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Menstrual health as an occupational equity issue in high-stress industries: A narrative review

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ABSTRACT

This review examines menstrual health as a neglected dimension of women's health and occupational equity, with particular attention to high-stress and gendered occupational contexts. It asks how menstruation is addressed or silenced within workplace health frameworks, and how these dynamics are intensified in safety-critical, shift-based, and regulated occupations. A narrative review was conducted to synthesize literature from occupational health, feminist organizational scholarship, health policy, aviation studies, and workplace inclusion research. Aviation is used as a focal case, bringing together circadian disruption, fatigue exposure, public visibility, bodily discipline, and gendered occupational hierarchies. The review identifies four dynamics. First, rigid job design, workload intensity, circadian disruption, and recovery opportunities exacerbate menstrual health risks. Second, policy responses remain fragmented, uneven, and symbolic, offering recognition without accommodation or redistribution. Third, organizational cultures of silence and stigma frame menstruation as unprofessional, discouraging disclosure and reinforcing gendered norms of ideal workerhood. Fourth, inclusive and participatory leadership practices can create openings for psychological safety and employee voice, but their impact remains constrained without structural and policy reform. By reframing menstruation as an occupational health and equity issue rather than an individual concern, this review contributes to debates on embodied work, gendered organizations, and menstrual inclusion in high-pressure workplace contexts.

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Feminist organizational theory; High-stress industries; menstrual health; occupational equity; workplace inclusion

Introduction

Menstrual health remains one of the most structurally marginalized issues in organizational and social life. Despite being a routine and embodied experience that affects nearly half of the world's population (Hennegan et al. 2021), menstruation is rarely acknowledged in occupational health policies, workplace design, or leadership practices (Brassart Olsen 2023; Cook and Van Den Hoek 2023; Howe et al. 2023; Levitt and Barnack-Tavlaris 2020). This silence reflects more than a simple oversight. It reveals how institutions, policies, and professional cultures continue to normalize a model of work that disregards cyclical needs and treats bodily variability as irrelevant or even disruptive. The absence of menstrual health in workplace agendas is particularly visible in high-stress occupational fields such as aviation, where gendered hierarchies, rigid schedules, shift-based labor, and time-zone disruptions can exacerbate physiological symptoms while organizations frame these needs as private, incidental, or unprofessional (Cruel 2024; Iglesias, Terrés, and Chavarria 1980; Yang et al. 2013).

The continued erasure of menstrual health from workplace policy represents a form of structural exclusion. Feminist organizational theory highlights that dominant models of work remain organized

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around the notion of the "ideal worker," a figure who is uninterrupted, rational, and implicitly male (Acker 1990; Martin 1987). Acker (1990) argues that this ideal worker is fundamentally disembodied, abstracted from the physical, cyclical, and reproductive realities of human experience. Within this paradigm, embodied difference is not accommodated but erased: the body is expected to remain invisible, predictable, and uninterrupted by biological variation (Federici 2004; Harlow 1986; Williams et al. 2025). Menstruation is not a deviation from a bodily norm but a cyclical physiological process and a vital indicator of reproductive health (Bobel et al. 2020; Hennegan et al. 2021). Framing it as "normal" or "abnormal" reproduces the very hierarchies that feminist scholars have long sought to dismantle, positioning menstruating bodies as inherently other in relation to an implicitly non-cyclical standard (Harlow 1986; Kissling 2006; Martin 1987).

These organizational norms do not operate only through formal policy but are also sustained through institutional culture. Ahmed (2021) argues that institutions are not neutral containers but active producers of norms that determine whose bodies, needs, and complaints are rendered visible or legitimate. When institutions reward conformity and silence over complaint and embodied difference, they do not simply fail to accommodate cyclical health needs: they actively construct those needs as incompatible with professional life (Sharma and Sharma 2026). For menstruating workers, particularly in high-stress occupational fields where gendered hierarchies shape roles, authority, visibility, and expectations of bodily control, disclosing cyclical symptoms may be experienced as a potential threat to professional legitimacy and belonging (Munir et al. 2007). These dynamics are particularly pronounced in aviation, where strict performance monitoring, physical demands, and constant public visibility create a culture that privileges bodily uniformity while devaluing cyclical variation.

Although recent scholarship has started to link menstrual symptoms to absenteeism, presenteeism, and decreased job satisfaction (Cook and Van Den Hoek 2023; Leon-Larios et al. 2024), most organizational responses remain superficial or absent altogether. Comparative policy developments, such as Spain's national menstrual leave law or Portugal's targeted endometriosis policy, indicate that awareness is growing, yet the uptake of such measures remains limited and stigma continues to persist (Crum and Sun 2025; Kassam 2024). In Türkiye, the policy vacuum is even more striking. Despite local initiatives, national labor regulations continue to overlook reproductive and cyclical health entirely (Demircan Yildirim 2024; Kaçmaz 2022; Sarı 2023). What these responses share is a condition-specific and largely symbolic logic. They name particular diagnoses or entitlements without revising the organizational assumptions that made cyclical health illegible in the first place. Recent human resource management scholarship has begun to name that absence directly. Drawing on Feminist Disability Theory, Yavuz Sercekman and Ayaz (2026) show how organizational assumptions about productivity, presence, and the able body render cyclical conditions simultaneously invisible and consequential, and propose physiodiversity, the recognition of chronic, cyclical, and fluctuating physiological variation as a legitimate dimension of workforce diversity, as a conceptual response. Menstrual health in high-stress occupations represents a paradigmatic case of this argument.

The neglect of menstrual health in workplace research and practice is not merely a gap in occupational health but also a wider issue of social justice, gender equality, and organizational sustainability (Brassart Olsen 2023; Fraser 1997; Howe et al. 2023). Menstrual exclusion reflects broader inequalities in whose bodies and experiences are considered legitimate within professional environments, reproducing the gendered substructures of organizational life that feminist scholars have long identified (Acker 1990; Ahmed 2021; Bobel et al. 2020). When workplaces ignore menstruation, they not only perpetuate stigma and compromise employee wellbeing (Cook and Van Den Hoek 2023; Hu et al. 2023; Okamoto et al. 2024; Poitras et al. 2024) but also limit workforce participation and constrain organizational resilience (Alemu, Waller, and Tooth 2025; Bridges, Wulff, and Bamberry 2023; Rowlands et al. 2022). In high-stress sectors like aviation, these dynamics may affect safety, productivity, and long-term retention, which makes the absence of menstrual health considerations a matter of organizational risk as well as equity.

