

SOCIAL SUPPORT, FOOD GIFTS AND WEIGHT GAIN DURING PREGNANCY IN RURAL SRI LANKA¹

INTRODUCTION

This paper examines the social support networks of pregnant women in a relatively non-traditional rural Sri Lankan community as represented by food gifts provided to the pregnant women during the last two trimesters of pregnancy. These acts of support are analysed in relationship to the women's weight gain.

Women's weight gain during pregnancy is viewed as an important health index of the child to be born as well as that of the pregnant women themselves. Inadequate weight gain during pregnancy can lead to low birth weight and low nutritional status of the infants (To and Cheung 1998). Low body mass index of pregnant mothers may lead to low weight gain (Merchant et al 1999). Reduced pregnancy weight gain was associated with higher blood pressure in children born to such women (Clark et al 1998). The adverse health effects reported in such infants include developmental problems, diseases associated with vitamin deficiencies, skin diseases, and sometimes malformations. Such children with poor nutritional status often become sick of diarrhoea and diseases in the upper respiratory system, which further deteriorate their health status. Prenatal and infant mortalities were significantly higher if weight gain during pregnancy was less than 7.0 kg. Low weight gain during pregnancy was also associated with significantly higher low birth weight deliveries and to some extent increased still birth rate (Agarwal et al. 1998).

In Sri Lanka, 20% of the pregnant women are reported to have inadequate weight gain during pregnancy, which is less than 12 kg for the whole duration of pregnancy. These women are mostly anaemic, and a considerable proportion of them are in the age group of 25-40. A large percentage of these low weight gain pregnant women live in rural populations, which comprises about 75% of the total population. Hospital data show that 24.5% of births are below the low birth weight threshold of 2,500 grams (Mudiyanse et al 1999). Although the association between low birth weight babies and mothers with low weight gain during pregnancy is not known for Sri Lanka, it is surmised that since a considerable

¹ The Centre for Intersectoral Community & Health Studies, Peradeniya (CICHS/P), under the Triangle Programme, funded the research led to this paper.

percentage of pregnant mothers in Sri Lanka are anaemic, a large proportion of mothers delivering low birth weight babies may have had low weight gain during pregnancy.

The rural sector in Sri Lanka at present is undergoing tremendous change owing to new developments and changes in the economic as well as sociocultural spheres. Postponement of age at marriage to 25 in females and 26 in males to some extent indicates that formation of social relations, particularly marriages have been hampered by extraneous factors (de Silva 1993). Increase in the number of never married women (Central Bank 1999) and the rate of suicides in the younger populations (Marecek 1998) also are indicative of major changes in the socio-economic and cultural fabric of the rural areas in Sri Lanka. In such a context of social stress and change, it is important to examine how social relationships and support systems can affect the pregnancy situation of village women for whom pregnancy still represents a major physiological and social transition.

As in any rite of passage, women in pregnancy undergo emotional and life stress (Holmes and Rahe 1967), with an accompanying crisis in their psychological systems as well as their roles and relationships (Bibring 1959). Among the many concerns, Sri Lankan women endure anxieties about the gender of the child. Many other social issues add to the psychological stresses. In some societies, women during pregnancy are thought to be demanding, questioning, dependent and extremely sensitive. Some psychoanalytic theorists view adaptation to pregnancy and motherhood largely as an intrapsychic task (Grossman, Eichler and Winickoff 1980), but also indicate that husband and wife relationships (Wenner and Cohen 1968; Dyer 1963) as well as family and community relationships (Gorsuch and Key 1974) can play a significant role.

A variety of different kinds of support systems can help to cushion the effects of stressful events (Lin et al 1979). Support systems based on family organizations have generally been found beneficial to pregnant women (Key 1982). However, there have been contradictory findings when health outcomes are specifically examined. One US researcher found that adolescent mothers, who were predominantly unmarried, had less weight gain and lower birth weight babies when their basic support came from parents and family members. However, basic emotional and financial support from friends related positively to pregnancy weight gain (Eisenburg 1984). Most researchers have found a positive relationship between health outcome and social support, although there are instances where this relationship was negative (Gierszewski 1983).

