Original article

User perceptions of the quality of nutrition care for children under five year in Botswana

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Abstract

Background: Perceptions about the quality of healthcare attract a great deal of attention due to their influence on user satisfaction and the continued utilization of health services.

Objective: To examine the perceptions of caregivers and healthcare providers about nutrition care for children aged 05 years and the interpersonal communication between providers and caregivers in health facilities in Botswana. **Methods**: Ten focus group discussions involving about six caregivers each and survey data from health providers (n = 39) were used to examine perceptions about nutrition care for children aged 0-5 years and interpersonal communications between providers and caregivers.

Results: Caregivers examined in this study perceived nutrition and dietary screening and intervention as important components of healthcare for children. However, the caregivers were concerned about the frequent shortage of food supplements, the lack of alternative food supplements and programs for children whose needs were not adequately met by existing services. Poor interpersonal communication between providers and caregivers, shortage of supplements and long queues were also identified as concerns by both caregivers and health providers. Although health care service providers reported to have been trained to provide nutrition and dietary care, many were not satisfied with their present skill level in these areas.

Conclusion: The caregivers perceived nutrition care to be an important aspect of care. However, the poor interpersonal communication between providers and caregivers and the low confidence that providers have in their skill level in nutrition care is likely to adversely influence the dependent care abilities of caregivers. [*Ethiop.J.Health Dev.* 2006;20(3):177-183]

Introduction

There is a growing interest in the quality of healthcare services that exist in developing countries. In particular, the interplay between users' perceptions of the quality of health care and users' satisfaction with and continued utilization of health services has attracted much attention (1, 2). It appears that users' perceptions of the quality of health services are influenced by factors related to the competency of providers, access to healthcare, effectiveness of care, availability of health resources and services, and interpersonal relations between users and providers (1, 3-5). Amongst these factors, interpersonal relations between providers and users have emerged as equally important determinants of users' perceptions of the quality of health care as the medical factors. Positive users' perceptions of the interpersonal relations between them and providers have been shown to mitigate the negative impact of the introduction of user fees, lack of equipment and shortage of drugs in developing countries (6). However, the interpersonal relationship between providers and users were neglected during the formative years of many health systems in developing countries (3). Left unattended, the negative user-provider interpersonal relations can lower the utilization of healthcare services (5).

The relative importance of the determinants of users' perceptions across the different health systems may differ due to differences in the characteristics of users and factors unique to the different health systems (7). Therefore, the periodic inclusion of users' perceptions as one of the outcome measures in health systems in evaluation studies is recommended (8, 9).

When user perceptions are examined in contexts where the users' use or lack thereof of services affect their dependents care activities, the theory of dependent care can be a logical theoretical guiding principle (10). This theory is a corollary theory to Orem's self-care and selfcare deficit nursing (11). The theory of dependent care links the concepts of dependent care agent, (parent/ caregiver responsibility), dependent care system (activities and networks the dependent care agents have to engage in order to meet the self care requisites of the dependent and the necessary components of meeting the self care demands of the dependent (10). Orem refers to the necessary components as nursing care technologies and these would include human interaction, communication and nursing care or practice (12). In this study, the later would be equivalent to nutrition education, food and nutrition interventions and other aspects of nutrition and health care services that caregivers would receive from meaningful interactions with health providers.

Within the context of this theory, the dependent care abilities of users are expected to be influenced by their perceptions of the quality of nutrition care provided in health facilities. Negative user (dependent care agents) perceptions of the quality of nutrition care, we argue, can disinterest caregivers from engaging in meaningful interactions with health providers and thus deny them the opportunity to acquire dependant care abilities from health providers and health services. All this may cause the dependent care agents to develop inadequate dependent care systems for their dependents and thus compromise their care. Because child malnutrition and survival are critical issues of concern in developing countries, and can be compounded by inadequate use of healthcare system or failing healthcare systems, user perceptions of the quality of nutrition care must be such that they encourage continued use of health care services. This is particularly important because the general growth and development of children does not only depend on the social status of their families and socioeconomic situation of the country but also on the parental knowledge of health and nutrition services and use of primary health care facilities (13).

