Annals of Global Health
VOL. 82, NO. 5, 2016

ISSN 2214-9996/$36.00
http://dx.doi.org/10.1016/j.aogh.2016.10.006

ORIGINAL RESEARCH

Determinants of Weaning Practices Among Mothers of Infants Aged Below 12 Months in Masvingo, Zimbabwe

Laston Gonah, MPH, Julia Mutambara, PhD
Gweru, Zimbabwe

Abstract

BACKGROUND Poor weaning practices have been reported to contribute to high infant mortality and morbidity rates especially in developing countries.

OBJECTIVES This study sought to determine factors related to weaning that predispose, reinforce and enable mothers of infants younger than age 12 months to comply or not to comply with the World Health Organization (WHO) 2009 guidelines on appropriate infant feeding.

METHODS The present study was a descriptive cross-sectional study. An interviewer-administered questionnaire was used to collect data on weaning and infant feeding practices from a sample of 300 mothers of infants aged younger than 12 months, resident in the Rujeko community, and registered and seen at the Rujeko Council Clinic during the study time.

FINDINGS The study results indicated that noncompliance with WHO infant feeding guidelines was high among the study participants. The rate of exclusive breastfeeding in the first 6 months was very low (14.8%), with the mean age of introduction of complementary foods to infants of 5 weeks (range 1-24 weeks). Early supplementation of breast milk was not associated with mother's age, level of education, and religion. Scheduled breastfeeding was more prevalent among the mothers who worked outside the home ($P = .018$). Provision of formal advice and influence from health care workers was found to improve young child feeding and weaning practices among mothers ($P = .011$).

CONCLUSIONS Various weaning methods were used, and mothers identified numerous factors as impeding their efforts to follow proper breastfeeding practices. The findings highlight the need to develop personal skills among mothers to prepare nutritionally balanced diets.

KEY WORDS exclusive breastfeeding, weaning, predisposing, reinforcing, infants, Zimbabwe

INTRODUCTION

The period from birth to 12 months of age includes the period of breastfeeding and the shift from breast milk to other foods (weaning period), during which children are at greater risk of developing malnutrition and becoming underweight. Zimbabwean mothers as a result of economic challenges in the country may resort to improper feeding practices as they may not have the money to buy nutritional foods for the baby. Various myths on exclusive breastfeeding that exist among the

The authors declare that there has not been any funding to conduct the present study, and that there are no competing interests related to the study.
From the Department of Behavioural Sciences, Faculty of Medicine, Midlands State University, Gweru, Zimbabwe. Address correspondence to J.M. (juliamutambara@gmail.com).

Annals of Global Health, VOL. 82, NO. 5, 2016
September–October 2016: 875–884

population may also hamper efforts toward proper infant feeding practices.

The Word Health Organization[1] recommended new feeding guidelines to be followed by all mothers (both HIV positive and HIV negative) in feeding their babies from birth to 59 months of age. These new guidelines promote exclusive breastfeeding for the first 6 months of life (especially in developing countries and low-socioeconomic communities where adequate and hygienic replacement feeding might not always be available to complement breast milk), early initiation of breastfeeding (less than 1 hour after birth), and continued breastfeeding with the gradual introduction of appropriate complementary foods (timely, adequate, safe, and properly fed) thereafter.[1] It was, however, not clear as to what weaning practices were being followed by mothers in Rujeko community and whether these practices were in line with the WHO guidelines because nutritional problems were arising among infants. Growth-monitoring figures from the clinic T5 forms[2] indicate the proportion of children underweight at 12 months of age (6.8%) to be greater than that of children born with low birth weight (0.18%). Clinic-based information indicated that the number of children who became underweight came from the population of children (all sexes) who were born with normal weight.[2]

Nutritional requirements of children older than 6 months cannot be met by breast milk alone, both in quantity and quality, for energy and other micronutrients essential for the growth and well-being of young children, including iron, zinc, and vitamin A.[3] As the child grows, breast milk should be supplemented by complementary foods, starting with liquids and then slowly progressing to solid foods manageable by the infant's digestive system. This is known as the weaning process: "the introduction of foods other than breast milk into an infants' diet while slowly reducing breastfeeding."[4] According to Briend et al,[5] during the complementary feeding period, children require diets with all the required nutrients in their correct proportions for optimum growth. However, previous research findings on weaning practices of caregivers reported that the weaning process is often accompanied by ill health and low weight, especially for infants in low-socioeconomic societies, mainly as a result of weaning foods that are not prepared to meet the infant's needs.[6] According to the National Nutrition Survey,[7] 100% of all the infants surveyed in Masvingo District were already on complementary feeding before the age of 6 months. The prevalence of wasting was found to be 2.9%, underweight 10.2%, and stunting 35.3% in the district. These statistics are higher than in other districts of the same province and are well above the WHO standard thresholds of 2.1%, 9.9%, and 33.8%, respectively.[7,8]

The educational and organizational diagnosis phase of the PRECEDE model,[3] which forms the conceptual basis of this study, focused on the predisposing, reinforcing, and enabling factors of weaning practices of mothers in Rujeko community. The PRECEDE-PROCEED model developed by Green et al[9] "provides a comprehensive structure for assessing health and quality of life needs, and for designing, implementing, and evaluating health promotion and other public health programmes to meet those needs." According to the framework, health behavior is influenced by both individual and environmental factors. The model enables analysis of determinants of weaning behaviors or practices as a function of predisposing, reinforcing and enabling factors.

Predisposing factors are characteristics of a person or a population that motivate behavior before the occurrence of that behavior—for example, age, occupational status, religion, knowledge, and so on.[9] Enabling factors are characteristics of the environment that facilitate action and any skill or resource that facilitates or hinders an individual's ability to execute the expected or recommended weaning practices, which include accessibility and availability of programs, resources and services, skills, money and time, and facilities.[9] For the present study, these include accessibility and availability of programs, resources and services, skills, money and time, and facilities.[9] Reinforcing factors are rewards and punishments after or anticipated as a result of behavior. They serve to strengthen the motivation for behavior.[9] Reinforcing factors include family, peers, health care workers, the media, and others.[9]

Goals of the Study. The goals of the study were to determine the predisposing, reinforcing, and enabling factors related to weaning practices of mothers, contributing to high rate of malnutrition (underweight) among infants younger than 12 months of age, who use services provided at Rujeko Clinic in the Masvingo urban district during the time of study. No district-specific research study has been carried out to assess compliance with WHO recommendations on weaning and child feeding among mothers of infants and to find determinants of weaning practices. Such a research