

Original article

How much do workers' health examinations add to health and safety at the workplace? Occupational preventive usefulness of routine health examinations



Maria Cruz Rodríguez-Jareño^{a,b,*}, Emilia Molinero^c, Jaume de Montserrat^c, Antoni Vallès^d, Marta Aymerich^{e,f}

^a Departament de Ciències Mèdiques, Facultat de Medicina, Universitat de Girona, Catalonia, Spain

^b Servei de Prevenció, Serveis de Salut Integrats Baix Empordà, Palamós, Girona, Spain

^c Subdirecció General de Seguretat i Salut Laboral, Departament d'Empresa i Ocupació, Generalitat de Catalunya, Spain

^d Departament de Salut Pública, Facultat de Medicina, Universitat de Barcelona, Catalonia, Spain

^e TransLab Research Group, Departament de Ciències Mèdiques, Facultat de Medicina, Universitat de Girona, Catalonia, Spain

^f Universitat Oberta de Catalunya, Catalonia, Spain

ARTICLE INFO

Article history:

Received 13 June 2014

Accepted 4 November 2014

Available online 17 December 2014

Keywords:

Cross-sectional studies

Occupational Medicine

Occupational health

Occupational health services

Workplace

Public health surveillance

Safety management

Resource allocation

ABSTRACT

Objective: Despite no evidence in favour, routine workers' health examinations, mostly pre-employment and periodic, are extensively performed worldwide with important allocation of resources. In Spain they are performed within a theoretical job-specific health surveillance system. Our objective was to ascertain their occupational preventive usefulness from the perspective of occupational health professionals.

Methods: Cross sectional study. Online survey addressed to all physicians and nurses members of the Catalan Society of Safety and Occupational Medicine ($n = 539$) in 2011. Univariate and bivariate analyses of prevalence and prevalence differences of answers.

Results: Response rate 53% ($n = 285$). According to more than 70% of respondents the health surveillance system isn't cost-effective, doesn't meet the goal of early detection of health damage related to work, and doesn't contribute to improve the occupational risk prevention system. Further deficiencies were identified regarding specificity and scientific basis for health examinations, quality of collective health surveillance and referral of suspected cases to mutual insurance companies for diagnosis and treatment. Bivariate analysis showed a significantly more negative opinion for several items amongst physicians (versus nurses) and amongst professionals working in external prevention services (versus internal services).

Conclusions: This study raises serious concerns about how health examinations are performed within our workers' health surveillance system, which should be reviewed to ensure the fulfilment of its occupational preventive objective. Our results might encourage other countries with similar practices to assess them in order to assure their fitness for purpose.

© 2014 SESPAS. Published by Elsevier España, S.L.U. All rights reserved.

¿Qué aportan los exámenes de salud a la seguridad y salud en el trabajo? Utilidad preventiva ocupacional de los exámenes de salud rutinarios

RESUMEN

Objetivo: Pese a la ausencia de evidencia a favor, la realización de exámenes de salud rutinarios a los trabajadores, sobre todo previos/iniciales y periódicos, es una práctica extendida en muchos países y conlleva una asignación importante de recursos. En España se realizan dentro de un sistema de vigilancia de la salud laboral teóricamente específico. Nuestro objetivo fue determinar su utilidad preventiva ocupacional desde la perspectiva de los profesionales sanitarios de salud laboral

Métodos: Estudio transversal. Encuesta en línea dirigida a profesionales sanitarios miembros de la Sociedad Catalana de Seguridad y Medicina del Trabajo ($n = 539$) en 2011. Análisis univariado y bivariado de prevalencia y prevalencia de diferencias de las respuestas.

Resultados: Tasa de respuesta 53% ($n = 285$). Según más del 70% de los participantes, el sistema de vigilancia de la salud no es costo-efectivo, no cumple el objetivo de detección precoz de daños a la salud relacionados con el trabajo, y no contribuye a mejorar el sistema de prevención de riesgos laborales. También se identificaron deficiencias en la especificidad y base científica de los exámenes, en la calidad de la vigilancia colectiva y en la derivación a mutua de casos sospechosos de patología laboral para diagnóstico y tratamiento. El análisis bivariado mostró una opinión significativamente más negativa para

Palabras clave:

Estudios Transversales

Medicina del Trabajo

Salud Laboral

Servicios de Salud del Trabajador

Lugar de Trabajo

Vigilancia en Salud Pública

Administración de la Seguridad

Asignación de Recursos

* Corresponding author.

E-mail address: maricruz.rodriguez@udg.edu (M.C. Rodríguez-Jareño).

varios ítems entre los médicos (versus enfermeras) y los profesionales de servicios de prevención ajenos (versus propios).

Conclusiones: Este estudio plantea serias preocupaciones acerca de cómo se realizan los exámenes de salud dentro del sistema de vigilancia de la salud de nuestros trabajadores, que debe ser revisado para asegurar el cumplimiento de su objetivo preventivo laboral. Países con prácticas preventivas similares podrían verse alentados por nuestros resultados para revisarlas.