This study contributes to the body of knowledge on the users' satisfaction with health care services in developing countries by exploring users' satisfaction with nutrition care provided to children aged 0-5 years in Botswana. An attempt is made to describe caregivers' perceptions of; 1) the importance of nutrition care in the survival of children 0-5 years of age; 2) the adequacy of clinic services in addressing the nutritional needs of children; 3) interpersonal communication between providers and caregivers (users); 4) providers knowledge and perceptions about the adequacy of their training and consequently the nutrition care they provide to children 0-5 years and 5) providers perceptions about their communication with providers. Finally, a theoretical discussion of how the

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interpersonal communication between providers and caregivers and providers' knowledge and competence in addressing dietary and the nutritional concerns caregivers have about their children can affect the dependent care abilities of caregivers, is provided within the underpinnings of the dependent care model.

Methods

Focus group data previously used as a supplementary data source in a study that explored the linkages between Child Survival Programs with malnutrition alleviation strategies in Botswana were examined to characterize the caregivers' perceptions about the quality of nutrition care provided to their children (14). Participants were caregivers whose children had received preventive and/or curative care in randomly selected health facilities in Southern Botswana. The preventive services, which were offered through the Child Welfare Clinic, included growth monitoring, supplementary feeding, and Immunization services while the curative services included primary medical care for various childhood illnesses. The recruitment of focus group participants took place at the clinics after the caregivers exited consultation rooms.

The focus group participants considered; 1) the importance of nutrition assessments and interventions in the clinic care of children 0-5 years of age, 2) the adequacy of clinic services in addressing the nutritional needs of children, and channels of communication between caregivers and providers in health facilities. The participants were requested to limit their observations to their experiences in their clinics. All focus group discussions were conducted in the respondents' native language (Setswana) and were moderated by the first author.

Overall, ten focus groups of about six members each were conducted. The sessions were captured on videotape. The focus group moderator prepared the transcripts prior to analysis. During the analysis, salient themes specific to each of the research questions were identified and the frequency of their occurrence across the groups was established. Careful attention was taken to establish the frequency of occurrence of themes, phrases and expressions that users (caregivers) used to describe their perceptions relative to the specific research questions.

In addition, a structured questionnaire was used to obtain data from health providers in the study clinics. Data collected included: demographic characteristics, providers' perceptions about the adequacy of their training in dietary and nutrition screening and interventions, established communication channels in their clinics and perceptions about interpersonal communication between providers and caregivers.

Results

Caregivers' perceptions about nutrition care: Caregivers perceived nutrition and dietary assessment to be important for their children. In all the ten focus groups, the importance of nutrition care in both the curative and preventive programs was mentioned (Box 1). There was a strong sense that the programs should work together to provide nutrition interventions. Expressions such as "the programs should work together", "assist each other", "refer ill children between the clinics" were common across the groups.

As shown in Box 2, caregivers across most groups raised several concerns about the adequacy of nutrition care. These concerns included the perceived inadequacy of nutrition assessment, the irregular supply of supplementary foods, lack of Vitamin A doses, and the lack of special programs for children perceived to be particularly malnourished. Participants also raised concerns about the lack of alternative supplements for

Box 1: **Focus group excerpts[1] that indicate caregivers' perceptions about the importance of nutrition care for children seeking care from health facilities[1]** [1]

- Ill children should get medical care first, then the child's nutritional status should[3] be assessed (1,6-7,10) [2]
- When children are ill their nutritional status should be evaluated because children tend to lose weight when they are ill (8)
- Nutrition and dietary screening should occur in both the growth monitoring (preventive) and curative clinic (5).
- The clinics should work together (1-10)
- The growth monitoring clinic should refer ill children to the curative clinic (4)
- Clinics should assist each other in addressing nutrition and dietary needs (4)
- If clinics cannot give you the right food for your child they should tell you what food to provide for your child (6)
- Since Growth Monitoring attendance occurs once a month for each child, children who lose weight in between visits should not wait the whole month for the next Growth Monitoring Clinic; they should be taken to the curative clinic (8, 10)

- There should be a special nutrition class for pregnant women. …all we hear in education classes are immunization schedules (7)

Excepts in this figure and the subsequent figures were translated from Setswana to English by the first author.