This paper makes two central contributions. First, at the theoretical level, it extends feminist organizational theory and workplace inclusion scholarship by treating menstrual

exclusion as a structural practice of silencing. This framing moves beyond accounts of menstrual health as an incidental policy omission and shows how disembodied norms of professionalism, ideal worker expectations, and recognition-only policy models can reproduce occupational inequity. It also clarifies the limits of inclusive leadership when psychological safety and employee voice are not supported by structural and policy-level change. Second, at the practical and policy level, the paper uses aviation as a focal case to show how high-stress occupational environments shaped by gendered hierarchies can magnify embodied risks. It outlines the reforms needed in job design, occupational safety frameworks, workplace policy, and inclusion practice.

To advance this agenda, the paper presents a narrative review. Aviation is used as a focal case because it illustrates with particular clarity the physiological risks, cultural barriers, and organizational silences that menstruators encounter in practice. The review integrates four interrelated strands of scholarship: (1) occupational health and menstrual well-being, (2) feminist critiques of workplace structures and embodied exclusion, (3) cross-national, regional, and Türkiye-focused menstrual leave and workplace policy discussions, and (4) leadership and organizational behavior studies that engage with inclusive practice. These literatures highlight the limitations of current approaches and point to the need for a broader shift in workplace thinking, where menstruation is treated as a structural matter of occupational equity and social justice.

Materials and methods

Review design and purpose

This study employs a narrative review to examine the organizational, structural, and policy dimensions of menstrual health in high-stress occupational settings with a particular focus on aviation. A narrative review was selected because menstrual health at work remains an under-theorized and weakly integrated area of inquiry. Existing scholarship addresses the issue through partially separate literatures on occupational health, reproductive health, gendered organizations, stigma, health policy, and workplace inclusion, rather than through a consolidated occupational-equity framework (Acker 1990; Cook and Van Den Hoek 2023; Howe et al. 2023; Kissling 2006; Levitt and Barnack-Tavlaris 2020; Okamoto et al. 2024; Randel et al. 2018). A narrative review is therefore appropriate because it enables the integration of heterogeneous evidence, the development of conceptual connections, and the identification of neglected or emerging questions across disciplinary boundaries (Baumeister and Leary 1997; Ferrari 2015; Green, Johnson, and Adams 2006; Sukhera 2022). While systematic reviews are valuable for answering narrowly defined questions through fixed and reproducible protocols, narrative reviews are better suited to theory-building, critical synthesis, and problem-driven inquiry where the evidence base is diverse and conceptually dispersed (Green, Johnson, and Adams 2006; Sukhera 2022).

The primary aim of this review is to map how menstrual health is addressed, or systematically excluded, across workplace policies, occupational health frameworks, and leadership practices in high-pressure sectors. In practical terms, the review operationalizes conceptual integration in three ways. First, it brings together the extant works that usually remain separate: occupational health research on menstrual symptoms and work performance, feminist organizational scholarship on embodied exclusion, health policy studies on menstrual leave and workplace regulation, and leadership research on psychological safety and employee voice. Second, it treats these literatures not as parallel bodies of evidence, but as connected explanations for how menstrual health becomes visible, marginalized, or silenced through job design, organizational culture, policy provision, and inclusion mechanisms. Third, it develops occupational-equity framing by linking individual-level experiences of menstrual symptoms, disclosure, and cyclical health needs to broader organizational and structural conditions. In this way, the review does not simply catalog

existing studies; it uses narrative synthesis to clarify how fragmented evidence points to a broader structural problem in workplace health and inclusion.

Review scope

In this review, menstrual health is understood as a multidimensional workplace issue that includes the physical, psychological, social, and organizational conditions through which menstruation and menstrual-related symptoms are experienced, managed, or accommodated at work. This understanding follows broader definitions of menstrual health that extend beyond the biological event of menstruation to include wellbeing, dignity, stigma, access to resources, and participation in social and economic life (Hennegan et al. 2021). The review therefore includes literature on menstruation, dysmenorrhea, heavy menstrual bleeding, menstrual irregularity, menstrual disorders, menstrual leave, stigma, workplace accommodations, absenteeism, presenteeism, and occupational stress where these issues are connected to job design, policy, organizational culture, or workplace inclusion. Menopause and perimenopause were not central search concepts because they refer to distinct life-course and endocrinological transitions; however, menopause-related literature was considered where it directly informed the analysis of workplace policy, embodied exclusion, or reproductive health at work (Howe et al. 2023).

The term "high-stress workplace" is used with reference to established occupational health frameworks rather than as a descriptive shorthand. Drawing on Karasek's job strain model, the EU-OSHA framework on psychosocial risks, and ICAO's definition of fatigue, high-stress settings are understood as work environments where high psychological demands, limited control, irregular schedules, circadian disruption, emotional labor, safety-critical responsibility, and restricted opportunities for rest or bodily recovery converge (Karasek 1979; EU-OSHA 2022; ICAO 2016; Hochschild 2012). Civil aviation was selected as the primary focal field because these conditions converge across multiple occupational groups, including cabin crew, pilots, air traffic controllers, and ground personnel.

Aviation is not treated as a homogeneous sector. Menstrual health experiences may vary across occupational groups because roles differ in labor conditions, bodily demands, access to facilities, scheduling control, organizational authority, and professional visibility. Women's participation also varies across aviation occupations, with comparatively higher visibility in cabin crew, passenger services, and ground operations than in cockpit, aircraft maintenance, engineering, and senior decision-making roles (Corazza 2024). ICAO data similarly show that women accounted for approximately 4 percent of airline transport pilot licenses globally in 2021, compared with 20.6 percent of air traffic controllers and 3 percent of licensed aircraft maintenance engineers and technicians (ICAO, 2025). These differences support treating aviation as a differentiated occupational field shaped by uneven gender representation, role-specific constraints, and variable access to rest, facilities, and autonomy (Acker 1990; Crenshaw 1991; van Drongelen, Karwal, and Simons 2024).

