

Widow and Widower Remarriage: An Analysis in a Rural 19th Century Costa Rican Population and a Cross-Cultural Discussion

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ABSTRACT Although the topic of remarriage features saliently in the cultural anthropological literature, it is virtually absent in the biological anthropology journals. This is perplexing, given that remarriage affects the differential reproductive success of males and females in a community, and could well impact a community's population structure. In this paper, we research remarriage practices in a rural 19th century community in Costa Rica. Although we find support for the proposition that males

are more likely to remarry than females, we find that widows who remarry are not all young and able to reproduce. Our findings support the cross-culturally-generated suggestion that a female's ability not to remarry is tied to her to ability to own property. Remarriage is a topic of interest to biological anthropologists from a cross-cultural and biocultural perspective. *Am J Phys Anthropol* 122: 355–360, 2003. © 2003 Wiley-Liss, Inc.

The institution of marriage has been of interest to anthropologists in general. From the perspective of biological anthropology, marriages are of importance because they are usually the venue by which genes are exchanged within and among populations. Thus, they allow us to investigate levels of genetic differentiation and heterozygosity, population structure, inbreeding, migration patterns, mate choice, parental fitness, investment in offspring, and more (Agarwala et al., 2001; Beall and Goldstein, 1979; Biondi et al., 1996; Bittles and Smith, 1994; Bouckaert and Boulanger, 1997; Cabello and Krieger, 1991; Calderon et al., 1998; Castilla et al., 1991; Christensen, 1998; Dinsmore, 1987; Fuster et al., 2001; Hampshire and Smith, 2001; Hernández et al., 2000; Jorde and Pitkanen, 1991; Khlát, 1988; Körtvelyessy et al., 1988, 1990; Lasker and Kaplan, 1995; Lasker, 1988; Lasker et al., 1986; Madrigal et al., 2001; Madrigal and Ware, 1997, 1999; Mascie-Taylor et al., 1987; Naidu et al., 1995; Pettener et al., 1998; Pettener, 1985; Pitchappan et al., 1997; Reddy and Malhotra, 1991; Relethford, 1992; Roguljic et al., 1997; Sanchez-Sellero et al., 2001; Varela et al., 1997; Vernay, 2000).

Equally important to biological anthropologists should be a study of a population's rules and practices on remarriage of widowers and widows. We can learn much about a population's genetic structure by determining if widowed males and females are allowed, encouraged, or forbidden to remarry. If a young widow, for example, is forbidden from remarriage, her contribution to the gene pool of the next

generation will be compromised. Also, if more widowers than widows remarry, then males' contribution to the gene pool could in some way mirror that found in polygamous societies, where some males have offspring with more than one wife. If the levirate or the sororate are practiced, then the widow/widower's contribution to the next generation will as much as possible mirror that which would have been obtained had the initial consort not died. Clearly, there are many ways in which the topic of remarriage is of interest to biological anthropologists. It is therefore disappointing that very few papers have been published on the effect of remarriages on population structure or fertility (Blom, 1991; Isiugo-Abanihe, 1998; Klasen, 1998; Knodel and Lynch, 1985; Ring, 1979; Sonko, 1994; Thornton, 1978). Even in books about human mating, marriage, mate choice, and family structure, this topic is usually absent (Ellison, 2001; Fox, 1993; Kurian, 1979; Miller, 2000; Murstein, 1976; Nicotera, 1997; Small, 1995; Suggs and Miracle, 1993; van den Berghe, 1979; Wood, 1994). In contrast, the sociocultural

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anthropology and sociological literature is full of studies on remarriage, ranging from increased longevity in the 20th century and remarriage, inheritance rules and remarriages, the formation of new families and their concomitant problems, to the infamous practice of suttee (widow burning) in India. We cannot cover, but do acknowledge, such ample literature.

An early book by Bernard (1956) and a review article by Blom (1991) are excellent sources on remarriage practices cross-culturally, practices which range from strict prohibition of remarriage to mandatory remarriage. The strictest enforcement of prohibition to remarriage was the Indian practice of suttee, in which the widow was burned with the dead husband. However, various forms of social ostracism or of disapproval obtained an almost complete absence of remarriage in various cultures. At the other side of the spectrum, several cultures prescribe that the widow/widower remarry, often specifying the person who will become the new spouse. Overlaying this variation in remarriage practices are the following generalizations: firstly, according to Bernard (1956) and Blom (1991), there is an almost universally greater permissiveness toward remarriage of males than of females. After reviewing the literature, however, we are of the opinion that the greater permissiveness is not almost, but is actually universal. Secondly, the remarriage of widows is strongly mediated by their biological and economic situation. In other words, young widows are more likely to remarry than are older ones (Cattell, 1997). Moreover, in cultures in which widows are allowed, encouraged, or expected to remarry, a widow who has the economic ability to take care of herself and her offspring may choose not to remarry. Certainly, a widow's economic status depends in great part on her society's inheritance rules, which determine if she can own wealth (Cattell, 1997). Thus, two salient factors influence women's remarriage options, one cultural (inheritance rules), and one biological (her age and/or reproductive status) (Bernard, 1956; Blom, 1991). Another issue of importance to several different societies is that although the Catholic Church traditionally recommended that widowed females not remarry, this recommendation was not universally enforced (Van Poppel, 1995).