[2] The numbers in b identify the focus group from which the statements or phrases were extracted. [3] Phrases or words that reflected caregivers' perception about the provision of nutrition care are underlined

children perceived to have a poor tolerance for *tsabana (sorghum-soy bean supplementary food).* In two groups, participants suggested that a replacement program for the Direct Feeding Program, an intense nutrition rehabilitation program that ceased in the mid 1980s, needs to be put in place (15). Alongside this program, participants also wanted providers to routinely assess the general needs of caregivers whose children are chronically undernourished, as the child's chronic conditions may be suggestive of the caregivers' general needs. Overall, in seven of the ten groups, caregivers' comments suggested that providers can do more to improve the perceived adequacy of nutrition care provided to children.

In three of the groups, some participants indicated that providers often asked a lot of questions in an attempt to screen children who were found to have lost weight during clinic visit. Some of the questions that providers are reported to have asked related to the feeding practices of the caregivers and the illness history of the children.

Box 2**:** Caregivers' Concerns about the Inadequacy of Nutrition Care (Focus Group Number)

Resources Not Always Adequate:

- Irregular supply of food in the supplementary feeding package (1,8)
- Vitamin A doses often not available (8,9,10)
- Infant scales not available (6, 8)
- No special program for very malnourished children (6,8)
- No alternate food supplements for children who do not tolerate weaning food (2)
- Lack of variety (1,8)

Lack of Nutrition and dietary Intervention Activities

- Nutrition and dietary assessment, education or guidance rarely provided (1,2,8,9,10)
- No educational flyers about nutrition (6)
- No help for caregivers with children who refuse to eat (4, 9)
- Providers give conflicting advice for children who refuse to eat (4)
- No help for households with frequently ill or malnourished children (8)
- No special care for children who have lost much weight (6,10)
- No expedited care for children perceived to be very ill or very malnourished (long lines; very ill/malnourished children are expected to join long lines like any other clinic client (1,6)

Providers' perceptions about nutrition training: About seventy-one percent of the providers included in the study reported that their pre-service training in nutrition adequately prepared them to provide nutrition and dietary care to children. However, a smaller proportion of the providers were comfortable with their present skill level in providing nutrition (57.9%) and dietary care (53%) (Table 1). When asked to list three indicators that could reflect the risk of poor nutrition and dietary intake in children, only 12.8% and 35.9% were able to correctly list three indicators of nutritional status or dietary intake respectively. The providers gave variable and often conflicting responses to questions requiring them to provide specific examples of indicators they routinely used to screen children. For example, while 82.1% of the providers reported that they routinely assessed the growth of children, only 45.5% reported that they routinely measured the weights of the children they consulted on.

Table 1: **Dietary and nutrition knowledge, skills and perceptions of practitioners**

Variable	N (%)	Variable	N (%)
Perceived adequacy of training in assessing dietary intake		**Perceived adequacy of training in assessing nutrition risk**	
Adequate	27 (69.2)	Adequate	27 (71.1)
Somewhat adequate	7 (17.0)	Somewhat adequate	8 (21.1)
Not adequate	5 (12.9)	Not adequate	3 (7.9)
Number of appropriate methods for assessing dietary intake		**Number of appropriate methods for nutrition screening**	

None	7 (17.9)	None	3 (7.7)
One	5 (12.8)	One	16 (41.3)
Two	6 (15.4)	Two	13 (33.3)
Three	14 (35.9)	Three	5 912.8)
Never assess dietary intake	7 (17.9)	Never assess nutritional status	2 (5.1)
Satisfaction with skills for assessing dietary intake		**Satisfied with skills for assessing nutrition risk**	
Satisfied	20 (52.6)	Satisfied	30 (57.9)
Somewhat satisfied	11 (28.9)	Somewhat satisfied	6 (15.8)
Not satisfied	7 (18.4)	Not satisfied	2 (5.2)

