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Investigating Purchasing Patterns in Products Related to the Management of Menstrual Symptoms

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Introduction & Background

Supermarket shopping data provides researchers with a novel source of information regarding health-related behaviours. Women's health is an underexplored area, including how individuals manage menstrual symptoms. Whilst several tools exist to assess menstrual symptom severity in clinical and research settings, these are outdated and fail to consider relevant management behaviours, which may be traced through digital shopping records.

Objectives & Approach

This study aims to develop a modern survey tool to assess the use of self-care strategies and related shopping habits in managing menstrual symptoms. Pilot survey findings were used to identify relevant products, management strategies, and purchasing patterns which will guide future research harnessing shopping data. In October 2025, 150 female participants aged 18-55 completed an online survey. Recruitment was managed through Prolific with pre-set screening criteria to target participants who were paid for their participation. A range of statistical methods were deployed in data analysis.

Relevance to Digital Footprints

This study contributes to improving our understanding of applying novel data linkage to study an important public health issue. It provides important insights into how purchasing behaviours reflect management strategies, laying the groundwork for using shopping data to track management of menstrual symptoms.

Results

The mean participant age was 37 (SD = 8.77), most (80.00%) were in paid employment and 99.33% identified as cisgender. Use of self-care strategies was common with 72.67% of participants reporting this. The most common strategies for managing pain were paracetamol (68.00%), ibuprofen (53.33%), hot

water bottle (50.00%) and herbal tea (26.67%). Most participants reported purchasing period products for themselves only (81.33%) or for themselves and another person (16.67%). Supermarkets were cited as the main location where participants purchased period products (83.33%) and pain relief for period pain (71.33%). Most participants reported purchasing period products regularly with 52.67% purchasing monthly or more frequently and 36.00% purchasing every 2-3 months. The mean reported monthly spending on managing menstruation was £11.49±£8.60. Such self-reported behaviours can indicate likely shopping patterns, helping to track and study management strategies.

Conclusions & Implications

Our findings help to improve our understanding of how individuals self-manage menstrual symptoms, as well as inform approaches to future shopping data research to study female health-related behaviours at a national level.

Keywords

shopping data, survey, women's health, menstrual health, dysmenorrhea