Pregnancy is a critical life period involving a substantial degree of change and uncertainty. It requires considerable capability and maturity. Individual women may find it difficult to marshal the necessary physical and psychological strength unless they receive substantial social support. In Asian societies, as elsewhere, traditional support systems based on kinship play a vital role during pregnancy, helping pregnant women deal with the uncertainty and physiological stress (Jeffery and Lyon 1988).

In the cultural context of rural Sri Lanka, the basic support system is located within the larger, extended kin group (**pavula**). The pioneer work of Yalman (1962) on Sinhalese kinship indicates that 'The most important social groups for the individual in the village are his (or her) immediate circle of kinsmen who act together and who regard themselves as a kin group (**pavula**) with a definite identity'. Such a kin group, continues Yalman (1962), 'exhibits considerable solidarity in diverse contexts'.

The kindred (**pavula**) 'is a group of kin pledged to support one another within the general reciprocity of kinship. It is, as it were, a mutual insurance association conceived in the realm of kinship and infused with kinship values. The group (**pavula**) offers security in the absence of other agencies' (Yalman 1962). 'It is formed around the expectation of mutual assistance and support' (Yalman 1962). 'Every individual in this sense has a (**nä**) **pirisa**, at least a few kinsmen who are his active supporters or following. Affluent individuals have a large **nä pirisa** whose extent, strength and unity, are manifested on formal ritual occasions' (Obeyesekere 1967).

Such kin-based family relationships are focal to land tenure and marriage patterns in rural Sri Lanka (Obeyesekere 1967, Tambiah 1958). Obeyesekere's classic study examined these relationships, and described the basic elements. These include the norm of bilateral inheritance with both males and females inheriting property; **ävässa** or cross cousin marriage; and property consolidation which brings about **samagiya** ('concord', 'unity') between two families. In **ävässa** marriages, the two families join together to create a closely knit larger **pavula**, and an alliance between the families. It is also noted that kinship relations in Sri Lanka are significant for labour organization and domestic activities in addition to property inheritance.

While kinship is bilateral in rural Sri Lanka, residence is virilocal. This means that the woman joins the kin group of her husband, initially living with the husband's parents. Usually the young couple establishes a separate household after the birth of the first child. Because the **pavula** is bilateral, and thus every household's **pavula** is distinct from that of other households, the boundaries of **pavulas** are relatively fuzzy on a society-wide basis. They do not constitute enduring property-owning 'corporate groups'.

Another important feature of this kinship system is endogamous caste or **kulaya**. People must marry within their own caste. There is also an incest taboo, which prohibits marriage within the immediate family and with parallel cousins.

Women depend heavily on family (**pavula**) based support systems during pregnancy (Obeyesekere 1963, Obeyesekere 1985). During early pregnancy it is expected that women will experience unsatisfiable cravings, which are referred to as '**dola duka**'. Family members are expected to provide assistance to pregnant women during this time (Obeyesekere 1963).

Besides the psychoanalytic work of Obeyesekere (1963; 1985), focusing on **dola-duka** in early pregnancy, there is hardly any work on pregnancy and its related socio-cultural aspects in Sri Lanka. Pregnancy cravings are viewed by Obeyesekere (1963) as a 'Cultural complex ... related to the social structure and the female personality problems it fosters', and as a system constituting personal symbols which needs 'to be understood in relation to the female role and the psychological problems engendered by it'.

