Project period: Improving period product provision in a large inner city hospital

Laura Knox, Philippa Thornton, Rosie McNee, Isabelle Bough, Daniel Rodgers

ABSTRACT
Background BMA guidance recommends all hospitals provide suitable, comfortable and convenient period products. In 2018, none of Scotland’s health boards had policies on sanitary product provision.

Aim
► Establish current provision at Glasgow Royal Infirmary.
► Improve provision for staff and patients.
► Improve working experience for staff while menstruating.

Methods Cycle 0: A pilot survey was circulated to assess current provision, availability and impact on working environment.
Cycle 1: The survey was circulated to all hospital staff. Suppliers were contacted for donations. Two menstrual hubs were established in the medical receiving unit.
Cycle 2: Polling confirmed the preferred mode of downstream product distribution, with products supplied to each ward. Menstrual hub use was monitored.
Cycle 3: Staff were resurveyed following the interventions. Findings were presented to hospital and board managers.

Results Cycle 0: 95% felt current provision for staff was not appropriate. 77% felt provisions were inappropriate for patients (n=22).
Cycle 1: 97% felt hospital period product provisions were not appropriate. 84% of menstruators had no access to products when required: 55% asked colleagues for products; 50% used makeshift products and 8% used hospital pads. Overall, 84% did not know where to access period products within the hospital (n=968).
Cycle 2: 91% preferred ward-based provisions (n=46).
Cycle 3: 95% agreed that project period products were suitable for their needs (n=71). 82% felt access to period products had improved for personal use and 47% for patients. 58% were able to locate products for staff and 49% for patients.

Conclusion Project period highlighted a need for menstrual product provision in hospitals. It increased knowledge, suitability and availability of period products, and created a robust model of provision which may be easily replicated.

INTRODUCTION
In Scotland there are 1.3 million women within menstruating age. Additionally, females make up 77% of the NHS (National Health Service) workforce. Despite this, periods are seen as taboo, stifling discussion.

WHAT IS ALREADY KNOWN ON THIS TOPIC
⇒ While there are studies on the impact of menstruation in schools, and the subject of period product provision has become increasingly popularised in the media, there appears to be limited published work into the effect of menstruation on inpatients and healthcare workers.

WHAT THIS STUDY ADDS
⇒ Our quality improvement project (QIP) evidenced the ongoing distress that lack of access to suitable, comfortable and convenient period products causes in these groups, and how easily the experience of menstruating at work can be improved.

HOW THIS STUDY MIGHT AFFECT RESEARCH, PRACTICE OR POLICY
⇒ Our QIP provides a framework for other institutions looking to improve staff and patient well-being via the benefits of access to free period products.

2019 revealed that views around menstruation were negative, even among women, and menstruation within the workplace was seen as difficult.

The appropriate provision of period products is particularly relevant in areas with significant socioeconomic deprivation. According to The Glasgow Indicators Project, Glasgow remains the most deprived city and local authority area in Scotland. The Women’s Health Plan notes that the poverty rate in Scotland is highest for women; furthermore, “being in employment is not necessarily protective against poverty, and women are more likely to be in working poverty than men” Department for Public Health Women’s Health and Sport.

In January 2021, Scotland became the first country to mandate the provision of free period products. The act mainly focuses on local authorities and education providers, highlighting the “detrimental effect” of period poverty on the health of women, girls and transgender people. It also noted the fall in productivity and increased absences
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in education settings when period products are not available. These same issues are applicable to both staff and patients in healthcare environments.

Guidance from the British Medical Association states that hospitals should be ensuring provision of suitable, comfortable and convenient period products.8 This is reiterated in the period products (Free Provision) Act, which states that institutions “providing public services (and) serving the public interest” must ensure period products are obtainable free of charge.9 Despite this, none of Scotland’s health boards in 2018 had policies on provision of sanitary products for staff or patients. With this in mind, project period was established in the Glasgow Royal Infirmary (GRI) in 2020. Led by four junior doctors, this quality improvement project aimed to improve the current level of provision at GRI, thus improving the overall experience of staff who work while menstruating.

METHODS

Context

GRI is a large, urban, teaching hospital with approximately 1000 beds and 5819 staff members. It has expanded in a haphazard manner since its inception in the 18th century and is divided into distinct but interconnected geographical areas, as seen in figure 1.10 The way in which staff access their personal belongings, break and toilet facilities varies between each of these areas.

Interventions

The ‘plan, do, study, act’ cycle format was used to structure our quality improvement project.

These are visualised in figures 2–5.

Cycle 0

We asked staff within the specialist assessment and treatment area (SATA) to fill in an anonymous survey regarding their experience of menstruating in hospital, their understanding of patients’ experience and ideas for improvement. We spoke to procurement, management and nursing leads to establish if this experience was likely to be similar hospital-wide.

Cycle 1

We constructed an online survey which was distributed to staff through a board-wide email chain. Responses were collected through Survey Monkey. Responders were asked to complete either a survey for those who had
menstruated at work, or one for those who had not. We established the initial intervention of ‘period hubs’ in SATA and the acute medical receiving unit. We publicised the availability of products using online communications, large scale presentations, posters and word of mouth.

