SECURITY AND PSYCHIATRY To the Editor:

n the October issue of IMAJ Bergman-Levy et al. [1] advocated evolution in Israel toward the three-tier British system, of low-, medium- and high-security units. Bauer and Chernes [2] argued against this system. They preferred the existing custodial approach. Following closure of mental hospitals in the UK in the 1970s, regional secure units became necessary because of the need to house dangerous patients hitherto managed in the clinical rather than penal domain [3]. Coid et al. [4] carried out the first study of such units over time. Seven services were studied over a 7-year period. The principal differences were in readmissions, number of non-crime admissions and patients requiring high levels of security, and length of stay. Coid's study did not evaluate service effectiveness or efficiency. He concluded, "There is little purpose in doing so when such marked differences existed between styles of service delivery and levels of service provision." In Coid's recent study of patients discharged from 7 of 14 services [5,6], 1 in 8 men were reconvicted of grave offences. A third of men and 15% of women reoffended. These figures underestimate the prevalence of violence. For every individual convicted, surely another escapes detection or conviction.

What of the forensic requirements of Israel? Deinstitutionalization passed Israel by. Hence, that reason cannot be adduced for establishing medium secure units here. It is difficult to find compelling alternative arguments. Critics, commenting on the high rate of patient recidivism, argue that the units are a form of reinstitutionalization. Their clients are becoming the new, mental health longstay. As Bauer and Chernes correctly note, units are either secure or not secure. So if the issue is not operational, might it be clinical? Is there a diagnostic basis for a hierarchy of security management? Probably not. High security units house the chronic, criminally insane. Their dan-

gerousness is idiosyncratic, and predictably unpredictable. Medium secure units house those deemed clinically redeemable from their dangerousness. They center on three groups: the putatively better prognosis psychoses, the severe personality disorders, and those with dual disability, namely intellectual deficiency and serious mental illness. Even if penal policy and ideology were to permit it, does the empirical evidence bear out a separate, intermediate service? Again, probably not. To date no study has been carried out comparing different forms of service delivery to these various forensic populations. Clinical service has not been compared with alternate clinical service, penal provision with alternate penal provision, or clinical service with penal service. The field of service delivery is simply stumbling in the dark. To introduce regional secure units to Israel would be solving a problem we don't have (de-institutionalization) and creating another problem we also don't have, namely newly placed (reinstitutionalized), long-stay mentally ill. Perhaps we should return to diagnostic basics. But, the DSM passes violence by, and previous generations of studies on psychopathy and sociopathy have proven of remarkably limited effectiveness in guiding treatment or service delivery.

So, where to now? It is, in fact, irrelevant whether violent criminals with mental disorder are treated in prison units or in regional secure units. Either would serve. Both can equally be driven by the 'ideals' of retribution or restoration. The truly important question, independent of the locus of care, is how to understand these populations diagnostically, and how to render them safe to themselves and to others. This is not merely a problem for Israel or for the developed world. It is part of a global public health problem of violence, criminality and mental illness. Establishing medium secure units without addressing these issues merely shelves the problem, or creates new ones.

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DOES THE MAJORITY OF THE HEALTHY ISRAELI POPULATION REALLY SUFFER FROM HYPOVITAMINOSIS D? To the Editor:

ren et al. [1] present original data **U** on serum vitamin D (25(OH)D) levels based on a representative healthy study population of Israeli volunteers from a broad demographic spectrum, showing an impressive normal distribution. However, they note that of the 195 subjects who participated in their study 149 (78%) had insufficient vitamin D levels (< 30 ng/ml), and among them 52 (27% of the entire cohort) suffered from vitamin D deficiency (< 15 ng/ml). They conclude that their results suggest that hypovitaminosis D is common across all ages, genders and seasons in Israel. This finding is physiologically perplexing as this was even observed in the summer months, and Israel is of course a country characterized by a sunny Mediterranean climate.