It is interesting that Obeyesekere did not pay much attention to kinship structure in Rambadeniya or Medagama in his examination of pregnancy cravings, considering his classic work on land tenure in Medagama (Obeyesekere 1967), which provide a thorough analysis of kinship. It is our expectation that these kinship structures and relationships of **pavula** will be manifested in the pattern of social support offered to pregnant women, especially during her last two trimesters of pregnancy, which is characteristic of hunger (**badagini**) and a desire to eat (**ásáva**). This concept of 'desire to eat' **ásáva** is entirely different from the cultural concept of '**dola duka**' described by Obeyesekere (1963). **Dola duka** is characterised by food repulsion, vomiting and nausea (Obeyesekere 1963). Desire to eat or **ásáva** during the last two trimesters, on the other hand, is described by women in the village as constituting a greater ability and desire to eat 'anything or

any amount of food any time of the day' (*ona taram kanna puluwan kále*). In a similar cultural setting in India, it has been found that weight gain of pregnant women increases during the second trimester (Pinheiro, David, and Joseph, 2001) where cultural patterns tend to less regulate consumption practices of pregnant women.

The average weight gain recommended during pregnancy as indicated in manuals on maternal care in Sri Lanka and other developing countries is around 22 lb. or 10 kg (De Silva 1990). In the developed countries the patterns of weight gain are quite varied: women may gain between 10 to 40 pounds (Kay 1982). Thus far, no studies have been conducted on patterns of weight gain in Sri Lanka. No consideration has been given to the possibility that the weight gain during pregnancy might be related to behavioural factors and family relationship networks. The present paper focuses on behavioural factors as they affect weight gain during pregnancy. It provides a perspective on weight gain by pregnant mothers in Sri Lanka, which may have potential for application to other developing countries in the region.

SETTING

The fieldwork reported in this paper was carried out in Mawana (pseudonym), a large rural area in the district of Kegalle. The general area of Mawana has a population of about 15,000, mostly living in small hamlets of about 50 to 150 families each. Mawana is a hilly agricultural area with terraced paddy fields and streams typical of up-country (hill-country) Sri Lanka. The hilly areas where most of the houses are situated are only accessible by footpath. Elite families live near the roadsides, which passes through the community and connects with the two urban areas at each end. These two urban areas provide facilities such as hospitals, government administration offices, shops and secondary schools serving the villages in the surrounding area.

Maternal and child health care is provided through monthly clinics which are held at the village health centres (*Saukya Madyastana*) located in the area, one for each Family Health Worker (FHW, who is now known as the Public Health Midwife or PHM) division of 3000-5000 population (De Silva 1990). The Health Volunteers (HVs) who are trained and supervised by the FHW visit pregnant women in their homes to discuss their health problems and provide health

education. Over 90% of pregnant women in Mawana deliver their babies in government hospitals.

The social stratification in the village is largely based on the traditional caste structure. Low caste families own little land. They usually work as tenant farmers for the rich, high caste landlords. As a result, their ability to move up in social and economic status is limited compared to high caste families. Prestigious positions in the village, such as the village headman (*gramasevaka ralahami*) or the registrar for births, deaths and marriages (*lekam mahattaya*) are held by high caste people. Marriage types also tend to vary between the rich and poor. Arranged marriages, where a partner is chosen by the parents and kinsfolk, involving a dowry, are more common among the affluent families. Often such marriages are contracted with families in distant villages. Many marriages in the poor sectors of the village are a result of elopements (*panala yanawa*). Customs such as offering dowries, matching horoscopes (*kendare*), are generally not observed in such elopements. Instances were found of couples who married after the woman got pregnant or were planning to get married after the child was born. It is, however, erroneous to view this practise as an extension of the urban, middle class, consensual or love marriage.

