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RESEARCH ARTICLE

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ACCESSIBILITY OF ESSENTIAL MEDICINES AMONG THE MARGINALIZED COMMUNITIES: A CASE STUDY OF TANA RIVER COUNTY, KENYA

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Abstract

The researcher explored the dynamic relationship between accessibility of medicines and the health systems building blocks by establishing the cultural factors that influenced demand and utilization of essential drugs to the marginalized in Tana River County. This cross-sectional descriptive survey selected 283 respondents by lottery approach simple random sampling across 27 villages in Tana River County and 30 health providers both in government and non-governmental owned dispensing health facilities. Culture (taboo) had an effect on the use of certain essential medicines among 133 (47%) of the respondents. Health-seeking behavior among minority 43 (15%) was determined by the head of the family. Predictions on the population indicated >23% chance that culture had an effect on acceptability and utilization of essential medicines. *rs* (283) = 0.604, *p* <0.001. To improve on demand for essential medicines, socio-cultural behavior change and communication strategies should be in use targeting improved acceptability of essential medicines.

Key Words: Essential Medicines, Acceptability, Health Systems, Culture

INTRODUCTION

Essential medicines are those drugs that satisfy the priority health care needs of the population and were intended to be available within the context of functioning health systems at all times in adequate amounts and at a price that the individual and community can afford (de Buschiazzo P.M. et al, 2003, p.16).[1] The world's population without access to essential medicines was estimated at 1.7 billion(Organization & others, 2004).[2] Further revelations by Bisilliat & Policy, (2001)[3] clarified that of the 267 million Africans (making almost half African population) without access, majority were women and children living in the remote parts of Africa such as Arid and Semi Arid Lands (ASALs), raising the concern for the poor and marginalized populations in Arid and Semi-arid areas of Africa. The regions were also characterised with poor infrastructure and these features made livelihoods in these regions difficult and Health Service Delivery of essential medicines to the populations became challenging. Located in Coast Province, Tana River County was classified as arid (Ruto, Ongwenyi, & Mugo, 2010).[4]

Factors that influenced accessibility of pharmaceuticals and medical supplies stemmed from demand side and/or the supply side (Jacobs, Ir, Bigdeli, Annear, & Damme, 2011, pp. 288–300).[5] Demand side factors influenced people's ability to use the services while supply side factors were aspects of health services and health system that determine utilization. Further work by Jacobs, Ir, Bigdeli, Annear, & Damme, (2011)[5] observed that these factors were identified along all dimensions of access; geographical and financial accessibility, availability, acceptability and quality. This observation was supported by Obrist et al., p. e 308, (2007),[6] who recommended an innovative approach to help improve access to medicines in remote settings by analyzing the dynamics of supply and demand factors.

Issues surrounding access are complex at times and were culturally specific; solutions needed be sought for particular regions and situations (Leach, Paluzzi, & Munderi, 2005, p. 187).[7].The culture of nomadic and pastoralist groups is one unique situation where the culture is largely communal and formal education is not well covered. This led to such communities being social-culturally alienated. Health leaders and managers noted such cultural alienations which if not addressed undermined the ability of people to access and use health systems successfully especially in rural areas(Vriesendorp, 2010).[8] The Health managers needed identify opportunities and threats within these cultures so as to enhance access effectiveness.

Culturally significant factors include economic status, gender roles, and stigmatization of diseases(Blas, Kurup, & Organization, 2010, pp. 6–7).[9] Gender, was key determinant in who got access to essential medicines, why and how. These social cultural features largely determine the ability of individuals and families to access the medicines that are available at any given location(Blas et al., 2010).[9]

Pharmaceutical manufacturers and Suppliers used cultural information on values, perceptions, preferences and behaviours to tailor acceptable medicines since culture had great influence on consumers buying behaviours (Tanner & Raymond, 2016).[10] While Health policy makers used information on cultural factors to promote culturally appropriate health literacy and community support taking into account beliefs(Health Policy Institute, 2004).[11]

It was therefore important to get information on cultural norms and associated factors like gender influences to inform policies that can improve accessibility in specific locations.