Caregivers concerns about interpersonal communication: In the discussions regarding communication between providers and users, the participants reported three distinct ways of initiating communication with providers. These are: participants can initiate contact with providers by first contacting the lowest ranking clinic officers especially the Family Welfare Educators, by talking to any visibly accessible provider or by requesting Family Welfare Educators to arrange a meeting for them with the facility manager (also referred to as the Sister-in-Charge). The choice of the users' initial communication contact with the providers was influenced by the subject matter of the communication and the users' comfort level with providers in general. Most participants indicated that they would prefer to initiate their communication with the Family Welfare Educators.

Some of the statements and phrases that caregivers used to describe their interactions with providers are displayed in Box 4. Statements such as "we fear these people", "we are afraid of them", and "they treat us like children," were common and suggested negative user-provider interactions. Open communication between providers and users appears to be limited because participants indicated that they were afraid to share their concerns with providers lest the providers become angry with them, perceived them to be bad people or reported them to the matron.

Participants reported that users were to spoken harshly for reasons that included: failure to coat the child's Child Welfare Clinic card, arriving late at the clinic or failure to recall the immunization schedule for children. Overall, the participants stated that it took a lot of courage for caregivers to approach providers. Despite these difficulties, however, users in one group (group 2) stated that they readily forgave providers because they appreciate the fact that the providers work under pressure (Box 3).

Providers' perceptions about their communication with caregivers: Practitioners fell into two groups with respect to their perceptions about communication channels between them and caregivers (Table 2). One group of practitioners 20(51.3%) thought that there were established communications systems between caregivers and clinic staff. In the other group, 15(38.5%) practitioners felt that there were no established communication channels between caregivers and practitioners, while 4 (10.3%) denied any knowledge of the presence or absence of established systems of communication between practitioners and caregivers.

Among the 20 practitioners who affirmed the existence of well-established communication channels between caregivers and practitioners, nine (45%) felt that health education sessions that are routinely held in the clinics constitute one type of communication system that is currently in place. These practitioners felt that caregivers are free to communicate their concerns or make care recommendations about any clinic service during the question and comments sessions following the health talk /education[1]. Six (30%) practitioners felt that caregivers were free to contact the sisters-in-charge[2] of the clinic; and that this free access was perceived to be the second communication channel that takes place between caregivers and practitioners.

Practitioners' perceptions about caregivers' satisfaction with clinic services: Most practitioners reported that caregivers were satisfied with clinic services (Table 2). Practitioners also reported that caregivers had shared with them their concerns about the clinic services. However, twenty-three (60.5%) practitioners reported

that caregivers were dissatisfied with the long queues in the clinics. According to the practitioners, other areas of concern that caregivers identified were the frequent shortages of food supplements and practitioners' use of harsh or "unkind" words when communicating with them.

[1] While at some clinics, the primary researcher sat in with the clients as the health talks were given. The topics varied widely. Sessions were open to all in attendance, hence everyone could ask questions. Not all clinics offered health talks. Some caregivers were observed asking questions. [2]Soster-in-charge of clinic is the local terminology for the nurse who is the head of the clinic.

Discussions

We explored user's perceptions about the importance and the adequacy of nutrition care provided to children 0-5 years of age, users' awareness of communication channels between users and providers in their health facilities and health providers knowledge of nutrition and dietary care for children, as well as perceptions about the adequacy of their training in the same areas and perceptions about their communication with caregivers. Nutrition and dietary care for children seeking clinic care was perceived to be very important by caregivers, but the actual nutrition care

Box 3: **Focus Group Excerpts That Characterize Participants Perceptions of Their Interactions with Providers**

Group 2

- " Our major problem is that we do not have adequate practitioners. Many times one provider works in the injection room, the consultation room and the dispensary..." A practitioner's job is very tiring. Therefore, when practitioners in their tiredness talk to us harshly we forgive them readily. They are people like us and so they make mistakes."

