kerala (Ali 1968). Cross-cousin marriages are the most prevalent form and it ranges from 0.68% in Kurumans to 44.71% in Kurichians (Saheb et al 1989). The incidence of cross-cousin marriages in Kurichians is higher than in Paniyans and Muthuvans (Chakravarti 1968). Some of the Hindu Castes showed intermediate values ranging from 12.6% in Pulayans to 23.5% in Nayars. The Valans (5.6%), Nambutri Brahmins (6.0%), Cherumans (6.7%) and Chaliyans (8.6%) show very low proportions of first cousin marriages (Ali 1968). Among the religious groups, Kerala Muslims recorded higher frequency of first cousin marriages than Caste Hindus and Latin Catholic Christians (Ali 1968). All the communities registered very low proportion of consanguineous marriages beyond first cousins. The incidence of marriages beyond first cousins once removed is also high in Kerala Muslims (5.7 % to 9.5%) than that of Hindus and Christians, except Mukkuvan Christians (7.0%). The frequency of marriages beyond first cousins once removed in Kurichians (1.34% to 1.44%) is closer to that of Nambutris and Nayars (1.5%). The consanguinity rate in Kurichians, Paniyans and Muthuvans is significantly greater than other tribes, except Kurumans. The highest mean inbreeding coefficients for autosomal gene (0.0300 to 0.02848) is recorded in Kurichians, followed by Paniyans (0.0180) and Muslims (0.0167 to 0.013), while all other ethnic groups showed much lower values than the present study. Thavanati et al (2007) reported that higher mortality among consanguineous couples, and higher levels of inbreeding among Kurichians have eliminated the deleterious genes leading to increase in homozygosity of many genes that might have adapted to those conditions would explain the increased survival of the individuals under inbreeding.

Consanguinity in Mittoms

The occurrence of marriages along with the associated *Kulam deivams* (clan/ lineage deities) illustrate the nature and the pattern of mating that have occurred in different *mittoms* and also the type of consanguineous marriages practiced by them. The common deities recorded for different *mittoms* are Malakkari, Rajava, Moonan, Karimpili, Bhagavathi, Aril Bhagavathi and Karimbichchi. None of the marriages contracted between different *mittoms* have the same clan / lineage deities. The frequency of different form of marriages recorded in 28 *mittoms* indicates that the most common form of marriage

is between first cousins. The Pulamula (2.68%), Ozukolli (4.03%), Odamutil (4.70%), Natipara (4.02%), Kakkotara (2.68%), Edathana (5.37%) and Edamana (3.35%) *mittoms* show higher frequency of first cousin marriages than other *mittoms*. Most of the *mittoms* preferred matrilineal cousins (MBD) than patrilineal cousins (FSD). The occurrence of marriages beyond first cousins is reported in Odamutil (0.67%), Palliyara (0.67%), Nellikudian (0.67%), Karuvanazeri (0.67%) and Kuttiyottil (1.34%) *mittoms*. The occurrence of non-consanguineous marriages (NC) are higher than consanguineous marriages (C) in many *mittoms*, except in Ozukolli (C: 4.03%, NC: 0.67%), Palliyara (C: 3.36%, NC: 2.01%), Konneyodu (C: 1.34%, NC: 0.67%), Chelliyottil (C: 1.34%, NC: 0.0%) and Velakottil (C: 1.34%, NC: 0.67%) *mittoms*. The highest mean value for different forms of marriages is observed in Edathana *mittom* (M: 9.0; SD: 1.41; CV: 15.67), followed by Kakkotara (M: 7.0; SD: 4.24; CV: 60.57), Kutiyottil (M: 6.5; SD: 0.71; CV: 10.92), Edamana and Palerimutil (M: 6.0; SD: 1.41; CV: 23.50 each), Kottutara (M: 5.5; SD: 3.54; CV: 64.36), Pulamula and Odamutil (M: 5.0; SD: 1.41; CV: 28.20 each). The least values are observed for the rest of the *mittoms*. The highest coefficients of variation are observed for Natipara and Ozukolli *mittoms*.

