TWO SIMPLE METHODS FOR DAILY MEASURING COMPLIANCE WITH ORAL NUTRITIONAL SUPPLEMENTS IN THE COMMUNITY: ELECTRONIC SELF-REPORT METHOD VERSUS IMAGE-BASED METHOD

Gabriel Olveira¹, Francisca Linares¹, Montserrat Gonzalo¹, María José Tapia¹, Francisco José Sánchez¹, Marta Ruiz², María Maiz², María Aguirre³, Francisco Pérez-Sádaba⁴, Susana Aceituno⁴, and Miguel León-Sanz²

- 1. Department of Endocrinology and Nutrition, Hospital Regional Universitario de Málaga, Málaga, Spain. University of Málaga. IBIMA.
- 2. Department of Endocrinology and Nutrition, Hospital Universitario 12 de Octubre, Madrid, Spain. Complutense University of Madrid.
- 3. Danone Specialized Nutrition, Madrid. 4. Outcomes'10 S.L.U, Castellón.

INTRODUCTION

Oral nutritional supplements (ONS) are recommended in patients with disease-related malnutrition (DRM) who can eat^{1,2}. Regular monitoring of the ONS compliance is necessary to optimize outcomes in this population, especially in the community. Techniques for measuring compliance offer an approximation of the individual's behavior³.

Precise and time-saving techniques are needed for research and routine practice.

We aim to determine the concordance between two simple methods for ONS compliance assessment:



SRM

Self-reported method

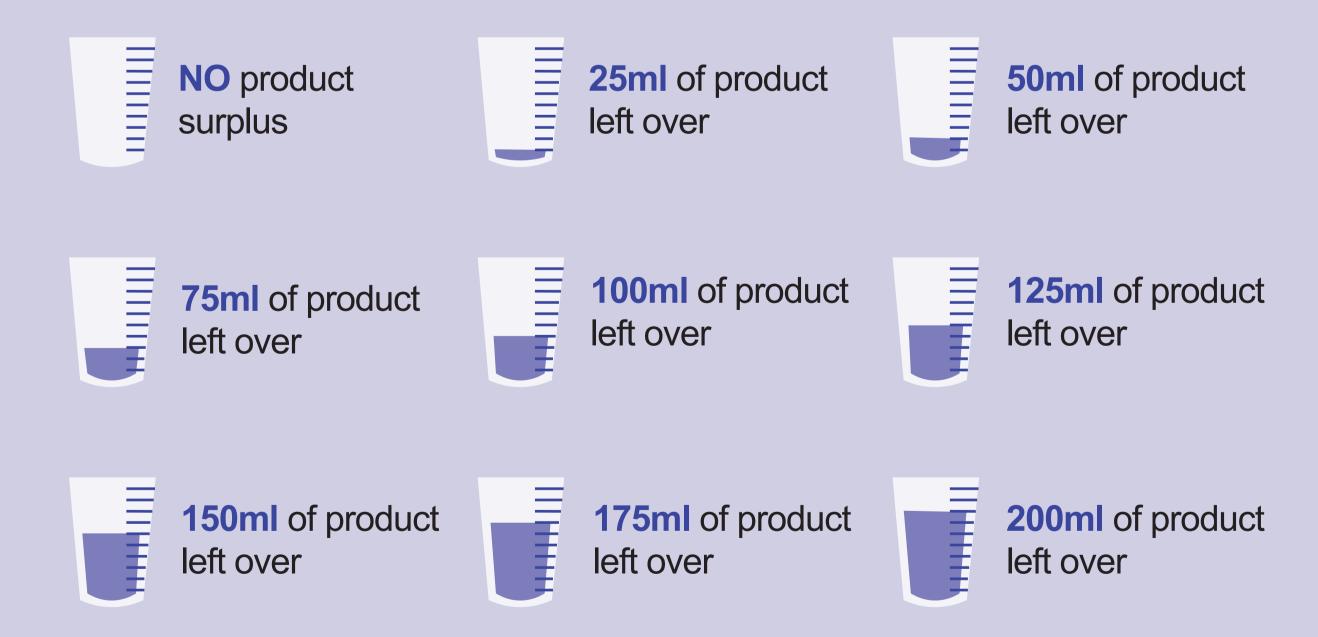


IBM

Image-based method

METHODS

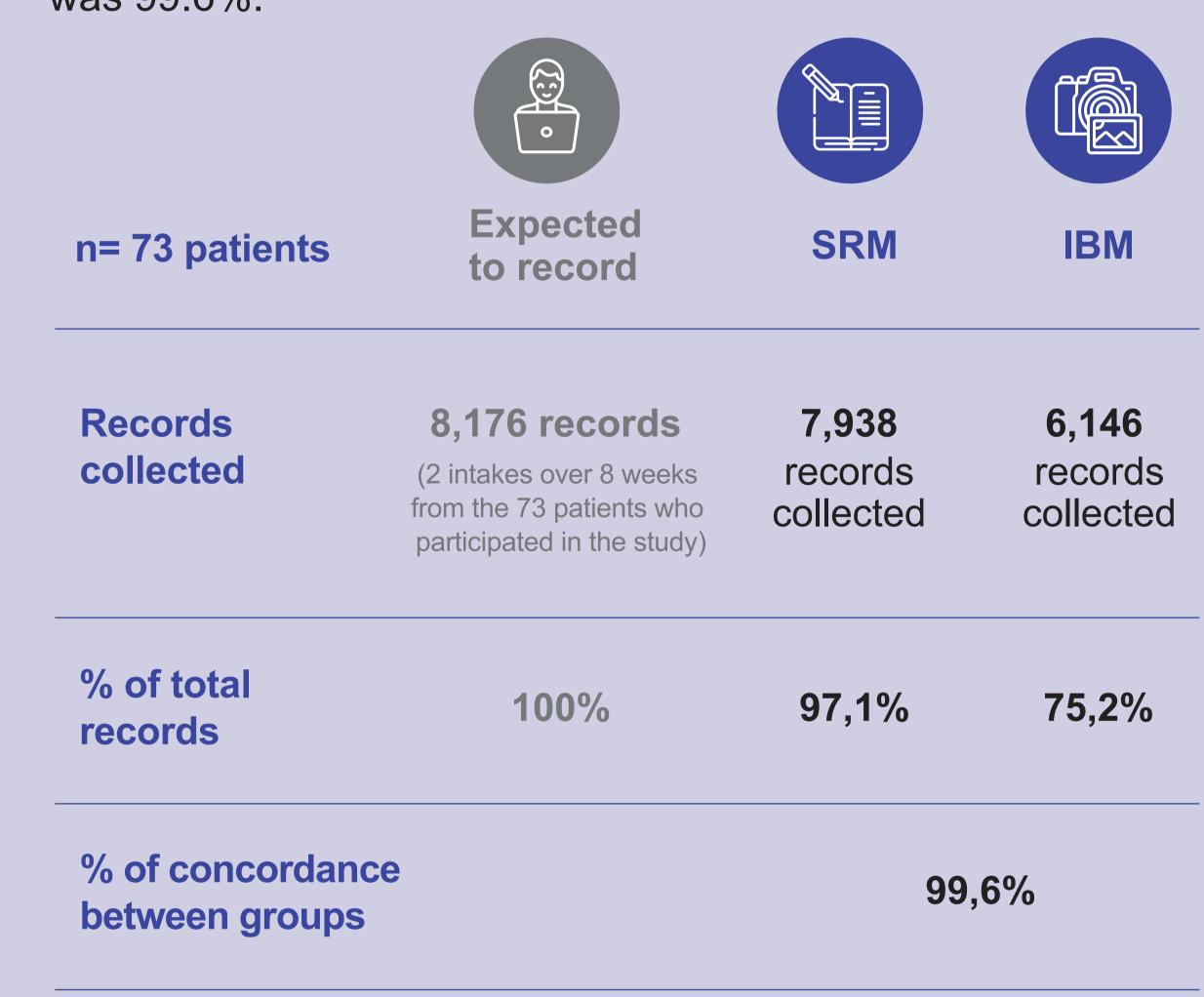
A randomized, crossover pragmatic trial was conducted in patients with DRM for 8 weeks. Compliance with ONS (% of product consumed vs. prescribed) was daily measured through the SRM of the ONS wasted volume from two daily prescribed bottles. Patients answered a question for each intake about the not consumed volume (0-200ml, from 25 to 25ml).



Additionally, the IBM for recording daily consumption by photographing the remaining volume was used. An electronic platform was used to record both by the patient. For each method, the number and proportion of total records over the 8 weeks were estimated. Each photo was compared one by one with the SRM measurement, and the percentage of concordance between both was analyzed.

RESULTS

Seventy-three patients were included in the study and were expected to record 8,176 prescribed intakes over the 8 weeks. Patients recorded 7,938/8,176 intakes (97.1%) using the SRM, and 6,146/8,176 intakes (75.2%) using the IBM. IBM records accounted for 77.4% of the records with the SRM. The percentage of concordance of records with both methods was 99.6%.



CONCLUSIONS

There is no standard method to measure compliance with ONS in research and practice⁴. However, self-reporting by electronic means and the use of IBM, whose results are concordant, could be positioned as suitable methods and place a low burden on patients and clinicians to measure compliance.

REFERENCES:

¹ Cederholm T. Clinical Nutrition 2017; 36(1):49-64; ² Muscaritoli M. Clinical Nutrition, 2021; 40(5): 2898-2913; ³ Gea-Cabrera A. Nutrients 2019; 11, 2627; ⁴ Hubbard G.P. Clinical Nutrition 2012; 31: 293-312.

Financial disclousure statement: This study was supported by Danone Specialized Nutrition (Madrid, Spain).

