

The distribution of widow's peak trait among young adults of the Isoko ethnic group in Delta State, Nigeria

ABSTRACT

Background to the Study: This study was carried out with the aim of determining gender differences in the distribution of widow's peak among the young adults of the Isoko ethnic group of the southern part of Nigeria. **Materials and Methods:** Six hundred and sixty (660) adults of both sexes (330 males and 330 females) between the ages of 18 years and 35 years were used for the study. Simple random sampling technique was used for the study. Determination of widow's peak was based on an observational study. Data obtained were subjected to statistical analysis using Chi-square test, with the aid of the Statistical Package for the Social Sciences, version 20. $P \leq 0.05$ was considered significant. **Result:** The result of the study revealed that a lower percentage of males (15.45%) did present with widow's peak, while it was 16.36% for females. There was no significant gender difference concerning widow's peak distribution among the Isoko males and females ($P > 0.05$). **Conclusion:** This study provides normative data for widow's peak distribution among the Isoko ethnic group. This study provides guidelines for designing the hairline in the study population.

Key words: Distribution, Gender differences, Isoko, Nigeria, widow's peak

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INTRODUCTION

The term "widow's peak" refers to the descending V-shaped point at the middle of the head's hairline just above the forehead of some individuals.^[1] The widow's peak hairline is a curious but interesting phenomenon. Previous researches regarding widow's peak have been conducted in average statured individuals^[2] and short-statured individuals^[3] of both sexes; similar study for only females has also been conducted.^[4]

Similar studies have also been conducted in India^[5] and Nigeria.^[1,6] Though previous studies have been carried out on widow's peak, none exists in the studied population. Hence, this study provides normative data for widow's peak distribution among the Isoko people.

The significance of the present study is in various aspects of bioscience, medicine, and anthropology. The

aim of the study was to determine the frequency of widow's peak distribution and the differences between the densities of widow's peak among individuals of both gender belonging to the Isoko ethnic group in Delta State.

MATERIALS AND METHODS

The study population comprised Isoko subjects aged between 18 years and 35 years in the State Polytechnic, Ozoro, Delta State, Nigeria. This observational anthropometric study involved 660 subjects, and the simple random sampling technique was employed.

Prior to the study, ethical clearance was sought and obtained from the Research and Ethics Committee, Delta State Polytechnic, Ozoro, and informed consent was obtained from the subjects in accordance with

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World Medical Association Declaration of Helsinki as revised.^[7] Facial interaction and eye observation were used to examine individuals in the sample area on widow's peak hairline from 8 am to 6 pm daily for 1 week. Distinctive widow's peak (DWP) is when there is a distinct point in the hairline in the center of the

forehead, and in slight widow's peak (SWP) there is no distinct point [Figures 1–3]. Subjects were selected if they met certain criteria. The subjects had nil history of craniofacial trauma, surgery and their parents up to the second generation were Isokos.

Data obtained were subjected to statistical analysis using Chi-square (χ^2) test with the aid of the Statistical Package for the Social Sciences, version 20 (SPSS-Inc., Chicago, US). $P \leq 0.05$ was considered significant.

RESULTS

Table 1 shows that the widow's peak trait was not predominant in the studied population.

Table 2 shows that there was no significant gender difference concerning widow's peak distribution among Isoko males and females ($P > 0.05$).

DISCUSSION

Hairline is the line demarcating the hairs of the scalp from the forehead. It can either be straight or curved (widow's peak) in shape. People with curved hairlines (widow's peak) have a prominent v-shaped point at the front of their hairline.^[6]

The present study reveals that there was no significant gender difference concerning widow's peak distribution among Isoko males and females ($P > 0.05$). This finding did not concur with some previous reports^[1] but did concur with others.^[4,5]

Findings from this present study reveal that straight hairline was predominant while DWP was the least predominant variable in the studied population. These findings are at variance with previous reports from a certain study.^[2] The present study revealed that widow's peak was present in 37.42% of the subjects. This study did not agree with the study of Odion *et al.* (2008) who carried out a study with



Figure 1: Absent widow's peak



Figure 2: Slight widow's peak



Figure 3: Distinctive widow's peak

Table 1: Distribution of widow's peak among the Isokos

Variables	SWP (%)	DWP (%)	AWP (%)
Male	73 (22.12)	51 (15.45)	206 (62.42)
Female	69 (20.91)	54 (16.36)	207 (62.73)
Total	142	105	413

¹SWP = Slight widow's peak; ²DWP = Distinctive widow's peak; ³AWP = Absent widow's peak

Table 2: Chi-square analysis of widow's peak for Isoko males and females

Variables	SWP	DWP	WPA
<i>P</i>	>0.05	>0.05	>0.05

¹SWP = Slight widow's peak; ²DWP = Distinctive widow's peak; ³AWP = Absent widow's peak, * $P > 0.05$ is not significant

355 students of Delta State University, from the Niger Delta region of Nigeria, and found that the percentages of those with and without widow's peak were approximately the same in both sexes.^[8] A study of women conducted by Nusbaum and Fuentefria (2009) found that 81% had a widow's peak.^[4] Smith and Cohen's (1973) study on male medical students revealed that only 3% had widow's peak.^[2] A study of a Nigerian population conducted by Ordu and Agi in 2014 revealed that 13.7% had widow's peak.^[6] The reasons for all these differences may be either high variation between gender or disagreement over what constitutes a widow's peak.

CONCLUSION

The present study revealed the naturally occurring hairline patterns among the Isokos. The present study provides guidelines for designing the hairline in the study population.

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form the patient(s) has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

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Conflicts of interest

There are no conflicts of interest.

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