Marital Distance

Marital distance has been measured as the actual road distance between birth places of the spouses in Km. The frequency of village endogamy is high (8.45%) in consanguineous couples than that of non-consanguineous couples (1.28%). The high frequency of village endogamy among consanguineous couples is due to their preference of cross cousin marriages and also due to the influence of matrilineal tradition of inheritance of property. Generally nephews reside with maternal relatives till their marriageable age, at their maternal home rather than at paternal home. Children born to Kurichian woman grow under the care of maternal uncles and their marriages are generally performed with maternal cross-cousins. The marital distance ranges from 1 km-56 km in consanguineous couples, while it ranges beyond 61km in non-consanguineous couples. About 85% of consanguineous marriages are contracted within 36km distance. Nearly 28.19% of consanguineous marriages have taken place within a distance of 20 km, while only 15.44% of consanguineous marriages have occurred beyond 20 km of distance. About 13.42% of consanguineous marriages have taken place between 25-40 km distances. Nearly 47.65% of consanguineous couples married up to a distance of 56 Km, while 52.35% of non-consanguineous couples have chosen their spouses up to a distance of 61+ km. About 24.16% of non-consanguineous marriages have taken place within a distance of 20 km, while 20.13% marriages have occurred within 20-40 km distance and only 7.38% of non-consanguineous marriages have taken place between 41-61+ km distances. The pooled sample shows 4.70% of village endogamy among Kurichians. About 61.01% of marriages have taken place within the distance of 25 km, while 36.91% of marriages have taken place within 25-50 km distance. Only 2.28% of marriages were contracted beyond 50 km from their actual birth places.

The mean marital distance of consanguineous couples (M: 17.37 ± 1.54 km; SD: 12.96 ± 1.09 ; CV: 74.61 ± 6.26) show significantly lower value by 7.06 km than in non-consanguineous couples (M: 24.43 ± 1.73 km; SD: 15.26 ± 1.22 ; CV: 62.46 ± 5.00). The non-consanguineous couples show 3.36 km higher mean marital distance than the mean marital distance of pooled sample (M: 21.07 ± 1.20 km; SD: 14.64 ± 0.85 ; CV: 69.48 ± 4.02), while the difference in mean marital distance is 3.70 km between pooled sample and that of consanguineous couples. The coefficient of variation shows 12.15 units higher value between consanguineous and non-consanguineous samples, whereas the consanguineous sample exhibit 5.13 units higher value than the pooled sample, while the non-consanguineous sample show 7.02 units less value than the pooled sample. Libee (1971) reported regional differentiation in the mean marital distance of the north Indian and south Indian populations. The north Indian populations show higher mean marital distance than that of south Indian populations. The mean marital distance of Andhra Pradesh tribes reported by Pingle (1983) and Saheb & Naik (1983) show higher mean marital distance values: ranging from 20-54 miles than Kurichians (13.10 miles) and Kurumans (11.51 miles) of Kerala. The mean marital distance of the present study is slightly higher than the mean value of Kurumans of Wayanad district (Urade 1997). The mean marital distance of Kurichians is significantly lower to that of Andh (87.27 km), Mathura (43.25 km), Pradhan (44.33 km) and Kolam (36.85 km) tribes of Andhra Pradesh (Pingle 1983). The mean marital distance of Kurichians (Saheb 1999) is lower to the mean values of Raj Gonds (29.96 km) and Banjaras (26.58 km) of Andhra Pradesh reported by Pingle 1983 and Saheb & Naik 1983 respectively, but higher to that of Kurumans (18.52 km) of Kerala (Urade 1997). The mean marital distance of Kurichians is significantly greater than the mean values of Bhils (8.37 km) and Pawra (8.37 km) of Maharashtra (Malhotra 1978).