Türkiye was included as a secondary contextual focus because it provides a relevant regional context in which rapid aviation sector growth, gendered occupational structures, and limited menstrual workplace policy recognition intersect. Turkish-language sources were included to capture policy debates, stigma narratives, and workplace discussions that may not be fully visible in English-language databases. Studies on Turkish aviation show continuing gendered organizational dynamics, including masculine occupational norms, professional legitimacy concerns, limited representation, and the need for institutional initiatives that support gender balance and inclusive sectoral development (Damgacı 2023; Demircan Yildirim 2024; Güngör 2023; Yanıkoğlu, Kılıç, and Küçükönal 2020; Yıldırım and Durmaz 2025). Türkiye is therefore not treated as a standalone national case study, but as a secondary contextual lens that helps illuminate how menstrual health, workplace culture, and gendered labor structures intersect within a rapidly expanding aviation sector.

Search strategy and eligibility criteria

A bilingual literature search was conducted between March and May 2025 using Scopus, Web of Science, and PubMed. These databases were selected because they provide broad coverage of occupational health, public health, organizational studies, aviation, and interdisciplinary social science research. The search covered publications from 2006 to 2025, with earlier foundational sources included where they were essential for feminist organizational theory, menstrual policy history, or aviation-related physiological evidence. English-language searches were used for international literature, and Turkish-language searches were used to strengthen the regional component of the review. The 2006 starting point was selected to capture contemporary debates on menstrual health, workplace inclusion, occupational equity, and menstrual policy, while still allowing the review to include recent developments in organizational and occupational health literature. Earlier sources were retained selectively where they provided foundational empirical, historical, or theoretical context, particularly in relation to aviation-related physiological risks, the history of menstrual leave, and feminist organizational theory.

Search terms included combinations of: "menstrual health," "menstruation," "menstrual disorders," "dysmenorrhea," "heavy menstrual bleeding," "menstrual irregularity," "reproductive health," "gynecological health," "workplace accommodation," "occupational stress," "absenteeism," "presenteeism," "aviation," "shift work," "fatigue," "psychological safety," "gender equity," "inclusive leadership," and Turkish equivalents where appropriate.

The initial search identified 312 records. After removal of duplicates and clearly irrelevant records, 186 titles were screened. Of these, 118 abstracts or source summaries were read, and 76 full-text publications were assessed for eligibility. A final corpus of 54 sources was retained for narrative synthesis. Sources were included when they addressed menstrual health, menstrual disorders, dysmenorrhea, heavy menstrual bleeding, irregular menstruation, menstrual leave, absenteeism, presenteeism, stigma, workplace accommodations, occupational stress, job design, aviation, high-stress sectors, leadership, psychological safety, or workplace inclusion. Sources were excluded when they focused solely on clinical menstrual physiology without occupational, organizational, policy, or workplace relevance, or when leadership studies focused only on performance without relevance to wellbeing, inclusion, disclosure, or support.

Gray literature and institutional sources, including reports and policy materials from international organizations, aviation bodies, unions, municipalities, and health agencies, were reviewed where they clarified real-world policy practice, regulatory context, or workplace discourse. These materials were used to contextualize the peer-reviewed evidence rather than to replace it.

Source selection and narrative synthesis

The final corpus was organized into six source categories: occupational menstrual health and work-related symptom studies; feminist, theoretical, and conceptual sources; menstrual leave, policy, and workplace regulation literature; aviation and high-stress sector literature; inclusive leadership, psychological safety, and employee voice literature; and Turkish-language or region-specific sources. Table 1 summarizes these categories, the type of evidence they contributed, and their role in the narrative synthesis.

Narrative synthesis proceeded in four stages. First, the included sources were read repeatedly to identify recurring empirical findings, policy claims, conceptual tensions, and sectoral patterns. Second, sources were coded for explicit content, including symptoms, absenteeism, presenteeism, disclosure, leave policies, workplace accommodations, leadership support, and psychological safety. Third, the coding also attended to implicit patterns, including silence, stigma, bodily discipline, managerial discretion, ideal-worker assumptions, and the absence of menstrual-sensitive job design. Fourth, related codes were clustered into four thematic areas: embodied risks and structural neglect; policy

Table 1. Overview of included sources and their role in the narrative synthesis.

Source category	N	Main type of evidence	Context or sectoral focus	Role in synthesis	Indicative sources
Occupational menstrual health and work-related symptom studies	9	Empirical studies, cross-sectional studies, survey-based studies, and review evidence	Workplace menstrual symptoms, dysmenorrhea, presenteeism, absenteeism, work performance, workplace productivity, and menstrual symptoms among employed populations	Provided the primary evidential basis for the theme "Occupational Risk and Structural Oversight," particularly links between menstrual symptoms, occupational stress, presenteeism, work performance, and workplace participation	Cook and Van Den Hoek (2023); Johnson et al. (2024); Okamoto et al. (2024); Leon-Larios et al. (2024); Mohamadirizi et al. (2013); Poitras et al. (2024); Raves et al. (2025); Ortynsky et al. (2025); Hardy and Hunter (2021)
Feminist, theoretical, and conceptual sources	5	Theoretical and conceptual scholarship	Gendered organizations, embodiment, menstrual stigma, institutional silence, recognition, and redistribution	Provided the interpretive framework for analyzing menstrual exclusion as structural rather than incidental; informed the concepts of the disembodied worker, institutional silence, stigma, and recognition without redistribution	Carneiro (2025); Ahmed (2021); Bobel et al. (2020); Federici (2004)
Menstrual leave, policy, and workplace regulation literature	10	Policy analysis, review articles, legal and institutional materials, and selected gray literature	Cross-national menstrual leave policies, workplace accommodations, menstrual policy debates, and Türkiye-specific policy discussions	Informed the theme "Policy Gaps and Menstrual Leave Regimes" by showing how policy recognition varies across contexts and how formal rights may remain underused when stigma, certification requirements, or weak implementation persist	Howe et al. (2023); Levitt and Barnack-Tavlaris (2020); Barnack-Tavlaris et al. (2019); Furlano (2024); Brassart Olsen (2023); Kassam (2024); Crum and Sun (2025); Dodman (2023)
Aviation and high-stress sector literature	14	Empirical sector studies, aviation reports, occupational health studies, and gender and aviation scholarship	Civil aviation, cabin crew, pilots, air traffic controllers, ground personnel, flight deck hierarchies, shift-based work, and safety-critical work	Provided the sectoral basis for using aviation as a focal case while also showing why aviation should be treated as a differentiated occupational field rather than a homogeneous sector	Hu et al. (2023); Lauria et al. (2006); Radowicka, Pietrzak, and Wielgoś (2013); Grajewski et al. (2015); Yang et al. (2013); Rampen et al. (2016); van Drongelen, Karwal, and Simons (2024); Stevenson et al. (2021); Perkins et al. (2024); Yanıkoğlu, Kılıç, and Küçükönal (2020); McNeely et al. (2018)
Inclusive leadership, psychological safety, and employee voice literature	8	Conceptual and empirical organizational studies	Inclusive leadership, psychological safety, inclusion climates, employee voice, participatory workplace practices, and psychosocial support	Informed the theme "Leadership and Participatory Practices as Change Levers" by explaining how relational conditions may enable disclosure and voice, while also showing why leadership alone cannot substitute for structural reform	Randel et al. (2018); Ashikali, Groeneveld, and Kuipers (2021); Roberson and Perry (2022); Bridges, Wulff, and Bamberry (2023); Douglas (2022); Mangi et al. (2025); Nishii (2013); Lee and Shin (2024).