I wonder whether the new data presented may actually imply that the vitamin D levels used to define hypovitaminosis D are not relevant to Israel. Perhaps the authors could define new norms based on the normally distributed levels that they measured, as I fail to understand how levels found for 78% (!) of an apparently healthy and representative sample can be defined as abnormal.

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To the Editor:

W e recently published findings in which 78% of healthy Israeli subjects had insufficient serum levels of vitamin D [1]. In his letter Seidman comments that perhaps the threshold value defining insufficiency (< 30 ng/ml) is not relevant to Israel. He further suggested that we define new norms based on the normally distributed levels that we measured.

We agree that threshold values for biomarkers defining abnormality are often determined based on the mean levels detected in the normal population. For example, a common cutoff value determination method is adding/subtracting two multiples of the standard deviation to the normal population mean. Interestingly, in the case of 25-hydroxyvitamin D (250HD), which is the best indicator of overall vitamin D status [2], the normal threshold levels were not determined by such a "statistical" rationale. The low end of the normal range of 25OHD was set at 30 ng/ml based on a physiological rationale [3]. That is, studies published in the past several years suggest that levels of parathyroid hormone rise and active calcium absorption diminishes when levels of 25OHD fall below this threshold value [2]. Moreover, levels lower than 30 ng/ml were related to various immune mediated and malignant diseases [3].

AT the beginning of 2011 the Institute of Medicine (IOM) issued recommendations concerning vitamin D requirements [4], which are based primarily on the integration of bone health outcomes with evidence concerning 25OHD levels and are less strict. They suggested that levels higher than 15 ng/ml meet the needs of approximately half the population (median population requirement), whereas levels of at least 20 ng/ml meet the needs of 97.5% of the population and are therefore sufficient [4].

Of note, when we applied these threshold values suggested by the IOM, we still found 40% and 28% of our healthy cohort to be in the insufficiency (< 20 ng/ml) and deficiency (< 15 ng/ml) ranges of vitamin D respectively. Therefore, it seems that our conclusion, that hypovitaminosis D may be commoner in sunny Israel than we previously thought, still stands.

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Capsule

Mus spretus SEG/Pas mice resist virulent Yersinia pestis, under multigenic control

Laboratory mice are well known to be highly susceptible to virulent strains of *Yersinia pestis* in experimental models of bubonic plague. Blanchet et al. found that *Mus spretus*derived SEG/Pas (SEG) mice are exceptionally resistant to virulent CO92 and 6/69 wild-type strains. Upon subcutaneous injection of 10² colony-forming units (CFU), 90% of females and 68% of males survived, compared with only an 8% survival rate for both male and female C57BL/6 mice. Furthermore, half of the SEG mice survived a challenge of up to 10⁷ CFU. The time required for mortality was similar between B6 and SEG, suggesting that survival is dependent on early rather than late processes. The analysis of 322 backcross mice identified three significant quantitative trait loci (QTLs) on chromosomes 3, 4 and 6, with dominant SEG protective alleles. Each QTL increased the survival rate by approximately 20%. The three QTLs function additively, thereby accounting for 67% of the difference between the parental phenotypes. Mice heterozygous for the three QTLs were just as resistant as SEG mice to *Y. pestis* challenge. The SEG strain therefore offers an invaluable opportunity to unravel mechanisms and underlying genetic factors of resistance against *Y. pestis* infection.

Genes Immun 2011; 12: 23 Eitan Israeli

"Convictions are more dangerous enemies of truth than lies"

Friedrich Wilhelm Nietzsche (1844-1900), German philosopher and classical philologist. He wrote critical texts on religion, morality, contemporary culture, philosophy and science, notably in existentialism, nihilism, and postmodernism. His style and radical questioning of the value and objectivity of truth have resulted in much commentary and interpretation. His key ideas include the death of God, perspectivism, the Übermensch, the eternal recurrence, and the will to power. Central to his philosophy is the idea of "life-affirmation."