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Research Application Summary

Household nutritional knowledge, attitude and practices associated with consumption of wild fruits and vegetables in Acholi Sub-region of Northern Uganda

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Abstract

Rural households mostly utilise wild fruits and vegetables as a supplement to household nutritional needs during lean seasons. However, nutritional benefits derived from a given food are influenced by nutritional knowledge, attitude and practices (KAP) employed in their utilisation. The study assessed nutritional knowledge, attitude and practices associated with wild fruits and vegetables consumption in Acholi Sub-region of Uganda. Individual household questionnaire was used to collect data from 192 households. Results indicate that there was a low level of nutritional knowledge (48%), good attitude (60%) and poor practices (29%). There was no significant difference between men and women as well as between districts in terms of KAP. The determinants of good nutritional knowledge (nutrition training and age), attitude (age of respondents) were identified as the possible routes through which KAP associated with wild fruits and vegetables consumption can be improved to enhance their contribution to household nutrition.

Key words: Attitude, knowledge, practices, vegetables, wild fruits, Uganda

Résumé

Les ménages ruraux utilisent principalement des fruits et des légumes sauvages comme complément aux besoins nutritionnels pendant les saisons maigres. Cependant, les avantages nutritionnels dérivés d'un aliment, sont influencés par les connaissances, les attitudes et les pratiques nutritionnelles utilisées. L'étude a évalué les connaissances nutritionnelles, les attitudes et les pratiques associées à la consommation de fruits et légumes sauvages dans la sous-région Acholi en Ouganda. Un questionnaire a été utilisé pour recueillir des données sur 192 ménages. Les résultats indiquent qu'il y avait un faible niveau de connaissances nutritionnelles (48%), bonne attitude (60%) et mauvaises pratiques (29%). Il n'y avait pas de différence significative entre les hommes et les femmes ainsi qu'entre les districts. Les déterminants d'une bonne connaissance nutritionnelle (formation nutritionnelle et âge), l'attitude (âge des répondants) ont été identifiés comme les voies possibles par lesquelles les connaissances, les attitudes et les pratiques nutritionnelles concernant la consommation de fruits et légumes sauvages peuvent améliorer leur contribution à la nutrition familiale.

Mots clés: Attitude, connaissances, pratiques, légumes, fruits sauvages, Ouganda

Background

The Acholi Sub-region, located in Northern Uganda is the second most acute food insecure part of the country after the Karamoja Sub-region (Uganda IPC Technical Working Group, 2013). In most of the Acholi Sub-region, nutritional needs of people are mostly met by own production (NRC, 2008; Tusiime *et al.*, 2013). However, during the lean seasons, households' own food production is not enough to support households' food and nutrition needs. Consequently, utilisation of wild fruits and vegetables provides an alternative means of meeting household food and nutrition needs (Pilgrim *et al.,* 2007). Utilisation of wild fruits and vegetables is very crucial especially for resource constrained households (Okori *et al.*, 2009). The objective of this study was therefore to assess the nutritional knowledge, attitude and practice (KAP) associated with wild fruits and vegetables consumption in the Acholi sub-region of Uganda.

Literature summary

Food consumption studies (Bogers *et al.,* 2004; Anderson *et al.*, 2005) suggests that nutritional knowledge and attitude are important in explaining variations in food choices among households. Other than choice, the level of utilisation of food by households greatly depends on their nutritional knowledge (Modi *et al.,* 2006), attitude (Ul Haq *et al*., 2012) and dietary practices that minimize loss of nutrients before, during preparation, or utilization in the body (Mepba *et al.,* 2007). Therefore understanding the KAP associated with a given food is vital for its proper utilisation in household nutrition.

Study description

A cross sectional study was carried out in Amuru and Gulu districts in northern Uganda located at 02050'N 33005'E and 02045'N 32000'E, respectively. The survey was carried out using a pre-tested questionnaire that was administered face to face by the interviewers. The interviewers were a team that had been trained in individual household method procedure and had ever participated in a nutrition survey.

The two districts were purposively selected because previous studies that documented the consumption of wild fruits and vegetables were conducted in the two districts (Oryema *et al.*, 2013). Random sampling was used to obtain two sub-counties per district, two parishes per sub-county and two villages per parish, respectively, while systematic sampling was used to draw 12 households from each village.

Research application

Results showed that the mean knowledge and attitude were higher than practices in both districts (Table 1). This has been previously demonstrated in other KAP studies. A study conducted in Swaziland (Masuku and Lan, 2014) found mean KAP among women living with HIV/ AIDS to be 67%, 67% and 51%, respectively. Similarly, another study

from India (Anand and Puri, 2013) found the mean KAP among people living with HIV/ AIDS to be 55.3%, 76.4% and 54%. A critical look at both studies shows that nutritional knowledge and attitude were higher than the level of practices. This shows that the practices are compromising the extent of nutrition derived from wild fruits and vegetables despite the good attitude towards their consumption.

Our findings also show that nutrition training and age of the respondents was the major determinants of good nutritional knowledge. This is comparable to findings from Baghel *et al.* (2015) which found nutritional knowledge to be determined by a number of factors such as age, nutrition training and gender, among others.

Table 1: Variation in knowledge, attitude and practice variables with districts and gender in northern Uganda

KAP variables	District		*p*
	Gulu	Amuru	
Knowledge	46.78±14.75	48.58±17.44	0.441
Attitude	60.96±9.66	59.20±11.78	0.261
Practices	29.30±19.27	28.91±19.98	0.890
	Gender		
	Male	Female	
Knowledge	49.50±13.18	46.97±17.15	0.277
Attitude	60.67±10.94	59.85±10.75	0.638
Practices	28.94±19.85	29.17±19.54	0.941

Values are significant at ($p<0.05$) Source: Survey results, 2016

Additionally, age of the respondent was the only determinant of good nutritional attitude. However, Masuku and Lan (2014) found attitudes to be determined by education level of the respondents. In our study, good nutritional practices were not determined by any socio-demographic variables.

Table 2: Relationship between good nutritional KAP and Socio-demographic variables

	Knowledge		**Attitude**		**Practices**	
Independent variable	**Coefficient** (B)	**P-value**	**Coefficient** (B)	**P-value**	**Coefficient** (B)	**P-value**
Gender	-0.619	0.083	-0.417	0.481	-1.045	0.568
Nutrition training	0.710	0.028*	0.643	0.241	-18.087	0.998
Age	-0.023	0.044*	0.048	0.014*	0.012	0.805
Distance to nearest market	-0.029	0.416	-0.009	0.917	0.062	0.892
Household size	0.036	0.496	0.611	0.314	0.022	0.918
Group membership	-0.161	0.663	-0.362	0.529	0.145	0.940
Interaction with VHT	-0.123	0.724	-0.150	0.302	-0.182	0.911

*Values are significant at 5% Source: Survey results, 2016

The determinants of knowledge and attitudes were identified as pathways through which the utilisation of wild fruits and vegetables can be improved to enhance household nutrition during lean seasons.

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