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METHODOLOGY

Study Design

The researcher used a cross-sectional descriptive study. The study was a cross-sectional survey given that the issues involved concern more than one section of the study population. Cultural factors of taboos and or restrictions were used as the Independent Variables. This was because cultural practices are reflective of the peoples public health information inputs required to enhance health services delivery. Acceptability of essential medicines, as a key output of health services, was used as the dependent variable.

Independent Variables as Cultural factors and Acceptability of Essential Medicines as the Dependent Variable

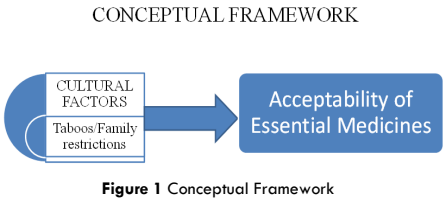

Figure 1 Conceptual Framework

Study Location

The study was conducted in Tana Delta District, Tana River County in Coast Province of Kenya, purposively selected to represent the marginalized populations of Kenya. Tana Delta District was classified under Category A (85-100 % arid). The Area depicted the most extreme marginalization due to geographical conditions, policy and development neglect, as such there exist unique challenges in accessing essential medicines' worth studying.

Study Population

The populations targeted in the study were health workers at dispensing facilities, both government and non-government owned and men and women of the communities residing in the area. This was because the health workers are familiar with supply patterns and the community members are insightful of the demand and utilization patterns of essential medicines.

Sample Size

The sample size of the study was obtained through a simple random sampling procedure. A total of 30 pharmaceutical retailers and 283 community members were used in the survey. The study used Simple random sampling using lottery approach procedure for randomization for community subjects. In this case, the total number of villages were listed and assigned unique numbers.

The numbers were then written down separately in small papers, folded, put in a small basket and shuffled to mix them. From that, the desired number of subjects were be selected by picking the folded papers randomly.

Once picked the numbers indicated on the selected papers were matched to the list of the villages and these were the subjects for the study. This gave each member of the study population across villages an equal chance of selection.
Pharmaceutical retailers, were purposively selected as the key informants of the study due to their vast knowledge on pharmaceutical management, one qualified pharmacist subject per retail shop were used. Sampling was calculated using the Raosoft sample size calculator with the total population of retailers taken as 30 and the total population of residents as 70,000 in the District. In both cases a 5% margin error and a 95% confidence level is adopted.

RESULTS

Culture had an effect on the health issues related to women and children, with less impact on men. Of the 238 respondents interviewed, 133 (47%) agreed there was a taboo to the use of certain essential medicines for women: (Contraceptives), children (ORS), elderly (Antibiotics). A modest section of respondents (71) 25% believed Oral Rehydration Salts are a taboo for children, 57 (20%) believed Iron Supplements medicines are prohibited for women, while only (10) 3% believed Antibiotics medicines being a taboo for the elderly.

Table 1 Showing Culture and its Effect on Use of Essential Medicines

Effect of Culture	No	Yes	Total
Women (Contraceptives)	226	57	283
Elderly (Antibiotics)	273	10	283
Children (ORS, Znso4)	178	60	283
Seek permission	243	43	283
Men (Antibiotics)	201	82	283

The health seeking behavior was also determined by the head of the family, mostly the husbands or fathers for a minority 43(15%). (Figure 1)

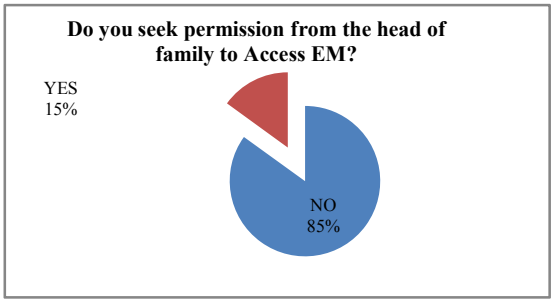

Figure 1 Health-Seeking Behavior with regard to Family's Access to Essential Medicines

Table 1 *Using Regression Analysis to Determine Effect of Culture on Essential Medicines*

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.838[a]	.703	.604	23.15222

a. Predictors: (Constant), VAR00002

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3802.724	1	3802.724	7.094	.076[b]
	Residual	1608.076	3	536.025		
	Total	5410.800	4			

a. Dependent Variable: VAR00001
b. Predictors: (Constant), VAR00002

Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	282.714	24.286		11.641	.001
	VAR00002	-1.161	.436	-.838	-2.664	.076

a. Dependent Variable: VAR00001

that culture has a key effect on acceptability and utilization of key essential medicines. *rs* (283)= 0.604, *p* <0.001.