Food Gifts: The Background

In rural Sri Lanka, Pregnancy is kept confidential in the first two to three months. Knowledge is limited to immediate and intimate members of the family such as husband, mother or mother-in-law, and sisters and sisters-in-law. Since many pregnancies are not planned, sometimes the women themselves are not aware of it until the physical symptoms appear. There are some women who do not know that these symptoms indicate pregnancy. Vomiting and nausea may be the first signs of pregnancy and the point when the close kinsfolk begin to talk about the pregnancy of the newly wedded woman. Usually when a woman shows the signs of pregnancy, she is specially treated and cared for by her husband and his kinsfolk. The duration of pregnancy has been described as a 'holiday' from her routine daily chores (Obeyesekere 1963). The special care and treatment during this period is highly functional towards making this 'holiday' happy and fruitful. 'It is considered great sin (*pav*) to ill-treat or neglect the woman during this period' (Obeyesekere 1963). This pattern contrasts sharply with those reported in many parts of India (Jeffrey, Jeffrey and Lyon 1988).

In rural Sinhalese society, it is customary to bring special foods presumably 'desired' by the pregnant woman. This provides an opportunity for kinsfolk to interact with the pregnant woman. A pregnant woman gets food parcels towards the

end of her pregnancy as well as in the second trimester. There is no restriction on the quantity of food or times of eating especially in the second trimester. The food packets gifted to the pregnant women are made large enough for her to satisfy her desire to eat as much as she wishes. When she is approaching the third trimester, she is given foods that are thought to increase her breast milk, ease her delivery, and improve the child's appearance. Among the special types of food given at this stage, shark meat (*Kirimoru*), and Sesame (*tala*) are common. There are also certain foods considered bad for pregnant women. Examples of these are yams (*desi ala*) and fried meat (*badun*).

The food parcels for the pregnant women are prepared with special care, wrapped in a cloth, resembling a bowl of alms (*daana*) offered to Buddhist monks. Usually food gifts are prepared and brought to the pregnant woman by the female kinsfolk. The men however, buy special foods (*kadeappan*) (not found in the village kitchens), when they return home from work, or from trips to the urban areas. Prestigious kinsfolk bring expensive or 'rich' food, which is usually not available in the village. The household of a pregnant woman is always prepared for visitors who drop in to 'see' (*balanta*) the pregnant woman. When such visitors come, the mother-in-law or a sister-in-law of the pregnant woman prepares tea and it is considered a social occasion.

After the seventh month of pregnancy women frequently reduce food intake. This is to prevent the foetus from getting fleshy and heavy, which is believed to make the delivery difficult. Some women believe that eating more food can occupy the space in the 'abdomen' (*bada*) that is required for the foetus. In general, after the seventh month of pregnancy, it is considered appropriate to consume lesser quantities of food than normal (This belief is found throughout the whole duration of pregnancy in South India as shown by Nichter and Nichter (1983).

Informants report that kinsfolk who fail to provide food for pregnant women tend to be distanced from the family. The fact that certain kinsfolk did not send food gifts is often mentioned to other relatives and also remembered by the pregnant women as a sign of discourtesy. Also, the Sinhalese believe that failure to fulfil the wishes of pregnant women is a sin and that relatives who do not meet their obligations in this regard will suffer from increased 'perverse appetites' in their next birth. Pregnant women are expected to fulfil these desires in order to prevent their children from having ear infections (Obeyesekere 1963) or other conditions, a belief

which is found in South India as well (Nichter 1980). Thus food gifts provide an opportunity for kinsfolk to visit the pregnant woman and thereby maintain or enhance their relationship with her family.

METHODOLOGY

In order to assess the significance of food gifts as a form of social support during pregnancy, both qualitative and quantitative data were collected.

Study Population:

The study population comprised all pregnant women in Mawana who were in their 4th and 5th months of pregnancy at the time of commencement of fieldwork. The identification of the pregnant women was done through the FHWs and their Health Volunteers, who did a house-to-house investigation for pregnant mothers in the area. Of the 45 mothers identified, 6 did not participate in the study (2 had moved to their mother's village as early as the 5th month of pregnancy, and 4 were excluded due to lack of co-operation). Of the remaining 39 pregnant women in this study, three abortions and one stillbirth were reported.