Marital distance in mittoms

Two couples each from Kottutara and Kakkotara *mittoms* and one couple each from Palliyara, Edathana and Kottuyotttil *mittoms* have chosen their mates from the same village. The couples from rest of the 23 *mittoms* preferred village exogamy. The couples hailing from Kottutara and Edathana *mittoms* contracted marriages beyond 60 km. About 90.6% of couples belonging to different *mittoms* contracted marriages up to a distance of 40 km. The couples that preferred marriages beyond 40 km distance are fewer in number and sporadically distributed in different *mittoms*. The Karavanacheri *mittom* recorded the highest mean marital distance (M: 31.75 ± 4.10 km; SD: 8.20 ± 2.90 ; CV: 25.83 ± 9.13) followed by Kottutara (M: 26.55 ± 5.45 km; SD: 18.07 ± 3.85 ; CV: 68.06 ± 14.51) and Odamuttil (M: 26.00 ± 4.65 km; SD: 14.70 ± 3.29 ; CV: 56.54 ± 12.64). The mean marital distance recorded below 20 km in few *mittoms* like Palliyara (M: 13.88 ± 3.87 km; SD: 10.96 ± 2.74 ; CV: 78.96 ± 19.74), Kakkotara (M: 14.36 ± 2.92 km; SD: 10.94 ± 2.07 ; CV: 76.18 ± 14.40), Kottuyotttil (M: 17.00 ± 3.25 km; SD: 11.72 ± 2.30 ; CV: 68.94 ± 13.52) and Pulamula (M: 18.00 ± 3.87 km; SD: 12.25 ± 2.74 ; CV: 68.06 ± 15.22). The Ozukolli (M: 21.57 ± 3.74 km; SD: 9.90 ± 2.65 ; CV: 45.90 ± 12.27), Palerimuttil (M: 21.33 ± 3.67 km; SD: 8.98 ± 2.59 ; CV: 42.10 ± 12.15), Edamana (M: 22.58 ± 4.15 km; SD: 14.36 ± 2.93 ; CV: 63.60 ± 12.98) and Natipara (M: 25.86 ± 2.22 km; SD: 5.88 ± 1.57 ; CV: 22.74 ± 6.08) *mittoms* showed that mean marital distance values fluctuating

between 21km to 25km. The highest value of coefficient of variation is observed in Edathana, followed by Palliyara, Kakkotara, Kottuyottil, Pulamula and Kottutara *mittoms*. The lowest value of coefficient of variation is observed in Karavanacheri and Natipara *mittoms*. The mean marital distance for the pooled sample is $(20.64 \pm 1.20 \text{ km})$, with a standard deviation of 9.90 ± 2.65 and coefficient of variation 45.90 ± 12.27 .

Impact of couple's age on marital distance

The couples aged 20-59 years have chosen their spouses with in a distance of 40 km; whereas the older generation couples aged 60-85 years opted marriage partners from greater distances i.e. beyond 60 km-65 km. However such marriages are fewer in number. It is evident that young Kurichian couples preferred spouses from short distances compared to older generation couples, contrary to the general observations in other ethnic groups (Majumdar 1977). The highest mean marital distance ($27.55 \pm 5.80 \text{ km}$) is observed among the couples aged 60-64 years, followed by couples aged 65-69 years ($26.33 \pm 4.91 \text{ km}$) and couples aged 45-49 years ($26.00 \pm 4.29 \text{ km}$). The lowest mean marital distance is observed among couples aged 40-44 years ($12.13 \pm 2.59 \text{ km}$) and couples aged 80-84 years (13.0 km). Only one couple below 20 years of age has contracted marriage with in a distance of 3 km. Majority of the couples preferred their mates with in a distance ranging from 17 km-25 km. The mean marital distance for all the couples is $20.28 \pm 1.16 \text{ km}$, which is lower than the value for the 45-74 years aged couples (range: 20.82 km-27.55 km) and higher than that of the couples aged 20-44 years (range: 12.13 km-18.60 km) and 75-84 years (13.0 km-18.0 km). The coefficient variation ranges from $28.00 \pm 6.60 \text{ km}$ in 70-74 years aged couples to $90.72 \pm 24.25 \text{ km}$ in 20-24 years aged couples.