The purpose of this paper is to determine through historical demography the frequency of remarriage in a small rural population from Costa Rica during the 1800s. Specifically, we wish to test the following predictions suggested by the literature:

1. More widowers than widows remarry.
2. The age at remarriage is different for males and females: although older widowers can and do remarry, older widows (past their reproductive age) do not.

MATERIALS AND METHODS

Data set

The Parish of San Miguel de Escazú (Escazú for short) is 15 km from San José, Costa Rica's capital. For a history of the settlement, see Madrigal (2003). Since its foundation in 1799, the Parish has kept excellent vital-event certificates. During the 1800s, Catholic priests were appointed civil servants, with the obligation of registering all vital events, even if non-Catholics were involved. For example, Madrigal (2003) noted that the deaths of persons who refused to take, or were denied the last sacraments, were routinely recorded (with an explanation of the situation). Although the church records are of excellent equality, they are unfortunately missing for the decade of 1840. For that reason, all of the analyses offered here will exclude by necessity that decade. The specific years analyzed here are 1800–1839 and 1850–1899.

Although it is fairly certain that all vital events were recorded (Howell-Castro, personal communication, 1995; Father Howell-Castro has been the Parishioner of Escazú for almost two decades), some priests included additional information (Madrigal, 1992). For example, most of the marriage certificates included the consorts' parents' names. If either or both were "illegitimate children," this was usually noted. Given that age at marriage was recorded by only two priests at the end of the 19th century, we have a smaller number of certificates that allow us to research age at remarriage. If an ecclesiastical dispensation was needed for the marriage to take place, the priests usually stated the nature of the dispensation, and even the rationale behind it. Not all dispensations involved consanguinity, but many involved "affinity," i.e., affinal relations between the consorts. Given that the sororate and levirate fall under affinal relations, we analyzed all affinal dispensations, both of first marriages and of remarriages. See Madrigal and Ware (1997) for a study on consanguinity in Escazú.

The laws of inheritance in Costa Rica in the 1800s were simple: single, married, or widowed Costa Rican women could own property. If a woman became a widow, half of the late husband's property belonged to her and half to their offspring. But if the latter were not adults, she was the usual trustee of that property. If the woman brought any property into the marriage, it belonged to her during the duration of the marriage, and was solely hers after the death of her husband (Lobo-Wiehoff and Melendez-Obando, 1997).

Methods

The data were first divided into records that stated the age of consorts and those that did not. Age at marriage was tested for normality, and because it was not normal, nonparametric tests were used. The frequencies of marriages involving a widower or widow were analyzed with a simple chi square test. All statistical analyses were performed using SAS

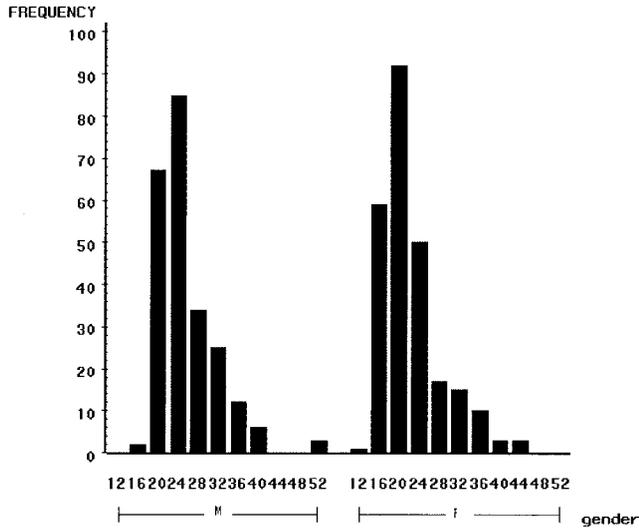


Fig. 1. Age at first marriages: males and females.