Group 3

- "It is difficult to share ideas with our practitioners. Only few people communicate with providers. Most people do not come for meetings."
- "Many people are not happy with the way things are being run in the clinics, yet you hardly hear people voicing their concerns."
- "When we are satisfied with services, we acknowledge and applaud our practitioners… we show gratitude readily, what is difficult for us to do is to voice our concerns."

Group 4

"Practitioners are very unkind. We are afraid of them. We fear these people."

- "They talk to us like they are talking to little children. I do not like to be scolded by another woman for no apparent reason. They don't talk to us with respect."
- "They don't treat people like people. ...One is even afraid to applaud them when they have done a good job. We are all afraid of them."

Group 5

- "There is a way to communicate with practitioners. When a caregiver has a sick member of the family at home, she should come to the clinic and tell any of the practitioners. They usually send someone to your home to assess the patient and decide if the clinic vehicle should come and transport him/her to the hospital." Group 6.
- "We do not tell them anything. We are afraid that they will become angry at us. If you raise a concern and indicate to providers your troubles, they will respond with hurtful words. That is why we are so miserable and hardly tell them anything."
- "We never tell them our concerns because we are afraid they will be angry. If you raise a concern about an aspect of care, they become angry with you. If you tell a provider that when you take such and such an action, you are doing us some disservice, she will respond harshly. That is why we never say anything to them."

Group 8

- "They start the education late. In addition, they require us to remember the immunizations schedule for children before they can help us. If you do not know the immunization schedule, they do not help you or if they do, it will be after everyone else has been helped."

Group 10

- "It is not easy to talk to providers. I think it is better to use a suggestion box, where we can all deposit our concerns anonymously. We should not raise our concerns face to face as that might cause friction between caregivers who speak up and providers."
- "If you talk to them face to face, they will think that you are a bad person."
- "We have an idea as to which of the providers to talk to and which ones not to talk to. The problem is that often times approachable providers work in different clinic programs than the problematic providers. Hence, even if the approachable providers are informed about caregivers concerns, they can not do anything to improve the situation."
- "How can we thank them? The only person I can applaud is (name of provider). She is the only person who is interested in community projects. However, we are afraid to applaud the helpful providers like her because the others might not like it."
- "I can applaud providers, but I have never experienced any deed that instilled in me a sense of gratitude. If it happens, I will have no problem telling providers."

Table 2: **Perceptions, communication channels and caregivers' satisfaction**

Variables	**N (%)**	**Variables**	**N (%)**
Communication system between caregivers and practitioners established		**are caregivers satisfied with clinic services**	
Yes	20 (51.3)	Yes	33 (84.6)
No	15 (38.5)	No	6 (15.4)
Don't know	4 (10.3)		
Communication channels		**Top 3 Concerns that caregivers told practitioners**	
Talk to Sister-in Charge of clinic	6 (30.0)	Long queues in clinics	23 (60.50
Suggestion Box	2 (10.0)	Shortage of supplements	8 (21.0)
Health talks-open forum	9 (45.0)	Practitioners use harsh words	7 (18.4)
Talk to any clinic staff	3 (15.0)		

provided was perceived to be inadequate. Some programs, particularly the Growth Monitoring and the Supplementary Feeding Programs, were perceived to be better at providing nutrition care than the medical clinics because of the provision of food supplements. Hence, participants expected the preventive and curative clinics to constantly work together in providing nutrition care to children.

