Vending machines in a renal outpatient setting – a difficult audience to please

Miss Rebecca Watkin¹, Miss Sena Ali², Ms Sitaara Saggar-Parikh², Ms Katie Durman¹

¹Bart’s Health NHS Trust, London, United Kingdom, ²London Metropolitan University, London, United Kingdom

Introduction

Vending machines are frequently used as a convenient way to provide food and drink in public areas. However, it can be difficult to cater for the varying dietary needs of customers, particularly in the hospital setting. Current criteria and guidance, produced by the British Dietetic Association (BDA) is limited to healthier choices (1).

The vending machines in the renal outpatient department of a large teaching hospital stock 44 snack foods and 26 drinks. The company aim to provide healthier options from small companies. The machines are used by kidney patients, their families, and staff. The local population is ethnically diverse which is represented in the patient and staff group.

This audit aimed to investigate the suitability of products in vending machines, located in a renal outpatient department, for the local client base.

Method

Each product was assessed against the BDA criteria, which specifies the maximum serving size and maximum energy, fat, saturated fat, sugar and salt content.

Products were classified as suitable for those following a reduced salt diet if the salt was <1.5g/100g (2). The items were also reviewed for ingredients high in potassium and phosphate.

A questionnaire was developed to gather customers’ views on whether the vending machines met their requirements.

Results

Four (9%) snack options and 18 (69%) drinks met the ‘better choices’ criteria. Sixteen (36%) snacks and 12 (46%) drinks were likely to be suitable for a low potassium, reduced salt and low phosphate diet.

Thirty-two patients, staff and family/friends completed the questionnaire. Thirteen (41%) felt the vending machine did not offer suitable choices. Twenty-eight (88%) thought a labelling system would be useful. Other comments included that items were too expensive and unfamiliar, making it difficult to determine suitability for their dietary and religious restrictions.

Discussion

Few of the foods met the healthy eating criteria, illustrating how difficult it can be to find healthy snacks in vending machines. For those at risk of malnutrition, a “healthy snack” may not be the priority. Providing a variety of high energy and lower calorie items would be more appropriate.
One limitation was the lack of nutritional data for potassium and phosphate; therefore, reliance was on the ingredients list. Despite some ingredients being high in potassium or phosphate, the overall product may have been suitable.

The customer survey indicated the majority would welcome a labelling system, especially as many products were unfamiliar. This may be difficult as the renal diet is complex, varied and needs to be individualised. A potential solution might be to highlight products which are better choices for those limiting potassium, salt and phosphate. Excluding products that include high potassium or phosphate ingredients is justifiable from a patient education perspective, to ensure consistent messages. Working with the vending machine provider to influence product choice will help increase the range of suitable items.

Conclusion

It is difficult for vending machines to cater for a wide variety of dietary requirements and for people to make appropriate choices. A simple labelling system to indicate better choices might be helpful.