Data Collection:

The pregnant women were interviewed once a month. At each interview they were asked to recall all visits with food gifts of the previous week, and to identify their relationships to the persons providing the foods. The number of recall interviews varied with each woman depending on the stage of pregnancy at which she was first contacted, and her duration of stay at her husband's village. The FHWs assisted in weighing the mothers every month. Data on socio-economic status were collected in a separate survey of these households at the beginning of the study.

Measurement of Variables:

Data on household possessions were used to create a Material Style of Life (MSL) scale, using the ANTHROPAC computer programme (Borgatti 1989, 1990). This scale was used for assessing household level variations in living standards within the community. The MSL scale was calculated based on 10 items pertaining to each household. They were radio, TV, sewing machine, bicycle, wall clock, settee, house type and household income. House type observations consisted of three items, roof, floor and wall types. Household income was categorised into high and low. The Kuder-Richardson reliability of the scale is 0.759 (Cronbach's Alpha) and the eigenvalue of the first factor (6.816) is more than three times larger than the

second factor (1.273). Some 68% of the variation in the population is explained by the first factor among those mentioned items. The internal consistency explained by the alpha and the eigen value of the first factor justify treating the MSL variable as an unidimensional scale and hence summing the individual items to arrive at a single individual score.

Weight gain data were collected using measuring scales available to the FHWs in the area. These instruments did not record any change of weight less than 500 grams. Therefore, any woman who had gained weight less than 500 grams was considered as having had no weight gain over the past month. The data were used to obtain a total weight gain over the period under investigation by subtracting initial weight from the final weight. The mean weight gain during the period was 2.5 kg which was used as a cut-off point to create a categorical variable consisting of two groups: a) 'low weight gain' (less than 2.5 kg) and b) 'high weight gain' (more than the mean weight gain).

Relationships among the variables were analysed using ANTHROPAC and SYSTAT statistical packages. Analysis included measurement of association between categorical variables using Chi Square test.

RESULTS

General:

The distribution of pregnant women by parity indicates that there were 10 (25.64%) women with no previous childbirth; a total of 14 (35.90) women with one child each, 7 (17.95%) women with 2 children each and 8 women (20.51%) with 3 or more children each. The maximum number of children was 6 and the median was 1 (SD 1.4). The mean age of the population was 26.7 (SD 4.5). The oldest woman in the population was 40 years old, while the youngest was 19. Age distribution by parity is shown in table 1.

Parity	Age Group (years)					TOTAL	Mean age
	<22	23-26	27-30	>31			
No children	2	5	3	-		10	24.9
One child	4	6	4	-		14	24.2
Two children	-	2	4	1		7	28.5
Three children	-	1	2	5		8	31.4
TOTAL	6	14	13	6		39	26.7

The Food Gifts:

There were 355 food gifts representing 87 different kinds of food received by the pregnant women during the period under investigation. The average number of food gifts per woman was 9.1. These were gifted in the form of packets, parcels, or dishes. Based on the knowledge of food classification in the village, these 87 food items have been grouped in to 7 types as shown in table 2.

Count	Percent	Food Types
21	5.9	Breakfast food
31	8.7	Fruit
44	12.4	'Kadeappan' *
90	25.4	Rice preparations
35	9.9	'Rich' food
94	26.5	'Traditional' sweets
40	11.3	'Maalu' or 'curries'**

* Foods bought at the village kiosk, or restaurant in the 'town'.
 ** These are given in the form of dishes, which are known as 'maalu'
 (The food classification mentioned here has the influence of Obeyesekere (1963, 1985)

The distribution of these seven types of food gifts varies with month of pregnancy as shown in table3.