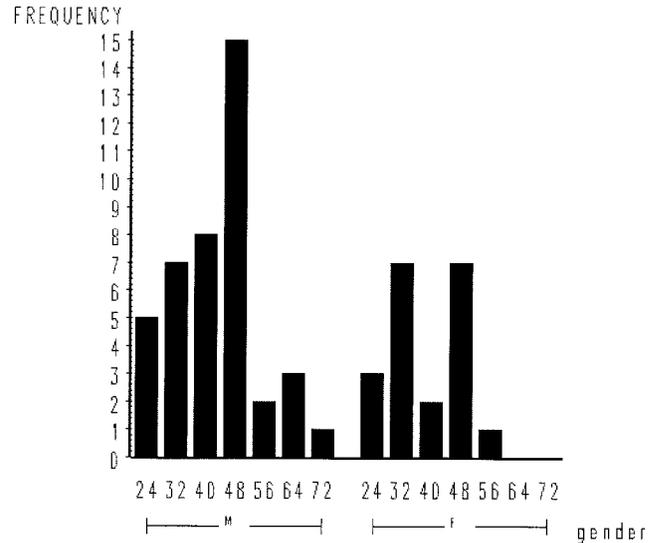


Fig. 2. Age at second marriages: males and females.

8.02 (SAS Institute, 2001). The affinal dispensations were analyzed by one of us (M.M.), using established genealogical techniques.

RESULTS

Frequency of remarriages

In total, 2,101 marriages were recorded. Nineteen percent (402) included at least one partner who was widowed, and 3% (73) were between partners who were both widowed. Thus, nearly 23% of all marriages involved at least one widowed partner. This indicates that the population did not restrict its widows and widowers from remarrying. To determine if males had a higher frequency of remarriage than did females, we excluded the 73 marriages that involved two widowed partners, and tested with a simple X^2 the hypothesis of equal distribution of remarriage across gender. We strongly rejected the hypothesis ($X^2 = 28.6$, $df = 1$, $P \approx 0.01$). Thus, a significantly greater proportion of males (213) than females (116) were involved in second marriages.

Ages at remarriage

We determined that only 279 records from 1866–1891 stated the ages of consorts. The age of both genders at first marriage is both heavily skewed to the right, as shown in Figure 1. The age at first marriage of males (median = 24) and females (median = 20) is significantly different (Wilcoxon two-sample test statistic = 68,129.5, normal approximation $z = 7.4206$, $P < 0.0001$). This is not surprising, given the cultural norm of the male being the bread winner of the family, which implied that he needed to be old enough to feed the family.

The number of records that stated the age of consorts who were marrying for the second time is rather small. Indeed, we only have the ages for 41 widowers and 20 widows who remarried. We analyzed these ages with nonparametric tests, acknowl-

edging our small sample size. Not surprisingly, the age at second marriage increased significantly for males, from a median of 24 to one of 44 (Wilcoxon two-sample test statistic = 10,139.0, normal approximation $z = 9.0944$, $P < 0.0001$), and for females from a median of 20 to one of 37.7 (Wilcoxon two-sample test statistic = 4,817.0, normal approximation $z = 6.2836$, $P < 0.0001$).

Ages at second marriage for both genders do not have as skewed a distribution as ages at first marriage (see Fig. 2). For males, the median age at second marriage is 44, and for females it is 37.7, a nonsignificant difference (Wilcoxon two-sample test statistic = 504.5, normal approximation $z = -1.7738$, $P > 0.05$). Thus, although it is true that widowers remarry older than do widows, the age difference is not significant. It is noteworthy that there are a number of females in our sample who remarried past or approaching the end of their reproductive career. Indeed, 40% of the females who remarried were over age 45. Two women married at age 50, and one at age 57.

Analysis of affinal-relation dispensations

The number of affinal dispensations is too small to do any statistical tests. However, only one remarriage involved a sibling, and another one the nephew, of a dead spouse. Thus, only 2 of 16 affinal dispensations granted for widow/widower remarriage involved a sororate/levirate-type relation. All other affinal dispensations concerned the occurrence of prior sexual relations with various relatives of the new spouse. One case in particular granted dispensation of illicit sex between a groom and his bride's two sisters, her aunt, and five first cousins.

DISCUSSION

A literature search on remarriage in the human biology and biological anthropological field leads to

the disappointing conclusion that very little has been published on the topic. However, biological anthropologists could gain much insight into the movement of genes within and among groups by asking whether widows and widowers were permitted, encouraged, or prohibited from remarriage. Indeed, remarriage is a topic which embodies the holistic perspective of anthropology, as there are cultural and biological influences on, and consequences of, a culture's rules on remarriage. Our literature review suggested the following influences:

1. The traditional Catholic doctrine is that remarriage of widows is not forbidden, but not recommended. However, as Van Poppel (1995) showed, there is great variation among various Catholic communities on the enforcement of this position.
 2. Widowers tend to marry more often than do widows.
 3. If widows remarry, they will do so at an earlier age than do widowers, i.e., the ability of a widow to remarry is tied to her reproductive status.
 4. If widows are allowed to remarry, they might not desire to do so if they can support themselves and their offspring. However, their ability to support themselves is dependent on the inheritance rules of their culture. In some cultures, women do not inherit any property when their husbands die; in others, women inherit property only if they do not remarry after their husbands' death; and in yet others, they inherit property only if they do remarry after his death. An interesting study was presented by Holmgren (1986) about the different remarriage rules in early Mongol and Yuan society. In these two contemporary cultures, the remarriage of widows was handled differently as a result of the culture-specific rules of inheritance. In the Mongol group, widows were expected to marry a brother or another close relative of the deceased husband, while in China, the widow was expected to stay in the husband's family without remarriage. If these expectations were violated, the widow would have lost her inheritance in both cultures.
3. Age at remarriage of males and females: our analysis of age at marriage and remarriage was hindered by the fact that ages were noted in the marriage records only during a few years. Thus, the sample size is rather small, especially for widows who remarried. Such a small sample size might prevent us from detecting a treatment effect. However, a nonparametric comparison of ages at second marriage of males and females did not reject the null hypothesis of equality of ages (even though age at first marriage was significantly different between males and females, with grooms being significantly older than brides). Indeed, it is very clear that a good proportion of widows were getting married towards the end of, or past their fertile years. These women were obviously not getting married because they had a long reproductive career ahead, but for other reasons. Thus, in Escazú, widows did not only remarry when they had reproductive potential. It is very unfortunate that we are not in a position to determine if females who remarried had higher fertility than did those who did not. We hope to go back to the field to collect that data.
 4. Inheritance rules, remarriage decisions, and women's status: given the inheritance laws in place in Costa Rica in the 1800s (see Materials and Methods), it is obvious that women in Escazú could own property and could at least in principle support themselves and their offspring upon their husbands' death. The legal and economic status of women, of course, impacts their morbidity and mortality. For example, Klasen (1998) reported that in 1700–1800s rural Germany, women had a low socioeconomic status which resulted in excess female mortality and many widowers, most of whom remarried within 6 months with women considerably younger than themselves. In contrast, Madrigal (1992) concluded that Escazú female and male children had equal access to food, as reflected by their diarrhea-associated mortality. We propose that our data on remarriage support the suggestion of Madrigal (1992) of a fairly equal status of females and males in this community. This relative equality is a likely explanation for the fact that women did not need to remarry.

We now discuss our results in the context of each of these generalizations:

- 1 and 2. Frequency of remarriage and gender-specific frequencies: in Escazú we find that more than 20% of all marriages studied involved at least one spouse who was a widow or a widower. Three percent of all marriages involved a widow and a widower. Escazú appears to be similar to several historical Catholic communities in which remarriage was not avoided (Van Poppel, 1995). We certainly found support for the cross-cultural generalization that widowers are more likely to marry. Indeed, there was a highly significant difference in the frequency of remarriage involving males and females.

Our data clearly indicate that there was no preferential remarriage with a dead spouse's siblings or close relations. The ecclesiastical dispensations only attest to not-infrequent liaisons with one's consort's relatives.

A question to which we have not referred is why males, with equally independent means, chose to marry more often. According to Blom (1991), whereas widows are more likely to face economic stress upon their spouses' deaths, widowers are more likely to suffer from the lack of labor of their late wives, especially if there are young children in the household. Thus, widows who can support them-

selves are less likely to remarry simply because they can meet the needs of their families, whereas widowers are more likely to remarry because even with economic means, they still need the labor of wives at home. Although these are broad generalizations, they do seem to apply to the situation in Escazú and in much of the review presented by Blom (1991).

We can only speculate that the genetic contribution of males and females was different in the community: if widowed, males tended to marry and produce offspring with more than one spouse, whereas females were more likely not to remarry, thus producing offspring with one man only. The effect of demographic processes on a population's genetic makeup is elegantly illustrated by Excoffier and Schneider (1999), who showed that populations' demography affects between-group similarity. Of more relevance to the present paper, Dupanloup et al. (in press) convincingly argued that the present-day distribution of human mtDNA and Y-chromosome variation can be explained by a recent shift from polygyny to monogamy.

Remarriages are a topic of research ideally suited to the biocultural view of the anthropologist. Although age at remarriage could be seen as a purely biological variable which affects the reproductive output of women, it is best understood in the specific socioeconomic and historic milieu of the study.

CONCLUSIONS

We conclude that in Escazú, remarriage was not shunned, though it was significantly more frequent among males than among females. Some of the Escazú widows who did remarry were in their 40s and 50s, i.e., nearing or past their reproductive years. We argue that the inheritance rules, which allowed women to accumulate and keep wealth, might explain the fact that fewer females than males remarried.

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