Cycle 2
We conducted a poll of downstream staff to ascertain the best method of provision. We provided a selection of products to each ward, along with verbal and written information on how to contact the project period team to replenish the products as required. We recorded the use of products in each of the hubs over the course of six months and replenished the hubs to ensure a consistent supply.

Cycle 3
We released a second survey to establish if our scheme had improved the experience of menstruating at work and distribution of products to patients. We presented our findings to hospital and board managers with suggestions as to how to ensure provision of suitable, comfortable and convenient period products to staff and patients, alongside estimated costs.

A detailed workflow diagram demonstrating our suggested model for implementing this project in other settings may be found in online supplemental appendix 1.

**Measures**

Our outcomes were:

- To establish the current level of provision at GRI.
- To improve the provision of suitable, comfortable and convenient period products for staff and patients at GRI.

Figure 3  PDSA cycle 1. PDSA, plan, do, study, act.

Figure 4  PDSA cycle 2. PDSA, plan, do, study, act.

- Ensure ≥75% knowledge and access to suitable, comfortable and convenient period products by staff.
- Improve overall experience of staff who are working while menstruating.

We spoke to procurement services as well as nursing leads to establish the current level of provision. They confirmed the only products available were maternity pads (figure 6).

We used our online surveys to assess whether staff felt this was suitable, comfortable and convenient, as well as staff knowledge of product availability. Our second survey...
assessed the impact of our intervention against our four key outcomes.

We constructed our survey using the Patient Satisfaction Questionnaire11 and Medical Interview Satisfaction Scale12 as a design basis. We used mostly binary questions with some Likert-type items to avoid central tendency bias. We used neutral statements to avoid acquiescence bias. We minimised question number and used an online platform to maximise survey completion. This also minimised human error in data collection and compilation. We were unable to find a pre-existing, suitable, validated tool, hence our construction of a novel, non-validated questionnaire.

To reach the entire gamut of workers at GRI we placed posters with QR code links to the survey in areas accessed by all staff and volunteers, and used the communications department to distribute the initial survey in a hospital-wide email. We collected demographic data from respondents. In the second survey, we were unable to access either distribution through communications or posters due to logistical constraints. We segregated our initial hospital-wide survey into ‘menstruators’ and ‘non-menstruators’.

Ethical considerations
All data were anonymous in accordance with ICO (Information Commissioner’s Office) guidelines.13 Significant consideration was taken with language choice to avoid excluding non-binary and transpeople as well as other non-menstruating women. Where possible, supplies were placed in non-gendered common areas.

RESULTS
Cycle 0
An initial survey was distributed among staff in SATA (n=22). Demographics of respondents were not collected at this time. Results showed that 91% of respondents had needed sanitary products at work but did not have immediate access to them, and 95% felt the current level of provision for staff was not appropriate. Additionally, 73% of staff had been asked for sanitary products by a patient; however, 45% knew where to access such products in the hospital, and 77% felt current provisions were not appropriate for patients. Overall, 86% felt better availability of sanitary products would improve their working conditions.

Cycle 1
Our hospital-wide survey was completed by 968 members of staff. A total of 840 respondents answered as menstruators, and 128 as non-menstruators. A complete list of job roles may be found in online supplemental appendix 2. The gender of the respondents was not recorded.

Results indicated that 97% felt that current provisions for period products within the hospital were not appropriate. On further questioning, 85% of respondents felt current provisions were not appropriate for staff (91% of menstruators vs 50% of non-menstruators; 44% of non-menstruators were not sure). Additionally, 89% felt current provisions were not appropriate for patients (93% vs 63%; 5% of non-menstruators were not sure). Patients had asked 33% of staff for period products; however, 84% of all respondents did not know where to access period products within the hospital (86% vs 71%).

Of those who had menstruated at work, 84% had needed products but did not immediately have access to them. When asked how they managed their period at such a time, responses indicated that: 55% had asked colleagues; 50% had used makeshift products; 30% had bought products at work; and 8% used the hospital supply (see figure 7). Ninety-one per cent of staff felt their experience of menstruating at work would improve if pads and tampons were available.

Cycle 2
During cycle 2, staff on downstream medical wards were surveyed regarding the optimum location for period products (n=46). Results showed that 91% preferred a ward-based system, thus guiding the distribution of products.

Cycle 3
A further survey was circulated in cycle 3 to help establish the impact of our intervention. Of the 71 respondents, 55% were doctors, 44% were nurses, and 1% allied health professionals. Results from this survey showed that 85% of respondents strongly agreed, and 10% agreed, that project period products were suitable for their needs. Furthermore, 82% felt their personal access to period products had improved, and 47% felt that project period

Figure 6 Hospital-provided maternity pad (left) and standard menstrual towel (right).
had improved patient access to period products (39% did not know).

Following the interventions made by project period, 58% of staff felt able to locate period products for themselves (24% answered no and 18% did not need products). Additionally, 49% felt able to find period products for patients. Thirty-three per cent of respondents had used project period products for themselves, and 23% had used them for patients.