FOOD TYPE	M4	M5	M6	M7	M8	M9	TOTAL	PERCENT
Break fast	14.3	28.6	23.8	19.0	14.3	0.0	21	100.0
Fruits	16.1	3.2	32.3	19.3	19.3	9.7	31	100.0
Kadeappan	4.5	31.8	25.0	25.0	11.4	2.3	44	100.0
Rice	11.1	23.3	27.8	13.3	16.7	7.8	90	100.0
Rich food	14.3	17.1	20.0	22.8	25.7	0.0	35	100.0
Traditional	7.4	26.6	18.1	26.6	15.9	5.3	94	100.0
Curries	17.5	40.0	27.5	2.5	7.5	5.0	40	100.0

Monthly distribution of food types indicates that almost every food type maintains a peak in fifth and sixth months with a gradual decline in eight month and after. This pattern is in conformity with the perception of Mawana villagers that the duration of pregnancy comprises two parts; early pregnancy and late. Advent of the seventh month signifies the beginning of the late pregnancy with the customary visits to the woman's mother for prenatal care and the gradual reduction in food intake in order to make the delivery easy. Clustering of food types into the two types of early and late pregnancies as in table 4 indicates that their distribution is significantly different.

Food Types	EARLY PREGNANCY	LATE PREGNANCY	TOTAL
Breakfast food	14	7	21
Fruit	16	15	31
'Kadeappan'	27	17	44
Rice preparations	56	34	90
'Rich' food	18	17	35
'Traditional' sweets	49	45	94
'Maalu' or curries'	34	6	40
TOTAL	214	141	355
TEST STATISTIC	VALUE	DF	PROB
PEARSON CHI-SQUARE	15.457	6	0.017

Breakfast foods, 'curries' or dishes and rice preparations are mostly provided during early pregnancy. Traditional sweets, rich foods, *kadeappan* and fruits are provided more or less equally during both periods.

Food Gifts and Kinship:

The frequency distribution of relationship of persons giving food gifts indicates that the pregnant woman's mother, her sisters and her husband are the key providers of food gifts. Excluding friends and neighbours, about 75.0% of persons providing foods were female relatives.

Table 5
Relationship of persons
giving food gifts to pregnant women
(355 gifts)

COUNT	PCT	KINSHIP/RELATIONSHIP
14	3.9	No mention
2	.6	School welfare
13	3.7	Friends
15	4.2	Neighbours
3	.8	Her son/daughter
18	5.1	Her brother
5	1.4	Her father
3	.8	Her father's brother
4	1.1	Her father's sister
1	.3	Her mother's brother.
18	5.1	Her mother's mother
71	20.0	Her mother
24	6.8	Her mother's sister
70	19.7	Her sister
2	.6	'Massina' (male cross cousin)
17	4.8	'Nāna' (female cross cousin/ 'sister-in-law')
1	.3	His father.
24	6.8	His mother
50	14.1	Husband

Further grouping of persons giving food into the **pavula** categories indicates that husband's kinsfolk (his **pavula**) contributes much less food to the pregnant woman compared to the wife's kinsfolk (her **pavula**) as shown in table 6. It is important to mention that a fair number (8.0%) of food gifts came from the friends (women) and neighbours.

Of the 39 women, only 4 went out of the area to their mother's home at the seventh month of pregnancy. This is not necessarily a big change as many of the women who stayed at their married homes, had natal homes nearby. In earlier times it had been usual that women returned to their natal homes for childbirth, particularly for their first delivery. This, however, is not the practise in north Indian villages where the woman always delivers at the husband's house (Jeffery, Jeffery

and Lyon 1988). We note that considerable proportion (60.8%) of food parcels was received from the relatives (**pavula**) of the pregnant woman (table 6).