(*Continued*)

Table 1. (Continued).

Source category	N	Main type of evidence	Context or sectoral focus	Role in synthesis	Indicative sources
Turkish-language and region-specific sources	8	Empirical studies, policy commentary, institutional materials, and selected gray literature	Türkiye, Turkish aviation, Turkish labor and policy context, stigma narratives, and local menstrual leave discussions	Strengthened the regional component of the review by showing how menstrual health, workplace stigma, policy gaps, and gendered aviation structures appear within a rapidly expanding aviation and labor market context	Kaçmaz (2022); Sarı (2023); Demircan Yildirim (2024); Gedik and Pehlivanli (2022); Yöndem and Çıtak Bilgin (2022); Güngör (2023); Damgacı (2023); Demircan Yildirim (2024)

gaps and the limits of recognition; cultures of silence, stigma, and professional norms; participation, voice, and organizational change.

To make the synthesis process transparent, Table 2 provides a condensed map of the analytic axes used to connect the evidence. These axes were structural, cultural, and relational. The structural axis captured formal arrangements, job design, regulations, and institutional provisions. The cultural axis captured norms, meanings, stigma, and dominant assumptions about professionalism. The relational axis captured disclosure, voice, trust, and everyday support practices. This approach helped integrate evidence across occupational health, feminist organizational theory, policy literature, aviation studies, and leadership research while keeping the review focused on menstrual health as an occupational equity issue.

The interpretive process was shaped by the authors' disciplinary backgrounds in organizational studies, gender, health, and workplace inclusion. Reflexivity was embedded in the synthesis by considering explicit findings on symptoms, policies, disclosure, and workplace support alongside silences, absences, and assumptions about professionalism, bodily control, and ideal worker norms. This approach helped frame menstrual health as both an individual health experience and a structural concern related to organizational equity.

Results

Embodied risks and structural neglect

Menstrual health as a dimension of occupational well-being highlights how organizational structures continue to privilege an abstract, disembodied worker. The evidence drawn from aviation and other high-stress sectors shows that cyclical symptoms are not idiosyncratic inconveniences but predictable physiological responses to demanding work conditions. Yet organizations have consistently failed to translate these risks into structural accommodation. This neglect exemplifies Acker's (1990) claim that workplaces are organized around invisible gendered substructures, while Federici (2004) emphasizes how women's bodies are positioned as unruly or disruptive to capitalist logics of productivity. Rather than being addressed as a matter of occupational justice, menstruation is treated as an individual liability, reinforcing silence and self-management.

Reframing menstruation as occupational equity

Globally, an estimated 1.8 billion people menstruate each month, yet many workplaces still lack even the most basic accommodations such as restrooms, breaks, or access to menstrual hygiene products (Brassart Olsen 2023; Fry et al. 2022). In aviation and other shift-based occupations, physiological demands such as long-haul flying, altitude exposure, and disrupted sleep schedules can exacerbate dysmenorrhea, fatigue, nausea, and mood disturbance, yet these are rarely treated as occupational

Table 2. Integration of analytic axes with Thematic findings.