© 2014 SESPAS. Publicado por Elsevier España, S.L.U. Todos los derechos reservados.

Introduction

Health examinations for workers are extensively performed in many countries, either in the context of fitness for work examinations -mainly at pre employment/pre placement-, as part of health surveillance -mostly periodic and often linked to fitness for work certification-, or as general health checks. In 2010, out of a salaried working population of 2.7 million,¹ one million workers' health examinations were performed in the context of health surveillance in Catalonia, involving approximate direct costs of 49–59 million Euros assuming a cost of 50–60€ per health examination charged to employers.² Indirect costs are difficult to calculate but they include lost working time, adjustments to maintain production schedules, travel time and expenses, and costs of re-testing (mostly in primary care) to rule out false positives. As any form of screening, this practice is not free of unwanted side-effects, like undue anxiety associated with false positives, re-testing, over-diagnosis and medicalization.^{3,4}

According to the International Labour Office, “the central purpose of worker's health surveillance is the primary prevention of occupational and work-related diseases and injuries, and health examinations play a very important role, not only in primary, but also in secondary prevention, through early detection. Medical examinations and tests, however, should not be carried out as a perfunctory routine and due consideration should be given to their value and relevance”.⁵

Indeed, the preventive usefulness of indiscriminate health examinations is currently highly questioned, both for general population and for working population. The best available evidence shows that general health checks are unlikely to be beneficial for general population, and therefore its use is not supported.^{6,7} Within the occupational setting, a Cochrane review⁸ found that there is very low quality evidence that pre-employment examinations that are specific to certain jobs or health problems could reduce occupational disease, injury, or sickness absence, thus recommended restricting pre-employment examinations to job-specific examinations, and warned about the potential harms of rejecting job applicants. Less is published about the occupational preventive usefulness of routine workers' periodic medical examinations.

In many European countries it is an obligation of all employers to provide occupational health coverage for their employees. The main Spanish health and safety law,⁹ a transcription of European Framework Directive 89/391/EEC,¹⁰ requires companies to offer appropriate health surveillance to their employees, and states that health examinations should be specific and a key instrument for prevention. These examinations are performed by occupational health professionals within prevention services. Companies can either create their own prevention service (internal prevention service) or contract the services from a private company (external prevention service). Prevention services have to interact with the two parallel, publicly financed, healthcare delivery systems in Spain: the National Health System, for non work-related issues, and employers' mutual insurance companies – that privately manage public funds – for work accidents and occupational diseases.

Given the importance of the issue and the scarcity of publications we decided to undertake this study with a twofold objective: (1) to ascertain the occupational preventive usefulness of medical examinations for workers in our country from the opinion of occupational health professionals, whilst searching for any potential differences by their personal or professional characteristics; and (2) to identify areas for improvement of health surveillance within prevention services.

Methods

Design and study population

Cross sectional design. Taking into account the objectives of the study and the scientific and legal aspects that would subsequently be used to analyse the responses, a self-administered questionnaire was designed, and refined after pilot-testing. Gold Plan SurveyMonkey software was used to develop the on-line version.

Apart from personal and professional data, it included a first section with 10 opinion questions about the overall situation of health examinations and workers' health surveillance in Catalonia, and a second section with 57 questions on actual practice of health surveillance addressed to a subset of the participants, those who performed health examinations in prevention services. The results of the latter are currently being analysed separately. This report analyses the answers to the first section of the questionnaire.

The study population consisted of all health professionals in the Catalan Society of Safety and Occupational Medicine since there is not an official census of health professionals working in Occupational Health in Catalonia (reference population). Our sample consisted of those professionals responding to the questionnaire (Fig. 1). Indirect data were used to estimate the size of the reference population.² Confidence level absolute values of the estimated ratios were calculated under the assumption of maximum uncertainty ($p = q = 0.5$) and 95% confidence.¹¹

Variables

Participants' characteristics (categories are shown in brackets). Age (years); sex (male/female); qualification (physician/nurse); field of activity (prevention service/other fields); type of prevention service if applicable (internal/external); and performance of health examinations by the professional (yes/no).

Areas explored. The questionnaire included questions on the specificity, evidence basis, efficiency, capacity for early diagnosis, and general preventive usefulness of health examinations. Further questions explored professionals' perception of communication channels between prevention services and both employers' mutual insurance companies and the National Health System, the degree of referral of suspected occupational and work related diseases by prevention services to mutual insurance companies, the quality of collective health surveillance, and the good use of the skills of occupational health professionals. Likert type scales with 4 or 5 categories plus one “I don't know” option were used for the answers.

Download English Version:

<https://daneshyari.com/en/article/1073154>

Download Persian Version:

<https://daneshyari.com/article/1073154>

[Daneshyari.com](https://daneshyari.com)