Friends/Neighbours	Husband's Kinsfolk (His Pavula)	Wife's Kinsfolk (Her Pavula)	Other
8.0	29.5	60.8	5.3

The differences between the two **pavulas** in their contribution to the pregnant mother's food gifts are not only a matter of scale but also of kind, as shown in table 7. The woman's **pavula** provided more rice preparations, curries (*maalu*) that go with rice preparations, and traditional sweets. The husband's **pavula** gifted relatively more fruits, **kadeappan** and 'rich food'. Pregnancy related food offerings often promote matrifocality, an increase in women's responsibility towards their fellow women, and increasing importance of wife's kin over husband's kin. The relationships during pregnancy thus lead to strong female networks, particularly of those women on the wife's side of kinship. While the men are an aloof category in the network of pregnancy related rituals and offering of foods, wife's relatives, particularly women, are in charge of reproduction related activities that surround the pregnancy of a woman, and wield power in reproductive function. Such adaptations initiated by the relative absence of males in the pregnancy related networks, most obviously at food offerings, however reflect significant transformations in gender roles, relations and ideology during pregnancy.

	Her Pavula	His Pavula	Total
Breakfast	12	6	18
Fruit	14	14	28
'Kadeappan'	22	20	42
Rice Preparations	62	17	79
'Rich' Food	10	16	26
Traditional food	72	13	85
Curries	24	6	30
TOTAL	216	92	308

Many informants (pregnant women) indicated that food gifts (**kāma**) provide an important element in their everyday diet. One woman experiencing her first pregnancy observed that 'the food gifts I get are quite adequate for my husband and me. My husband, however, wants a meal prepared by me [everyday]. So, even when I get sufficient food in the form of gifts, I still have to cook for my husband'. Another woman, who was very poor and whose husband had deserted her after she became pregnant, indicated that 'many times I eat these food [food gifts]. Were it not for my kinsfolk (her **nādayo** or her **pavula**), there would be big trees on my graveyard by now'.

Food Gifts in relation to MSL, Marriage type and Caste:

Distribution of food gifts does not show any significant association with caste, material style of life or marriage type of the pregnant women as indicated in table 8.

VARIABLE	Below Median (n=21)	Above Median (n=18)	P.value
MSL Low	12	11	n.s
MSL High	9	7	
CASTE High	15	13	n.s
CASTE Low	6	5	
Love Marriage	17	10	0.087
Arranged Marriage	4	8	

(The median number of food gifts=9)

Food Gifts and weight gain:

Table 9 shows weight gain in relation to the number of food gifts received. It shows that there is a significant association between the number of food parcels received and weight-gain of the women. This indicates that food gifts actually constitute a significant element in food intakes during pregnancy. In this context it is important to find out what other factors, if any, contribute to weight gain.

VARIABLE	LOWER Weight gain	HIGHER Weight gain
LOWER FOOD GIFTS	16	5
HIGHER FOOD GIFTS	8	10

(Chi Square 4.127 p 0.042)

Table 10.
WEIGHT GAIN IN RELATION TO FOOD GIFTS, CASTE
AND MARRIAGE TYPE

VARIABLE	Below mean wt gain (n=24)	Above mean wt gain (n=15)	p.value
MSL low	16	7	n.s
MSL High	8	8	
CASTE High	18	10	n.s
CASTE Low	6	5	
No of kinsfolk giving food packets:			
=< 4 persons	14	7	n.s
> 4 persons	10	8	
No. of food packets given by Her Pavula:			
Less than median	16	8	0.015
More than median	8	11	
No. of food packets given by His Pavula:			
Less than median	14	8	n.s
More than median	10	7	
Love Marriage	19	8	0.089
Arranged Marriage	5	7	
(Mean weight gain =2.5 kg)			

Table 10 shows the association between weight gain and major variables related to kinship organization in the village. Caste and MSL have no association with weight gain of the pregnant women. A significant association is reported between food gifts given by the woman's kinsfolk (her **pavula**) and weight gain. The association between marriage type and weight gain is not statistically significant.

The same relationships were examined separately for the low and high MSL groups. Most of the relationships showed very little difference between the two groups. However, this analysis showed that the relationships of love marriages to low weight gain was overwhelmingly a factor in the low MSL group. Of the 18 love marriages in the low MSL group, 15 (83.3 %) had low weight gain while it was 44.4 % of the consensually (love) married women who had low weight gain in the high MSL group. 86.0% of women with higher weight gain in the low MSL group

had food gifts from the woman's **pavula** while it was about 62.0% in the high MSL group.