Analytic axis	Embodied risks and structural neglect	Policy gaps and limits of recognition	Cultures of silence, stigma, and professional norms	Participation, voice, and organizational change
Structural axis: formal arrangements, job design, regulations, and institutional provisions	*Reframing menstruation as occupational equity*: High-stress work conditions, including shift work, long-haul duties, circadian disruption, physical workload, and limited recovery opportunities, may intensify menstrual symptoms while remaining weakly addressed in job design and occupational health frameworks [R: (Johnson et al. 2024; Rampen et al. 2016; Stock et al. 2019; Yang et al. 2013)]. This supports the interpretation of menstrual health as an occupational risk rather than only an individual health concern [T: (Acker 1990)].	*Historical trajectories of menstrual policy*: Menstrual health protections remain uneven across national and organizational contexts. Existing menstrual leave regimes differ in eligibility, pay, certification requirements, duration, and implementation, while many workplace policies remain fragmented or symbolic [R: (Barnack-Tavlaris et al. 2019; Furlano 2024; Howe et al. 2023; Levitt and Barnack-Tavlaris 2020)]. This illustrates the tension between recognition and redistribution [T: (Fraser 1997)].	*Normalizing discomfort and institutional silence*: Formal equality policies do not necessarily translate into menstrual inclusion when job design, absence management, uniform expectations, or disclosure systems do not accommodate cyclical health needs [R: (Cook and Van Den Hoek 2023; Cruel 2024; Okamoto et al. 2024)]. Menstrual health may therefore remain institutionally invisible even where general wellbeing commitments exist [T: (Ahmed 2021)].	*Leadership and the conditions of psychological safety*: Leadership support may create openings for disclosure and accommodation, but these remain fragile when not backed by formal policies, clear guidance, occupational health pathways, and predictable accommodation processes [R: (Barnack-Tavlaris et al. 2019; Bridges, Wulff, and Bamberry 2023; Douglas 2022; Kassam 2024)]. This shows why leadership must be linked to structural reform rather than treated as a standalone solution [T: (Fraser 1997)].
Cultural axis: norms, meanings, stigma, and dominant assumptions about professionalism	*Embodied disruptions in high-stress sectors*: Menstrual symptoms may be normalized as private discomfort rather than recognized as work-related strain, especially in sectors where bodily resilience and uninterrupted performance are valued [R: (Cook and Van Den Hoek 2023; Johnson et al. 2024; Poitras et al. 2024)]. This reflects wider ideal-worker norms that privilege disembodied availability [T: (Acker 1990; Martin 1987)].	*Fragmented initiatives and symbolic recognition*: Menstrual leave policies may be underused when cultural stigma frames use of such provisions as weakness, lack of commitment, or excessive disclosure of private health needs [R: (Barnack-Tavlaris et al. 2019; Furlano 2024; Kassam 2024)]. This suggests that policy recognition alone may not change workplace norms unless accompanied by cultural transformation [T: (Ahmed 2021; Fraser 1997)].	*Professionalism as a gendered regime*: Menstrual stigma is reinforced through norms of concealment, bodily control, emotional composure, and professionalism. In aviation, these broader stigma dynamics intersect with public-facing roles, masculine occupational norms, and hierarchical cultures that may make embodied concerns difficult to raise [R: (Cruel 2024; Perkins et al. 2024; Stevenson et al. 2021; Yanıkoğlu, Kılıç, and Küçükönal 2020)]. This synthesis links menstrual stigma scholarship with feminist organizational theory [T: (Ahmed 2021; Hochschild 2012; Kissling 2006)].	*Participation, voice, and employee agency*: Inclusive leadership may help challenge stigma by legitimizing difference, encouraging voice, and supporting psychological safety. However, cultural change depends on whether leaders model non-punitive responses to disclosure and whether organizations normalize cyclical health needs as part of workplace inclusion [R: (Ashikali, Groeneveld, and Kuipers 2021; Carmeli, Reiter-Palmon, and Ziv 2010; Randel et al. 2018)].

(*Continued*)

Table 2. (Continued).

Analytic axis	Embodied risks and structural neglect	Policy gaps and limits of recognition	Cultures of silence, stigma, and professional norms	Participation, voice, and organizational change
Relational axis: disclosure, voice, trust, and everyday support practices	*Institutional invisibility and the failure of job design*: Menstrual health experiences are shaped by whether workers can communicate symptoms, request adjustments, and access support without stigma or disadvantage. In aviation, this may vary across cabin crew, pilots, ground staff, air traffic controllers, and technical workers because of differences in autonomy, facility access, visibility, and scheduling control [R: (Stevenson et al. 2021; van Drongelen, Karwal, and Simons 2024; Yang et al. 2013)].	*From symbolism to structural change*: Policy uptake is shaped by trust, confidentiality, managerial response, and perceived career consequences. Even where provisions exist, workers may hesitate to use them if disclosure feels unsafe or if support depends on individual managerial discretion [R: (Barnack-Tavlaris et al. 2019; Douglas 2022; Kassam 2024)].	*Stigma, resistance, and policy uptake*: Silence is relational as well as cultural: workers may avoid disclosure when they anticipate disbelief, embarrassment, ridicule, or negative professional judgment [R: (Cook and Van Den Hoek 2023; Cruel 2024; Yanıkoğlu 2024)]. These patterns can be interpreted through Ahmed's account of institutional cultures in which complaint becomes costly [T: (Ahmed 2021)].	*Recognition without redistribution*: Psychological safety, inclusive leadership, and participatory decision-making may support employee voice and role-sensitive accommodation, but their effectiveness depends on being embedded in formal systems rather than relying on personal goodwill [R: (Bridges, Wulff, and Bamberry 2023; Douglas 2022; Mangi et al. 2025; Siyal 2023; Stevenson et al. 2021)]. This positions leadership as a bridge between individual voice and institutional responsibility.

Note. [R] indicates sources drawn from the reviewed corpus and used as evidential grounding for the thematic synthesis. [T] indicates theoretical or contextual sources used as interpretive frameworks. The opening phrases in each cell identify the discussion subthemes that each cell connects to; they are used as organizing labels rather than as additional themes.

risks (Furrell and Allen 1973; Morris, Aeschbach, and Scheer 2012; Stock et al. 2019; Yang et al. 2013). The persistent absence of structural responses illustrates what Acker (1990) called the "disembodied worker" norm: an implicit assumption that productivity should be unaffected by biological variation. Within such logics, menstruation becomes framed not as a predictable aspect of embodiment but as a liability, something to be concealed or endured, particularly in sectors with strict performance and safety expectations.

Embodied disruptions in high-stress sectors

Decades of empirical research confirm that aviation work disrupts menstrual regularity. As early as the 1960s, Cameron (1969) found that one in four women entering aviation experienced menstrual deterioration in their first years of service. Furrell and Allen (1973) reported that 28 percent of flight nurses flying trans meridian routes experienced irregular cycles. Subsequent studies confirmed these patterns. Iglesias, Terrés, and Chavarria (1980) reported that a notable proportion of airline stewardesses experienced adverse menstrual changes after entering aviation service, including irregular cycles and pelvic discomfort following long-haul routes.

A comparative U.S. study by Johnson et al. (2024) examined 694 flight attendants and 120 teachers and reported that flight attendants experienced more frequent menstrual cramps than teachers. Among flight attendants, frequent lifting of heavy loads was associated with irregular menstrual cycles. The authors concluded that occupational physical demands may contribute to the documented burden of menstrual cycle irregularities in this occupational group. In another study of 374 flight crew, Rampen et al. (2016) identified high work stress, long-haul duty, and younger age as key predictors of menstrual disorders. Similarly, Yang et al. (2013), in a study of 1,175 Chinese aviation workers, reported a significantly higher prevalence of irregular menstruation among flight attendants

(30.55 percent) compared to ground staff (13.40 percent). The authors associated these differences with occupational stressors specific to flight duty, including circadian disruption, fatigue, and the cumulative physical demands of cabin work.