**DISCUSSION**

**Summary**

Project period successfully highlighted a need for menstrual products to be provided in hospitals for staff and patients. The current provisions at GRI were found to be lacking, and our project showed the universal benefits of improving access to products, particularly when a variety of options are available.

Our results demonstrate that we have increased knowledge, suitability and availability of period products in line with our aims and BMA (British Medical Association) guidance. We have created a robust model of provision of period products to staff and patients which can be easily replicated in similar healthcare settings.

**Interpretation**

Prior to project period, the hospital provision of period products was insufficient and unsuitable for the needs of staff and patients. This appeared to be impacting the working environment, as 86% of staff felt their working conditions would improve with better availability of period products. There was also a lack of knowledge amongst staff regarding the availability and access to period products at work, with 84% of staff unable to locate products for themselves or for patients.

Cycle 1 of this project found that 97% of all respondents felt current provisions for period products within the hospital were not appropriate. By cycle 3, 95% agreed or strongly agreed that project period products were suitable for their needs. Blank-space responses highlighted appreciation of the variety of products on offer. Furthermore, following our interventions 58% were able to locate menstrual products for staff, and 49% for patients, compared with the 16% who had this knowledge in cycle 1.

Following a systematic literature review, no similar pilot projects have been identified. However, similar schemes run by third sector organisations which link into hospital settings have shown equivalent success. These projects can provide a foundation for policies within healthcare settings on the provision of menstrual products.

The introduction of the period products (Free Provision) (Scotland) Bill in 2020 has been the catalyst for providing menstrual products for staff and visitors. However, this QI project evidences areas for further improvement with regard to patient provision and staff knowledge around product location.

The potential implications of this project are significant. The project is easily replicated across health boards and may lead to meaningful changes throughout healthcare facilities. Project period supplied a variety of period products, all of which were in demand. Offering a range of products allows choice and autonomy over how to manage periods regardless of means.

Our products were kindly donated by an array of period companies to set this project up initially. After we had progressed with our project, we presented to management using cost approximations of bulk buying orders from the companies we had used. We realised that, to ensure the longevity of our project, the way
products were procured and distributed needed to be incorporated into the current ward-ordering system at GRI. We, therefore, involved management early on in our QI project, with guidance from facilities at a later stage.

Limitations
The products supplied by this project were donated and, as such, there was no control over product variety. A range of products were donated, including tampons and pads, and tampons were the preferred product at GRI. However, tampons are more expensive and thus any policy to supply products would need to reflect this.

We chose a repeated cross-sectional design to maximise participation as the surveys could be delivered broadly and anonymously. Although a longitudinal design may have provided more robust findings, we felt this potentially would limit the sample, especially given the stigma that surrounds menstruation. Furthermore, we hoped to reduce responder bias with this method. We deemed this an acceptable limitation.

We were unable to distribute our second survey through the hospital’s communications team or via posters due to logistical constraints. This affected our response volume and impacted the reach of this survey to non-medical members of staff in comparison to the first survey.

This project was limited to one hospital. Replicability is reliant on similar structures and systems within hospitals. Any policy must reflect the logistical complexity of providing products across a large hospital network, including establishing the responsibility of procurement, product stocking and finance teams. Knowledge of hospital management structures, or experience of working in this sector, is essential as, without this, we found communicating our results and expanding the project challenging. If setting up a future project, incorporating it into widely used distribution pathways would make usage much easier to quantify. A detailed workflow diagram demonstrating our suggested model for implementing this project in other settings may be found in online supplemental appendix 1.

During the conception of the project, we collectively sought approval from management—at a ward, departmental and hospital level. This was freely given, but the implementation, design, data collection and distribution of products were reliant on our team of four junior doctors. While this decision gave us great autonomy for decision-making, it also limited the up-scaling of our project, such as expanding to other sites within the same health board. If sites were looking to set up a similar project, we would suggest early and formal management discussions, with particular focus on procurement, as we feel this was a limitation of our work. Furthermore, we would suggest that having permanent staff involved in a project like this is invaluable to help sustain the intervention in the longer term.

CONCLUSION
We established a sustainable and impactful project within GRI to improve the menstrual health of our staff and patients. We showed that it is possible to improve access and awareness of menstruation and menstrual needs, and that this can improve the working environment within a hospital. The project is easily reproducible in other hospital or healthcare settings, and can be adapted to suit different healthcare environments.

Going forward, we hope to see replica projects in other health boards and hospitals, or indeed a more unified, national approach to ensure that we are adequately addressing the needs of our menstruating population. This project has been innovative and exciting, and we hope it can inspire further work to help improve the experience of those who menstruate.

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ORCID iDs
Laura Knox http://orcid.org/0000-0003-2709-3668
Phillipa Thornton http://orcid.org/0000-0004-3058-1093
Rosie McNeel http://orcid.org/0000-0001-0926-7065
Isabelle Bough http://orcid.org/0000-0002-1515-442X

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