Table 12

Log Linear Analysis of Food gifts, Weight gain and MSL

High MSL

Low Gifts

High Gifts

Low Wt. gain 6 2

High Wt. gain 3 5

Low MSL

Low Gifts

High Gifts

Low Wt. gain 10 6

High Wt. gain 2 5

Model	G-Square	DF	Probability
[1,3]	8.261	4	0.082
[2,3]	4.937	4	0.294
[1,2]	3.305	4	0.508

We recognise that the sample is rather small for log linear modelling. Nonetheless, it is interesting to examine the pattern that emerges. The best model in the log linear modelling is that food gifts are the main contributor to weight gain of the pregnant women. Material Style of Life, hence economic resources as such, do not predict the food gift pattern, and certainly MSL does not contribute separately to women's weight gain. All these relationships are fairly clear in tables 8 and 10. The log linear analysis confirms that conclusion.

The relationship of love marriages vs. arranged marriages make it further interesting because it may be the case that the women who contracted love marriages get fewer food gifts (tables 8 and 10). This would indicate that arranged marriages provide a better network for gifting of food packets. There seems to be the possibility that, if the sample were large enough, the argument would result in more food gifts and arranged marriages contributing to higher weight gain. This appears to be independent of MSL though there were more women with low weight gain in the low MSL group.

DISCUSSIONS AND CONCLUSIONS

In the preceding analysis it was shown that among rural Sinhalese women food gifts and the woman's kin groups, marriage type, are closely related to weight gain in pregnancy. Effects of the woman's **pavula** in the provision of food gifts during pregnancy are seen across caste structure and socio-economic status (MSL). Food gifts were a key factor associated with weight gain during pregnancy in Mawana. This shows that pregnant women in rural Mawana who get continuous support from their own **pavula** kinsfolk such as their mothers and sisters are well looked after during pregnancy in terms of their food requirements. This relationship of weight gain and food gifts, however, is more important in the low MSL group (comprising poor women of low social status) which clearly shows that in situations of poverty the role played by food gifts, particularly from the woman's **pavula** kinsfolk is crucial for the woman's (and baby's) health. Participation of the woman's **pavula** in the matters pertaining to the pregnancy is, however, affected by the type of marriage. In this community, those who contract arranged marriages are given recognition in the kinship network by way of a marriage ceremony and a feast participated in by the **pavula** kinsfolk of both man and wife. The majority of women who contract arranged marriages live virilocally in the husbands' family (his **pavula**) until the first baby is born. Food gifts during pregnancy provide a socially acceptable means through which the woman's natal family (her **pavula**) could interact more frequently than usual with the pregnant woman who lives with the husband in his **pavula** or village. During this period provision of food gifts is also considered an obligation of the man's **pavula**.

In contrast, those marriages without a socially acceptable marriage such as elopements often create a conflict situation between his **pavula** and her **pavula** resulting in either or both families not participating in matters pertaining to the new couple including pregnancy. This conflict situation in the kinship network is only a passing phase in many families but in certain instances such as inter-caste marriages they last for generations.

It is clear that long-standing social support systems concerning appropriate kinship behaviours during a woman's pregnancy have important implications for the health and well being of the expectant mother, especially her weight gain. It is therefore important that such culturally appropriate kinship support systems be strengthened through micro level participatory programmes in rural areas such as Mawana.

Particularly important is the finding that socio-economic status as measured through Material Style of Life and caste status appears to be unrelated to the mothers' weight gain. This finding is especially important in communities where there are a number of families living at or near poverty levels. Programmes intended to improve

the nutritional and other health aspects of pregnancy and the birth outcomes must take into account these positive culturally patterned behaviours and social support systems without subscribing to the pessimistic view that all efforts directed toward improving health problems must primarily deal with the economic issues.

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