These findings are supported by broader research on stress and menstrual health. A systematic review of 41 studies concluded that psychological stress is a major risk factor for menstrual irregularity (Poitras et al. 2024). Awasthi (2025) found that women in India with high perceived stress experienced heavier blood flow and less regular cycles. Mohamadirizi et al. (2013), in a study of 150 hospital midwives, also reported significant links between occupational stress and altered menstrual bleeding patterns. Together, this body of work demonstrates that menstrual disruption is not an incidental health complaint but a structural outcome of high-pressure labor regimes. From a social sciences perspective, this evidence underscores how embodied costs are normalized as acceptable trade-offs within male-dominated occupational cultures.

Institutional invisibility and the failure of job design

Despite decades of evidence, aviation organizations have yet to implement meaningful job design changes or policy adaptations. Even basic needs such as restroom access remain unsupported for female pilots, many of whom are expected to suppress or delay bodily functions to meet flight schedules (van Drongelen, Karwal, and Simons 2024). In Türkiye, Yöndem and Çıtak Bilgin (2022) showed that dysmenorrhea significantly affected nurses' performance, yet employers rarely provided recognition or accommodation. Turkish-language sources highlight how cultural taboos and managerial discomfort deter menstruators from seeking workplace support (Gedik and Pehlivanli 2022; Yanıkoğlu 2024). This mirrors global patterns in which menstruation is seen as irrelevant unless pathologized or tied to absenteeism (Cruel 2024; Okamoto et al. 2024). Empirical work in related occupational contexts reinforces these concerns. Cook and Van Den Hoek (2023, 8) examined 668 employed people experiencing dysmenorrhea and found that symptom severity, disclosure of menstrual pain to one's supervisor, and remote work were directly associated with period pain presenteeism. Okamoto et al. (2024) similarly demonstrated, in a cross-sectional study of women working in central Tokyo, that severe premenstrual syndrome and menstrual symptoms were associated with reduced work performance. The pattern emerging from these studies suggests that menstrual health remains organizationally invisible until symptoms reach a threshold that affects measurable productivity outcomes. From a broader theoretical standpoint, this persistent inaction exemplifies Ahmed's (2021) observation that institutions often absorb discomfort without meaningful response, sustaining cultures of silence. The consistent thread across these studies is systemic inaction: risks are well-documented, but rarely translated into flexible schedules, rest allowances, or menstrual-specific provisions.

Policy gaps and the limits of recognition

The regulation of menstrual health at the policy level illustrates a recurring tension between symbolic recognition and substantive redistribution. Although menstrual leave and related provisions have appeared in national debates and legislative frameworks across diverse contexts, implementation remains inconsistent, fragmented, and frequently contested. The result is a policy landscape in which menstrual health is acknowledged rhetorically but rarely institutionalized in ways that challenge workplace norms or support meaningful equity. This gap underscores how menstruation continues to occupy an uneasy position between visibility and structural neglect.

Historical trajectories of menstrual policy

The idea of menstrual leave is not new. The Soviet Union introduced menstrual leave provisions in the early 1920s but withdrew it in 1927 amid concerns about absenteeism and gender-based discrimination (Howe et al. 2023; Sarı 2023). Several East Asian countries implemented policies after World War II, including Japan (1947), South Korea (2001), Indonesia (1948, 2003), Vietnam (2020), and Taiwan

(2002). These regimes varied in scope and generosity, but they were typically framed as gender-based accommodations rooted in reproductive health and industrial labor contexts. More recent developments have been driven by feminist activism and public health advocacy, particularly in Asia, Africa, and parts of Europe. Zambia introduced menstrual leave in 2015 to address gendered health risks, while subnational initiatives in India (Bihar, Kerala) and China (Anhui Province) reflect local experimentation (Levitt and Barnack-Tavlaris 2020). Portugal's 2025 policy established paid leave specifically for workers diagnosed with endometriosis or adenomyosis, reflecting a medicalized but rights-oriented model (Crum and Sun 2025). In Europe, Spain became the first country to adopt national menstrual leave legislation in 2023. Uptake, however, was low: only 1,559 cases in the first year, with many workers refraining from use due to stigma, managerial judgment, or lack of awareness (Kassam 2024). In France, the municipality of Saint-Ouen introduced menstrual leave in 2023, a symbolic but incremental step (Dodman 2023). These examples suggest that policy recognition often outpaces practical uptake. As Fraser (1997) argues, recognition without redistribution risks offering visibility without substantive transformation. Policies may acknowledge menstruation as an issue but fail to challenge the workplace structures that perpetuate exclusion (Barnack-Tavlaris et al. 2019; Furlano 2024).

Fragmented initiatives and the Turkish context

In Türkiye, menstrual health remains largely absent from national occupational regulations and workplace health discourse. While gender equality is referenced in strategic development plans and some organizations adopt the ILO's gender mainstreaming model (Temur 2024), cyclical health needs are not formally integrated into workplace legislation. Attempts to introduce menstrual leave for women in heavy labor sectors in 2004 were repealed before implementation, and no national legal provisions currently exist (Demircan Yildirim 2024). Nonetheless, localized efforts have emerged. Several municipalities, unions, and multinational corporations operating in Türkiye have adopted informal or pilot menstrual leave schemes (Kaçmaz 2022; Sarı 2023). However, these remain discretionary and unregulated, often implemented without formal monitoring or institutional support. A broader cultural reluctance to engage with menstruation as a legitimate workplace issue continues to hinder policy innovation. Howe et al. (2023) identify one Türkiye-based study in their global review; however, this study focuses on menopausal symptoms among university workers and does not present or evaluate a menstrual-health workplace intervention. This distinction is important because Turkish examples remain largely absent from the literature on menstrual-inclusive workplace policies specifically. Moreover, existing initiatives often lack participatory design or attention to psychological safety, leading to policies that workers are either unaware of, distrustful of, or hesitant to use. In this context, organizations in Türkiye and comparable settings may become important sites for piloting menstrual-supportive practices, particularly where national protections remain absent and existing initiatives are fragmented.

