

**ПИСМО ДО РЕДАКТОРА
LETTER TO THE EDITOR**

**RELATIONSHIPS OF INSOMNIA WITH PSYCHOSOCIAL FACTORS
AMONG MEDICAL RESIDENTS – LETTER**

**ВРЪЗКАТА НА БЕЗСЪНИЕТО С ПСИХОСОЦИАЛНИТЕ ФАКТОРИ
СРЕД МЕДИЦИНСКИТЕ СПЕЦИАЛИСТИ – ПИСМО**

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DEAR EDITOR,

Relationships of insomnia with psychosocial factors among medical residents attracts an increased interest in almost the entire world due to the adverse effects involving both the performance of these young healthcare workers and the assisted patients; hence, the purpose of this letter is to provide additional comments based on recent literature [1-5]. Alawad et al. (2025) published their study about the prevalence of insomnia and relationships with depression and anxiety among 533 medical residents [1]. The following rates of prevalence were found: insomnia – 33%, sleep disturbances – 74%, anxiety – 58%, and depression – 57% [1]. Antecedent psychiatric illnesses, depression, dissatisfaction with anxiety income, obesity, coffee, and the sleep-inducing drugs consumption were the independent factors of the development of insomnia [1]. It was emphasized that insomnia is common in medical residents, being correlated with depression and anxiety, but the early properly intervention can improve sleep quality [1]. Cao et al. (2025) evaluated the influence of job burnout, the role of psychological resilience, and the effect of insomnia among 866 pediatric residents between March and May 2024. 529 participants were female (61.0%), 299 were first-year, 291 – second-year, and 276 – third-year residents [2].

Their career adaptability was negatively correlated with job burnout; their psychological resilience was a partial mediator for enhancing the protective effects in almost 24.0% of them [2]. Insomnia had the effect of weakening the beneficial impact of psychological resilience, and residents with high-level insomnia presented with a higher level of job burnout, even when they demonstrated a strong adaptability, which confirms the detrimental role played by the sleep disturbances [2]. Nagasaki et al. (2024) studied duty hours (DH), sleep duration, and insomnia, depressive symptoms, and the self-reported errors among 5579 residents who had completed the General Medicine program [3]. Of 5095 residents, 15.5% slept less than 5 h/day and 26.7% had insomnia; compared with ≥ 60 and < 70 , $DH \geq 90$ h/week was associated with shorter sleep duration and worsening insomnia. Shorter sleep durations and more intense symptoms of insomnia were related to increased depressive symptoms; medical errors increased with insomnia; $DH > 90$ h/week could lead to shorter sleep duration, worsened insomnia, a negative impact on well-being and medical safety [3]. Oliver et al. (2025) conducted a survey with 36 emergency medicine (EM) residents, and the aim was to find at least 9 with excessive daytime sleepiness to include in the interviews of sleeping experience [4]. Of the 36 EM residents, 24 completed the survey, and 11

of them scored ≥ 11 on the Epworth Sleepiness Scale (ESS); 9 residents participated in interviews reporting challenges with sleep hygiene, lack of satisfaction satisfied with sleep since residency started, normalization of poor sleep, and stigma on using medication for sleep [4]. Difficulties in maintaining sleep hygiene (due to inconsistent sleep-wake times), avoiding caffeine, alcohol, and large meals before sleep were found, and the sleep worsened after starting residency [4]. Zhang et al. (2025) evaluated 2891 medical residents and detected moderate to severe anxiety (20.3%), moderate to severe depression (19.72%), and moderate to severe insomnia (9.6%) [5]. Three distinct mental health groups were found: high anxiety–depression–insomnia, low anxiety–depression–healthy sleep, and moderate anxiety–mild depression–variable insomnia; training stage, professional accomplishments, self-reported errors, self-esteem, perceived stress, and social support were the factors significantly associated with mental health [5].

In conclusion, medical residents may have mental health problems, and need an early and adequate management.

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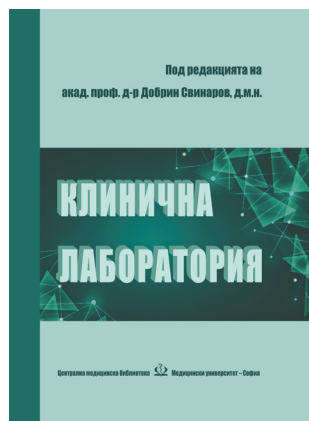
in drafting and revising it critically for important intellectual content; in final approval of the version to be published; and in agreement to be accountable for all aspects, ensuring that questions related to the accuracy and integrity of any part of the manuscript were appropriately investigated and resolved.

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Клинична лаборатория.
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Клиничната лаборатория е основна медицинска специалност, която заедно с другите лабораторни дисциплини осигурява над 70% от обективната информация в клиничната практика, и магистрала, по която научните достижения навлизат в медицината. Диагностичното значение на геномните изследвания се съчетава с възможностите на платформите за клетъчно сортиране и мащабите на клиничната масспектрометрия. Пълната автоматизация, навлизането на самообучаващи се машини и изкуствен интелект поставят лабораторния лекар в позицията на непосредствен участник в диагностично-лечебния процес, без когото е невъзможно да се осмисли и оползотворява комплексната лабораторна информация. Изискванията към лабораторния медик нарастват експоненциално и

налагат съчетаване на технологичната и организационна основа на лабораторията с широкоспектърна клинична подготовка и възможно най-дълбоко познаване на патофизиологичните и патобиохимичните характеристики на болестите.

Структурата и съдържанието на този учебник съответстват на програмата по клинична лаборатория за студентите по медицина в Медицински университет – София. Част от материала е представен в самостоятелни глави, за да се преодолее недостигът на учебни часове. Книгата запълва съществуващата от години липса на ръководство за системно и задълбочено усвояване на клиничната лаборатория на студентско равнище. Считаме, че представянето на всички основни раздели на дисциплината прави книгата подходящо начално четиво и за специалисти по клинична лаборатория. Предполагаме, че много лабораторни лекари и лекари с различни други медицински специалности ще намерят нещо полезно и ново в книгата и ще я ползват в ежедневната си клинична практика.

Учебникът е плод на колективния труд на преподавателите от Катедрата по клинична лаборатория на Медицински университет – София, които отделиха от своето време, за да споделят знания и опит в писмен вид – отговорно, изискващо и задължаващо усилие.

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