DISCUSSION

Culture was found to be a hindrance to uptake of essential medicines in Tana River County, Kenya. Table 1.0 evaluated the effect of culture on use of key essential drugs by children, men and women, as well as health seeking behavior of families.

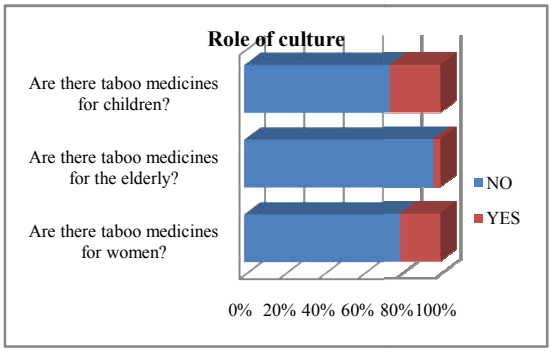

Figure 1 The Role of Culture in Utilization of Essential Medicines across Gender and Age Sets

Up to 47% the respondent observed taboo to contraceptives for women (Figure 1) Cultural and family opinion is particularly important in the demand for contraceptives and wider family planning advice. A study in Pakistan, for example, found that resistance by a husband and cultural unacceptability of contraception were more important determinants than fears of further pregnancy and knowledge of methods (Casterline, Sathar, & Haque, 2001).[13]

Cultural conventions about proper treatment of health issues may also inhibit access. A minority 3 % of elderly men in Tana River showed a convention not to accept antibiotics. One paper reports that the women of the Alur people of Uganda may be thought of as weak individuals if they receive help during delivery (Ndyomugyenyi R., 1998).[14] Children's treatment may be adversely undertaken in communities where woman are not expected to mix freely, particularly with men, utilization of health services from static facilities may be impeded. In Bangladesh, Rashid, Hadi, Afsana, & Begum, (2001).[15] found these cultural restrictions (Pardah) may prevent mothers from accessing medical treatment for themselves or the children.

Weak communication between provider and patients in Tana River could also have led to some products like Antibiotics being unacceptable. Wide differences in social status between practitioner and patient may also inhibit utilization. This may be through feelings of inferiority or simply an inability to communicate properly. This is demonstrated in a range of societies from the use of midwives in Benin to the treatment of low-caste Makkuvar women by higher caste doctors in Tamil Nadu(Ram, 1994; Whiteford & Szelag, 2000).[16,**Error! Reference source not found.**] In order to increase the cultural competence of the health care delivery system, health professionals must be taught how to provide services in a culturally competent manner (Health Policy Institute, 2004).[11]

CONCLUSION

The study concluded that although cultural and family opinion was particularly important in the demand for essential medicines, wide difference in social status between health practitioners and patient may inhibit utilization of essential medicines.

In this study, resident's community of Tana delta in Tana River County agreed that certain essential medicines are a taboo to certain members of the family and at times they had to seek permission from the heads of the family in order to use them.

According to this group, some medicine for women was a taboo and must not be taken while others were taboo for children. There are those who sought permission from the family head (man).

The study recommended Public Health Interventions to educate the communities and especially opinion leaders on the need for women (and men) to use essential medicines and break down historic barriers to utilization of medicines.

The goal of culturally competent health care services is to provide the highest quality of care to every patient, regardless of cultural background. The study further recommended the need for improving the Patient - Provider interaction and institutionalizing changes in the health care system. Therefore health facility providers must be trained to offer culturally sensitive health information.

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