From symbolism to structural change

Across contexts, a recurring pattern emerges policies alone do not create inclusion. Even progressive legislation may be undermined when cultural stigma and institutional inertia discourage uptake. As Ahmed (2021) notes, institutions often absorb progressive commitments without altering the underlying structures that inhibit their use. Furlano (2024) highlights how menstrual leave can inadvertently reproduce gendered assumptions by framing menstruation as an individual liability rather than a collective and structural concern. In some cases, disclosure requirements place the burden on employees to reveal intimate health information in potentially unsupportive environments, exacerbating stigma rather than dismantling it. These dynamics illustrate the importance of integration rather than isolation. Menstrual policies must be coupled with inclusive job design, leadership support, and occupational health frameworks that normalize cyclical needs. Without such scaffolding, menstrual leave risks functioning as a symbolic gesture, a checkbox of diversity practice rather than a transformative vehicle for equity and justice.

Culture of silence, stigma, and professional norms

Even in workplaces that formally endorse equality, menstrual health remains at the margins of what counts as "professional." This exclusion is not usually the result of explicit prohibitions, but of cultural scripts of silence, stigma, and emotional self-management that regulate how bodies are expected to appear in organizational life. In high-stress sectors such as aviation, where performance and appearance are tightly monitored, menstrual health is treated less as an occupational concern and more as a private matter to be managed individually. This reinforces gendered hierarchies of professionalism and sustains workplace cultures in which embodied needs are difficult to disclose and accommodate.

Normalizing discomfort and institutional silence

Research shows that many workers internalize menstrual discomfort as a private burden rather than a legitimate occupational concern. Aviation professionals, particularly flight attendants, often perceive their symptoms as shameful or unworthy of disclosure, fearing ridicule, managerial dismissal, or damage to their professional image (Cruel 2024; Yanıkoğlu 2024). Studies examining women's experiences in aviation further suggest that gendered and bodily concerns are often perceived as difficult to raise within hierarchical organizational cultures. Similarly, Perkins et al. (2024) note that limited gender diversity and persistent masculine norms within aviation leadership structures may discourage open discussion of embodied health experiences. These findings provide the aviation-specific grounding for interpreting Ahmed's (2021) concept of "institutional mood." In this review, the relevance of Ahmed's framework lies not in claiming that all aviation organizations explicitly silence menstruation, but in showing how male-dominated, and performance-oriented contexts may make embodied disclosure feel risky or professionally inappropriate. Cultural messages further reinforce this silencing. The emphasis on concealment and bodily control identified in broader menstrual discourse also resonates with the organizational culture of aviation work. Passenger-facing aviation roles place strong expectations on emotional regulation, aesthetic presentation, and continuous professionalism, often requiring workers to maintain composure regardless of discomfort or fatigue (Hochschild 2012). Within such settings, menstruation may become further associated with the need for self-management and invisibility, reinforcing pressures to conceal symptoms and avoid disclosure (Cruel 2024). In aviation, this wider cultural script intersects with occupational expectations of bodily control, emotional composure, and uninterrupted service performance. As Kissling (2006) demonstrates, the menstrual product industry has long promoted concealment and sanitization, shaping menstruation as something incompatible with public and professional life. When such narratives are internalized, even severe symptoms remain undisclosed, producing cycles of presenteeism, pain, and silence (Cook and Van Den Hoek 2023; Okamoto et al. 2024). Martin (1987) and Hochschild (2012) argue that workplaces regulate not only labor processes but also emotional presentation and bodily conduct. These dynamics are particularly visible in aviation, where emotional composure, attentiveness, and passenger-oriented service performance are institutionalized components of professional behavior (Hochschild 2012). Existing studies further indicate that women in aviation frequently experience pressure to demonstrate resilience, uninterrupted performance, and emotional control within organizational cultures shaped by masculine occupational norms (Perkins et al. 2024; Stevenson et al. 2021; Yanıkoğlu, Kılıç, and Küçükönal 2020). Within these conditions, embodied experiences such as menstrual pain, fatigue, or mood fluctuation may become implicitly framed as incompatible with professional expectations, encouraging concealment and self-management rather than organizational accommodation.

Professionalism as a gendered regime

Norms of professionalism are frequently coded as rational, uninterrupted, and emotionally neutral, implicitly aligned with non-cyclical male bodies. Acker (1990) conceptualized these as the "gendered substructures" of work: invisible but powerful norms that disadvantage those whose bodies depart from the ideal. This may produce an environment in which menstruators feel pressured either to

suppress their needs or seek informal accommodations that depend on managerial discretion, personal rapport, or cultural legitimacy (Gedik and Pehlivanli 2022; Udegbe 2003). In practice, this creates precarious and uneven forms of support rather than systemic equity. Empirical studies reinforce these patterns. Stevenson et al. (2021) found that women reported higher concerns about sexual harassment and gender bias than men, alongside greater hesitation in bringing such concerns to management. While menstrual health was not directly examined in this study, the broader reluctance to raise sensitive workplace concerns plausibly extends to embodied experiences such as menstrual symptoms, especially in cultures where workers are expected to appear unaffected by cyclical bodily variation. At the leadership level, Perkins et al. (2024) observe that allyship and gender-inclusive practices remain underdeveloped within flight deck hierarchies, which may further constrain the broader workplace conditions under which sensitive health concerns may be raised. Even peer relationships and informal mentoring may not override the institutionalized mistrust and stigma that surround menstruation. These studies do not always address menstruation directly, but they help explain why menstrual disclosure may become difficult in aviation settings: bodily concerns are filtered through wider gendered norms concerning credibility, resilience, professionalism, and belonging.