While the provision of food supplements and providers' initiative in probing for possible nutrition or health problems in children exhibiting growth faltering were the two most frequently given examples that users perceived reflected the efforts of providers in addressing the nutrition needs of children, it is unlikely that such measures were adequate and would be sustainable in addressing nutritional problems of children because of communication challenges reported between providers and caregivers. Beyond the provision of supplements, research suggests that successful and sustainable nutrition interventions are those that combine the provision of supplementary foods with nutrition education, community participation, skill acquisition, and establishment of linkages across community, governmental and non-governmental sectors (16-18). These are factors that require consistent and more positive communication between users and providers than users reported in this study. Observations from previous studies suggest that effective nutrition interventions are characterized, among other factors, by good communication between providers and users, as well as community, governmental and non-governmental organizations (16, 17).

Observations from the quantitative data taken from providers lend some credence to concerns raised by the caregivers. Though most providers reported having been trained in nutrition and dietary care for children, fewer providers were comfortable with their present skill level in these areas. Perhaps, of greatest concern to us, was the fact that most providers were not able to list the correct risk indicators of poor nutritional status and dietary intake although most providers reported that they routinely screened children for poor nutrition and dietary intake.

The interpersonal communication challenges that caregivers face and which are suggested by focus group discussion data to exist in this study were corroborated by providers. Interpersonal communication challenges was the third most common concerns caregivers reported to providers, the first two being the long queues at the health facilities and the shortage of food supplements. Although we can not quantify the agreement between observations made from the providers and the caregivers' data sets, we can definitively conclude that concerns about the long queues, the shortage of food supplements and poor interpersonal communication were salient issues from both data sets.

The apparent interpersonal challenges between providers and caregivers might be better explained by focusing on caregivers' level of despair as might be implied from caregivers description of communicating with providers as being unnecessary or not useful (would not make a difference), or providers as being difficult to approach, and being too busy. Although definitive explanations about the nature of the communication difficulties between caregivers and providers in this population require further study, other studies have documented similar challenges in client-provider interactions (3, 6, 19, 20) These studies document inadequate verbal communication or unsatisfactory interpersonal relations between caregivers and practitioners in primary health care settings in developing countries (3, 6, 19, 20). Razum (20) reported conflicts between caregivers and providers similar to those reported by caregivers in this study. In Razum's study (20), for example, caregivers report being spoken to harshly for arriving late at the clinic or for a misplaced healthcare card.

Interpersonal relations between caregivers and providers play a major part in caregivers' perceptions about the quality of primary health care in developing countries (3, 6). In a study conducted in Zaire, for example, caregivers perceived interpersonal qualities such as respect, patience, courtesy, attentiveness and straightforwardness as the best qualities for providers (nurses) and tended to perceive care provided by providers with these qualities as being better care than that provided by providers who were perceived differently (3,6).

The low knowledge level of providers in nutrition screening and care and the poor interpersonal communication between providers and caregivers in this study have serious implications on the ability of providers to support caregivers in the nutrition care of their children. This holds both within the context of the UNICEF Framework of Child Survival and the theory of dependent care. As conceptualized in the UNICEF Framework of Child Survival, caregivers' access to information and services about health care, maternal and childcare and household food security, all of which are key determinants of child survival, require adequately trained providers and positive interpersonal communication between providers and caregivers. Within the context of the theory of dependent care model, both the low confidence of providers in nutrition care and the poor interpersonal communication issues can disinterest caregivers from using primary health care services and consequently, adversely affect the dependent care abilities of caregivers in nutrition care and by extension the dependent care systems.

In conclusion, this study found that caregivers perceived nutrition care for children aged 0-5 years to be very important and expected both preventive and curative programs to coordinate nutrition care. Communication

between caregivers and providers in the clinics was perceived to be problematic, with many caregivers finding providers' communication to be overly harsh and often threatening. The perceived communication challenges reported in this study can potentially dampen users' confidence in the nutrition interventions provided for children of 0-5 years of age. Although the extent of the problem cannot be established quantitatively given the qualitative nature of this study, important observations about user perceptions of health services have been raised. Of immediate importance is the potential impact of these communication challenges not only on nutrition education but also on the overall health information exchange between providers and users, community participation in nutrition programming and the efforts of community volunteers, which are largely credited for the success of many nutrition interventions in developing countries (16, 21).

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