Summary and conclusions

Demographic data was collected during 1996 on the Kurichians of Wayanad district in Kerala with an objective to elucidate the demo-genetic structure of the matrilineal tribe. Kurichians still adhere to the matrilineal and matriarchal traditions. They observe touch pollution with other tribes and castes, except the Nambuthri Brahmin and Nair castes. Their economy is primarily based on agriculture. They live in exclusive settlements named after their respective *mittoms*. There are about 148 *kulams* among the Kurichians and each kulam has a specific deity and worship place within the courtyard of the *mittom*. *Therattu kalyanam* is performed to girls on attaining menarche, under the supervision of the *Karnavar*. The institution of *talikattu kalyanam* was abolished recently by their tribal council. They maintain strict endogamy and prefer consanguineous marriages. There are 4 sub tribes among Kurichians, namely Jati Kurichians, Kannan Kurichians, Anchilla Kurichians and Paathiri Kurichians and are differentiated at socio-religious levels. The present study is confined to Jati Kurichians, who are numerically dominant, ritually pure and maintain social distance with other sub tribes. The Jati Kurichians are Hindus, while Paathiri Kurichians profess Christianity. They celebrate all the Hindu festivals. They are excellent bowmen. Tradition says that they are a martial tribe, who assisted Pazhaassy king of Kottayam in his fight against the British during 18th century. They claim to be the descendants of Perambadan Villoli Kari Nairs.

The Kurichian couples age ranges from 20 years to 89 years, which indicates that average life span of Kurichian is significantly higher than the life span of average Indian. Though monogamy is the common practice, three cases of polygynous unions are reported in Kurichians. Maximum number of couples falls between 20-60 years indicating that high proportions of them in the breeding age group. The age disparity among Kurichian spouses range from 5-10 years, where the mean age difference of couple is 8.07 years. Out of the 28 *mittoms*, Pulamula, Ozukolli, Odamuttil, Natipara, Kakkotara, Edamana and Edathana *mittoms* recorded higher frequency of first cousin marriages compared to other forms of marriage. Consanguineous marriage is the preferential form of marriage among Kurichians but the frequency of consanguinity is much below to that of Andhra Pradesh tribes. The uncle- niece marriage is not practiced by Kurichians and other ethnic groups of Kerala. The consanguinity rate in Kurichian (47.65%) is significantly higher than that of other ethnic groups of Kerala. The preference for matrilateral cross-cousins over patrilateral cross- cousins is in conformity with the practice in Andhra Pradesh tribes. The mean inbreeding coefficient for autosomal loci in Kurichian (0.0300) records the highest value in Kerala populations, but is closer to the values recorded in various other ethnic groups of south India. Nearly 5 percent Kurichian couples married within the native village, which is higher than the frequency recorded among the Kuruman tribe of Wayanad district. Majority of Kurichian couples married within 40 km. The mean marital distance of Kurichian (21.07km) is lower than the mean marital distance of non-consanguineous couples (24.43km), but it is significantly higher to that of consanguineous couples (17.37km). The mean marital distance of Kurichian is closer to the mean marital distance of the Kolams, but lower to that of Andh and Pradhan tribes of Andhra Pradesh. The couples from Kottutara and Edathana *mittoms* contracted marriages up to a distance of 65 km, while couples from other *mittoms* chosen their mates within a distance of 40 km. The maximum mean marital distance is recorded in Karuvancheri *mittom* (31.75km), while the lowest mean marital distance is recorded in Palliyara *mittom* (13.88km). The couples in 20-59 years age groups preferred mates from shorter distances compared to elderly couples. The maximum mean marital distance (27.55 km) is recorded for couples aged 60-64 years, while the lowest mean marital distance (13.00 km) is recorded for couples aged 80-84 years.

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