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# Posture Adopted In Home and Farm Activities by Women of Hilly Terrain

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#### ARTICLE INFO

### ABSTRACT

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Key words:

Posture, Musculoskeletal disorder, Household activities, Agricultural activities The study was carried out among women of Karbi Hill Tribe residing in Lumbajong Development Block of Karbi Anglong District of Assam. It was observed that sitting on feet is the most common posture among adopted by the women while doing the kitchen related activities, mud plastering and washing of clothes. Sitting on feet, stooping and bending are found to be the common postures adopted by the women while doing the agricultural activities. Among all the postures adopted while doing the home, farm and allied activities most strenuous is sitting on feet. Findings also revealed that pain in waist is more among the women.

### 1. Introduction

Women in every society play a vital role in managing their households. But variations are observed in nature of activities based on the type of society. The homemaker has to perform these activities adopting different posture. To an extent the working efficiency and the health condition of the homemaker also depends on the working posture. The repetitive uses of same posture for prolong period leads to musculoskeletal disorders. Musculoskeletal disorders affect the soft tissues of the body such as the muscles, the tendons that connect muscles to bones, ligaments that connect bone to bone, nerves and blood vessels. Majority of the Indian women spent most of the time in managing their households working in both home and farm. Thus, it becomes essential to study the posture adopted while accomplishing these activities. The present study was carried out considering the women section of a hill tribe i.e. the Karbi tribe residing in the district of Karbi Anglong District of Assam. The selection of the women of this group is also important from the point that these women section works in hilly terrains and are still far away from the use of ergonomically designed equipment (household and farm too).

The study was carried out with the following objectives:

- (i) To study the socio-economic profile of the respondents
- (ii) To find out the postures adopted by the respondents while performing home and farm activities.

#### 2. Materials and Methods

The study was carried out in Karbi Anglong district of Assam. The district was selected purposively as major concentration of this hill tribe is inhabited in this district. A multistage purposive sampling method was adopted for selecting the sample of the study. The study was carried out among 200 Karbi women considering four villages of Lumbajong Development Block under Diphu Sub-division of Karbi Anglong district of Assam. Primary data collected through observation and interview method. Simple frequency and percentage distribution was employed for analysis of the data.

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### 3. Results and Discussion

### 3.1 Socioeconomic background of the respondents

Findings regarding the socio-economic profile of the respondent's show that higher percentage of the respondents (43.5%) belongs to age group of 30-40 yrs. Majority of the respondents (73.5%) are illiterate. It is observed that none of the respondents are found to have education up to matriculation. All the respondents of the study are found married and follower of Hindu religion. Out of the total respondents 59.0% belongs to nuclear family. Most of the respondents (47.0%) belong to large family (more than 7 members). Majority of the respondent's (95.0%) have kutcha type of house. Agriculture is the main source of income for all the respondents. Minimum number of the respondents (11.0%) have monthly family income more than Rs. 6000/-. In this study it was found that 51.5% of the respondents have more than 8 bighas of operational landholdings.

# 3.2 Posture adopted while performing kitchen related activities

The role of the women in the family resource management also depends upon the physical condition which is even regulated by their working postures. Findings reveals that 45.5% of the respondents adopt the posture of sitting on feet while cutting vegetables. Majority of the respondents adopt the posture of sitting on feet while doing the activities like cooking, serving of food and cleaning of utensils (83.0%, 64.5% and 100%, respectively) Table 1. In a study carried out by Mehta, et al. (1995) on the women's time and energy input in various kitchen activities observed that squatting posture was most frequently used posture for doing kitchen activities followed by sitting on pidha/patra. Further, said that standing was rarely used posture while doing kitchen related activities by the rural women. Thus, from the above analysis it is found that most of the kitchen related activities are performed by adopting the posture of sitting on feet. On the other hand squatting is rarely used posture while accomplishing kitchen related activities.

**Table 1.** Posture adopted while performing kitchen related activities

SI.	Different postures	Kitchen related activities									
No.		Cutting o	f vegetables	Cooking		Serving		Cleaning of Utensils			
		F	%	F	%	F	%	F	%		
1	Sitting on ground	67	33.5	-	-	-	-	-	-		
2	Sitting on feet	91	45.5	166	83.0	129	64.5	200	100.0		
3	Sitting on low stool	42	21.0	34	17.0	54	27.0	-	-		
4	Squatting	-	-	-	-	17	8,5	-	-		

Table 2. Posture adopted while performing other major household activities (N=200)

SI.	Different	Maj	jor Acti	vities												
No.	postures	Sweeping		Mud		Washing		Fetching and		Cutting and carrying		Weaving				
				Plastering		of clothes		Carrying of		of Firewood						
								water								
		F	%	F	%	F	%	F	%	F	%	F	%			
1	Sitting on	-	-	-	-	-	-	-	-	-	-	43	21.5			
	ground															
2	Sitting on	-	-	189	94.5	187	93.5	-	-	-	-	-	-			
	feet															
3	Sitting on	-	-	-	-	13	6.5	-	-	-	-	25	12.5			
	low stool															
4	Sitting on	-	-	-	-	-	-	-	-	-	-	13	66.0			
	high stool											2				
5	Squatting	-	-	11	5.5	-	-	-	-	-	-	-	-			
6	Bending	-	-	-	-	-	-	200	100	200	100	-	-			

# 3.3 Posture adopted in performance of other major household activities

Findings show that mud plastering and washing of clothes are performed by majority of the respondents by adopting the posture of sitting on feet i.e., 94.5% and 93.5%, respectively. All the respondents adopt the posture of bending while sweeping, carrying water and in transferring of firewood. Most of the respondents (66.0%) weave clothes by sitting on high stool. It shows that respondents perform the major household activities by adopting the postures like sitting on feet, bending and sitting on high stool (Table 2).

