

PRE-EMPLOYMENT MEDICAL EXAMINATIONS: PEACE OF MIND FOR EMPLOYERS OR A POINTLESS PROCEDURE?

LUCAS SAN MIGUEL¹, HUGO N. CATALANO²

¹Área de Gestión de Conocimiento, TCba Centro de Diagnóstico, ²Departamento de Docencia, Hospital Alemán, Escuela de Medicina, Facultad de Medicina, Universidad del Salvador, Buenos Aires, Argentina

E-mail: hugoncatalano@gmail.com

The personnel selection process is a key stage for both employers and applicants, as it allows for the evaluation of a candidate's suitability for the job requirements. Among the most used tools are psychological assessments, which offer a thorough evaluation of applicants' cognitive, emotional, and social skills, offering insight into their adaptability and performance in the work environment.

Pre-employment medical evaluations are part of the personnel selection process. Many employers and other stakeholders believe that medical examinations for applicants can prevent occupational diseases and reduce absenteeism.

Diagnostic utility of pre-employment medical examinations

In 1977, in San Francisco, USA, Alexander et al. analyzed 6,125 applicants for low-physical-demand jobs at the Pacific Telephone Company to evaluate whether pre-employment medical exams were effective in predicting attendance or work performance issues. The study divided participants into two groups: in the first, pre-employment studies were used to decide hiring, while in the second, results were ignored, and all applicants were considered fit. After a one-year follow-up, no significant differences were found in the rate of absences due to illness, accidents, or other reasons between the two groups¹.

In 2004, De Raad et al. compared two pre-employment medical evaluation systems in the Royal Netherlands Army: the traditional

PULHEEMS system, based on disease detection, and the new BMEKL system, focused on functional capacity for military work. A follow-up of soldiers for two years after training found that those evaluated with the BMEKL system were fit for service for more days (648 vs. 612) with lower medical costs (€396 vs. €746). However, this study had a serious randomization issue, as the BMEKL and PULHEEMS evaluation systems alternated weekly, introducing a risk of selection bias².

A 2010 systematic review by Cochrane, updated in 2016³, concluded that: "There is very low-quality evidence that specific pre-employment examinations for certain jobs or health issues could reduce occupational diseases, injuries, or sickness absences. This supports the current policy of restricting pre-employment exams to job-specific evaluations. More studies are needed to consider the harm of rejecting job applicants."

Adverse effects of systematic medical evaluations

There is a fundamental difference between a medical screening program and a pre-employment medical evaluation: the environment in which the evaluation is conducted. In a pre-employment evaluation, decisions based on results depend not only on the applicant's characteristics but also on the employer's willingness and ability to provide work accommodations. Medical screening programs and pre-employment medical examinations both carry the risk of two significant downsides⁴.

False positives occur when healthy individuals are mistakenly deemed unfit, whereas overdiagnosis refers to identification of real conditions with uncertain prognoses that may not significantly impact job performance. In a pre-employment evaluation, this could translate into the unjustified rejection of healthy workers or, at best, the implementation of unnecessary work accommodations, which could generate additional costs and potential barriers to workforce entry.

Job insertion in patients with chronic diseases

Yildiz et al. conducted a study in the Netherlands to assess the influence of six common chronic diseases—mental disorders, cardiovascular, musculoskeletal, respiratory, metabolic, and neurological diseases—and multimorbidity on the likelihood of obtaining employment. The study included 619,968 unemployed individuals aged 18 to 55 between 2010 and 2013. Findings revealed that individuals with common and psychotic mental disorders, as well as those with multimorbidity (defined as having at least two chronic diseases), had a significantly lower probability of obtaining employment compared to those without these health conditions. Furthermore, the negative impact of multimorbidity increased with age, being more pronounced in the 45 to 55-year-old group, highlighting the increased vulnerability of this demographic to employment reintegration challenges⁵.

An example of quaternary prevention?

Quaternary prevention is defined as the set of actions aimed at preventing, reducing, or mitigating the effects of unnecessary or excessive medical interventions that may harm patients. Its objective is to protect individuals from unnecessary treatments and unjustified medicalization⁶.

How many candidates may be unfairly disqualified due to unnecessary medical evaluations? The absence of data on the true impact of this practice prompts reflection on its potential consequences, not only economically and psychologically but also on the physical health of those unable to access employment. Could unemployment be considered an unintended ad-

verse effect of systematically implementing pre-employment medical examinations?

Employment status is a significant determinant of health. This is reflected in the poorer mental and physical health status among unemployed individuals⁷.

Legal aspects and misuse

In Argentina, pre-employment medical examinations are mandatory and must be conducted before starting the employment relationship. According to current legislation, their purpose is to determine whether the applicant has the physical and mental fitness required to perform the job tasks and to identify any pre-existing diseases. Resolution SRT No. 37/2010 states that pre-employment or entry examinations must be carried out before the worker's incorporation, with the objective of assessing their suitability for the job. However, the misuse of these examinations has, on multiple occasions, resulted in discriminatory practices that infringed upon applicants' fundamental rights. In response to this issue, in 2022, Law 27.675 was enacted, expressly prohibiting the offering and performance of HIV, viral hepatitis, and other sexually transmitted infection tests both in pre-employment medical exams and during the employment relationship.

Final Comment

Pre-employment medical examination is a mandatory in Argentina despite the weak evidence supporting their implementation. This is neither the first nor the last time that legislation and clinical judgment have been at odds. While it is difficult to avoid unnecessary studies in the pre-employment stage, along with their inevitable incidental findings, it is essential that such findings do not translate into detrimental decisions for the applicant. The key lies in the expert interpretation of the physician, who, with professional judgment and rigor, must contextualize the results and clearly and clearly communicate whether the findings have any clinical relevance.

In this delicate balance between regulations and individual well-being, the physician should assume a crucial role: that of a guardian of health, not only as an agent of control but as a guarantor of a fair and humane evaluation.

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