Hepatitis B vaccination coverage levels among nurses in Greece

To the Editor:

Hepatitis B virus is mainly transmitted parenterally and represents a major risk factor for health care workers because of their frequent exposure to patient biologic materials (blood and body fluid).\textsuperscript{1} Epidemiologic studies have shown that the incidence of infection following a needlestick contaminated with hepatitis B virus ranges from 6\% to 30\%.\textsuperscript{2} Therefore, workers performing tasks involving exposure to blood or blood-contaminated body fluids should be vaccinated.

With this study, we wanted to estimate the coverage levels of hepatitis B vaccination among Greek nurses against hepatitis B. A self-reported questionnaire was used, based on the original questionnaire used in the survey of McEwen and Farren\textsuperscript{3} (after permission of the authors).

In our study, 63.2\% of the participant Greek nurses reported that they were fully vaccinated. The majority of immunized nurses (66\%) was female ($P = .008$), and 72.6\% of fully vaccinated nurses worked in intensive care units; 84.3\% of those who were fully vaccinated had their antibody titer measured to assess the efficacy of the vaccine. Of these, 10.5\% reported their titer was negative. Reported reasons for declining vaccination included concerns about adverse effects, beliefs that are not in increased risk for infection and prior hepatitis B infection. The main reasons for receiving vaccination were self-protection and family protection.

Compared with other studies,\textsuperscript{3,4} we found lower vaccination rates among nurses. The higher vaccination levels in these studies probably rely in development and application of continuing immunization programs for health care workers.

In conclusion, our study showed that a substantial number of Greek nurses (40\%) are not vaccinated for hepatitis B, despite being in great risk for infection because of frequent exposure to blood or other potentially infectious biologic materials. Although efforts have been made to tackle this issue during the last years, there is still a need for more efficient vaccination strategies. This would contribute further into reducing the number of unprotected health care workers and ensuring that all personnel at risk are actively offered and accept hepatitis B immunization.

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References

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