# 3.4 Posture adopted in performance of various agricultural activities

Half of the respondents (58.5%) adopt the posture of sitting on feet while cleaning seeds. Cutting of jungle is performed in bending posture by 73.8% of the respondents. Activity like land leveling is performed in stooping and bending posture 54.8% and 45.2% respondents, respectively. While broadcasting seeds 75.5% respondents performed dibbling (61.5%) and weeding (41.0%) by sitting on their feet. All the respondents adopt the bending posture while performing the activities like uprooting, transplanting, reaping of crops and making bundles. Stooping is the commonly used posture while carrying crops from field and de-husking. Sitting on feet is the posture adopted by majority of the respondents (60.5%) while winnowing. Konwar (2005) found that various postures were adopted by women while performing agricultural activities like sitting on ground and pirhi was assumed while performing weeding and winnowing respectively. She further reveals that forward bending posture was adopted while weeding, uprooting of seedlings, transplanting and cutting of lying crops. Thus, the findings shows that sitting on feet, stooping, bending and squatting are the postures mostly used by the respondents while performing farm activities (Table 3).

## 3.5 Respondent's opinion towards strenuous posture

According to more than half of the respondents (59.5%), sitting on feet is the most strenuous posture. Thus, from the opinions of the respondents it is observed that respondents have to work hard and suffer a lot of stress and strain while accomplishing day-to day activities to run the family. It is also important to note that performance of work with these postures consume more time and energy of the respondents which leads to poor health condition and in-efficiency (Table 4).

### 3.6 Discomfort felt by the Respondent's

Table 5 reveals that majority of the respondents (40.5%) suffer from waist pain followed 32.0% respondents having knee joint pain and (27.5% respondents having back pain. Mostly the pains are associated with covering of ling distances by carrying of loaded baskets fastened to the head (Table 5).

## Conclusion

From the study, it can be concluded that the hill women while performing home and farm activities adopts various postures. Most of the postures adopted are for longer duration and awkward, thus are strenuous. It is also observed that most of these activities are performed in traditional way using their traditional tools. Further, the respondents do not have adequate knowledge about importance of proper working posture and it may be due to poor literacy rate. So, it is the duty of the government and non-government organizations to impart training on proper working posture and musculoskeletal disorder associated with adoption of awkward posture while at work and also facilitate them with ergonomically designed tools and equipment's to reduce the discomfort level.

Table 4. Opinion of the respondents towards strenuous posture

#### Reference

SI. No.	Different postures	No. of Respondents	Percentage (%)
1	Sitting on ground	21	10.5
2	Sitting on feet	119	59.5
3	Squatting	23	11.5
4	Stooping	8	4.0
5	Bending	29	14.5
	TOTAL	200	100.0

Konwar G (2005). Inter-gender sharing of drudgery among plain tribes in farm activities. Unpublished M.Sc. Thesis, AAU, Jorhat.

Mehta M, Gandhi S, Gupta M, Sharma DN (1995). Women's time and energy input in various kitchen activities. Kurukshetra 39(9): 34-38

SI.	Activities	Standing		Sitting on fit		Squatting		Stooping		Bending		Sitting on low stool		Total with %	
No.															
		F	%	F	%	F	%	F	%	F	%	F	%		
1	Cleaning of seeds	7	3.5	117	5 8. 5	4	2.0	-	-	-	-	72	36.0	20 0 (10 0.0)	
2	Cutting of jungles	26	26.26	-	-	-	-	-	-	73	73.8	-	-	99(100.0)	
3	Land levelling	-	-	-	-	-	-	58	54.8	4 8	45.2	-	-	10 6 (10 0.0)	
4	Broad casting	-	-	-	-	-	-	1 51	75.5	49	24 .5	-	-	20 0 (10 0.0)	
5	Dibbling	-	-	123	61.5	69	3 4. 5	-	-	8	4. 0	-	-	20 0 (10 0.0)	
6	Uprooting	-	-	-	-	-	-	-	-	200	1 00 .0	-	-	20 0 (10 0.0)	
7	Transplanting	-	-	-	-	-	-	-	-	200	1 00 .0	-	-	20 0 (10 0.0)	
8	Weeding	-	-	8 2	41.0	77	3 8. 5	-	-	4 1	20.5	-	-	20 0 (10 0.0)	
9	Reaping of crops	-	-	-	-	-	-	-	-	200	1 00 .0	-	-	20 0 (10 0.0)	
10	Making bundles	-	-	-	-	-	-	-	-	200	1 00 .0	-	-	20 0 (10 0.0)	
11	Carrying crops	-	-	-	-	-	-	1 23	1 00 .0	-	-	-	-	12 3 (10 0.0)	
	from field Threshing														
12	De -husking	24	1 2. 0	-	-	-	-	-	-	176	88.0	-	-	20 0 (10 0.0)	
13	Winnowing	-	-	-	-	-	-	2 00	1 00 .0	-	-	-	-	20 0 (10 0.0)	
14		15	7.5	121	6 0. 5	-	-	-	-	-	-	64	32.0	20 0 (10 0.0)	

# Table 3. Posture adopted by the respondents in performing various farm related activities