Stigma, resistance, and policy uptake

Menstrual stigma does not only shape organizational culture; it also constrains the uptake of policies designed to promote equity. Spain's landmark menstrual leave legislation was rarely used in its first year, with many workers fearing that reliance on the policy would mark them as weak or less committed (Kassam 2024). This illustrates how legal recognition can be undermined when cultural stigma remains intact. Furlano (2024) and Barnack-Tavlaris et al. (2019) caution that policies implemented without cultural transformation risk reproducing shame and surveillance rather than dismantling them. As Ahmed (2021) argues, institutions may absorb complaint or progressive language without altering the everyday structures that make disclosure difficult. Addressing stigma therefore requires more than recognition; it requires structural and relational change. This includes leadership modeling, workplace dialogue, and organizational training that validate cyclical needs as real and legitimate. Without such transformation, policies risk remaining symbolic while lived experiences of silence and stigma persist.

Participation, voice, and organizational change

While structural exclusion and cultural silence constrain how menstrual health is treated at work, leadership and participatory practices represent critical points of intervention. Leadership cannot substitute for systemic reform, job design change, or occupational health provision. However, it may shape the relational conditions under which employees feel able to raise embodied health concerns, request support, and participate in decisions about workplace practices. When leaders encourage openness, value difference, and foster participatory decision-making, menstrual needs might be reframed as collective concerns rather than private burdens, offering possibilities for incremental organizational change.

Leadership and the conditions of psychological safety

Psychological safety, defined as the shared belief that one can speak up without fear of reprisal, is central to health-related disclosure and support-seeking in the workplace. Empirical studies show that inclusive leadership, characterized by openness, accessibility, and individualized consideration, is a consistent predictor of such climates (Ashikali, Groeneveld, and Kuipers 2021; Carmeli, Reiter-Palmon, and Ziv 2010). Leaders who model empathy and normalize difference create spaces where sensitive topics such as menstruation may be discussed without stigma. In aviation and other high-stress sectors, where hierarchies are rigid and informal stigma persists, inclusive leadership can disrupt norms of bodily

suppression and emotional control. Stevenson et al. (2021) found that women in aviation were significantly more hesitant than men in bringing concerns to management, a pattern attributed in part to the persistence of male-dominated workplace cultures (Perkins et al. 2024). Inclusive leaders at frontline and mid-levels may mitigate these barriers by legitimizing cyclical health needs and implementing practical accommodations such as flexible schedules or rest breaks without requiring medical disclosure (Douglas 2022).

Participation, voice, and employee agency

Inclusive leadership also matters because menstrual inclusion cannot be designed effectively without the participation of those affected by workplace conditions. Randel et al. (2018) and Roberson and Perry (2022) argue that inclusive climates emerge when leaders value both belonging and uniqueness. This is particularly relevant for menstrual health because cyclical needs are not uniform: they vary by symptom severity, job role, shift pattern, access to facilities, medical diagnosis, and degree of occupational autonomy. Participatory approaches can therefore help organizations avoid one-size-fits-all policies and instead develop practices that reflect the differentiated realities of workers.

Aviation provides a useful illustration of this need for differentiation. Cabin crew, pilots, ground staff, air traffic controllers, and maintenance workers experience different bodily demands, visibility expectations, rest opportunities, access to facilities, and degrees of control over scheduling. Bridges, Wulff, and Bamberry (2023) propose a model of organizational resilience for gender inclusion, showing how inclusive cultures improve retention and well-being for women in aviation. They emphasize that resilience is not an individual trait but a function of structural support, including peer networks, organizational policies, and leadership practices. Antloga, Do Carmo, and Iglesias (2025) similarly argue that inclusive leadership must go beyond representation to challenge entrenched barriers such as gendered expectations, job insecurity, and stigma around menstrual disclosure. Further evidence shows that inclusive leadership can buffer against stress and burnout in high-pressure jobs, fostering engagement and psychosocial stability, conditions especially important for menstruators navigating cyclical health challenges without systemic recognition (Mangi et al. 2025; Siyal 2023)

Recognition without redistribution

Existing research suggests that workplace support for gendered and embodied health concerns often depends heavily on informal managerial practices rather than standardized institutional mechanisms. Studies conducted in aviation and other high-stress sectors indicate that employees' willingness to disclose sensitive health-related experiences is closely shaped by supervisory attitudes, interpersonal trust, and perceptions of psychological safety (Bridges, Wulff, and Bamberry 2023; Stevenson et al. 2021). Douglas (2022) further argues that access to flexibility and accommodation frequently remains contingent on managerial discretion rather than formal organizational entitlement. Similar patterns are evident in discussions surrounding menstrual leave uptake, where workers may hesitate to use available provisions due to concerns about stigma, inconsistent managerial responses, or potential career consequences (Barnack-Tavlaris et al. 2019; Kassam 2024). In this sense, leadership may facilitate supportive climates, yet without formal organizational protections such as flexible scheduling arrangements or menstrual health policies, inclusion remains uneven and dependent on individual actors rather than structural guarantees. Fraser's (1997) distinction between recognition and redistribution clarifies this limitation: symbolic recognition of difference, such as empathy from managers, must be accompanied by material and structural forms of support. Otherwise, menstruation remains positioned as a discretionary concern rather than an integrated dimension of occupational equity. For high-stress sectors such as aviation, this means that menstrual health support needs to be embedded in routine systems of job design, occupational health, scheduling, and retention rather than left to informal managerial discretion.

Conclusion

This review examined how menstrual health is positioned within occupational well-being agendas in high-stress and gendered work contexts, using aviation as a focal case. The synthesis of 54 sources showed that menstrual health risks were shaped by the interaction between symptoms, work design, scheduling, fatigue, limited recovery opportunities, and professional norms. Organizational responses were often fragmented, discretionary, or absent. Inclusive leadership could foster psychological safety, disclosure, and employee voice, but it could not replace formal workplace provision. The findings suggest that silence around menstruation is produced through the interaction of job design, policy, and professional expectations. Meaningful change therefore requires attention to scheduling, rest and facility provision, occupational health guidance, disclosure processes, and workplace policy. As a narrative review of heterogeneous literatures, the study cannot establish causal relationships or assume that the findings apply across all occupational roles and national contexts. Future research should examine these patterns in specific sectors and evaluate workplace interventions in practice.

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Data availability statement

The data that support the findings of this study are available upon request.

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