How Many Psychologists do we Need?

Andrea Branley & Michael Byrne

Andrea Branley is a Research Assistant and Michael Byrne is Principal Psychology Manager, both with Roscommon Health Service Area, HSE West. Correspondence regarding this article can be sent to michaelj.byrne@hse.ie

Introduction

The most recent manpower survey of psychology posts (Breaden & Woods, 2010) indicated that there were 647.34 Whole Time Equivalents (WTEs) working in the Irish health services in 2008. However, psychology managers and many other stakeholders recognise that this level of staffing is insufficient. The purpose of this paper is to examine the two not totally dissimilar population- and needs-based methods of estimating workforce requirements and to outline which might be the best method to calculate how many psychologists are needed in Ireland.

Population-Based Estimates

This method estimates the number of required psychologists by applying to a population’s size recognised ratios that are based on prevalence rates of psychological difficulties in the general population. For example, applying a recommended ratio of 1 in 5,000 (Management Advisory Service, 1989; National Health Services [NHS] Education for Scotland, 2009) to Ireland’s population (Central Statistics Office [CSO], 2007) yields a national estimate of 849 psychologists or a shortfall of 201.66 WTEs on current staff numbers (Breaden & Woods, 2009).

Another example is Carr’s (2000) review of the Midland Health Board Psychology Service. At the time of this review, the local ratio of psychologists to population was 1 in 12,000. Carr based his recommendations for changes to service provision on what he described as a “conservative view” that only 10% of the area population required intervention and a further 10% required prevention services. Proposed service models in his review report requiring extra psychologists would have increased this ratio to 1 in 3,000 to 5,000. Some of the recommendations made in order to improve this ratio included increased staffing levels, an improved referrals system and waiting list management, protocols for duration of psychological intervention, and improved prevention services.
The Department of Health, Social Services and Public Safety of Northern Ireland (2008) reported that staffing levels equated to 1 WTE per 10,276 general population. It was acknowledged that this was not an adequate ratio and recommendations were made regarding how to increase numbers. However, further detail was not provided including a recommended ratio.

The difficulty with merely using ratios of how many psychologists are required for the general population is that individual differences across the population are not accounted for. For example, a review of the literature on the prevalence of mental health problems in Ireland shows significant differences between different age groups. An average of 20.6% of Irish children (0 to 18 years) are thought to require psychological intervention (Martin & Carr, 2005), while an average of 12.9% of adults (18 to 64 years) and 10.2% of older adults (65+ years) are thought to require psychological intervention (Tedstone Doherty, Moran, Kartalova-O’Doherty, & Walsh, 2007). Factors such as socioeconomic status further contribute to the difference between these prevalence rates. If the number of psychologists required is based on a general prevalence rate in the population, the result could be an oversupply of psychologists working with some age groups and a shortage with some others.

**Needs-Based Estimates**

The number of required psychologists can also be estimated by, using prevalence rates of clinical presentations, first calculating the number of people likely to require psychological services and then dividing this figure by the expected workload of a psychologist.

The British Psychological Society (BPS; 2004) published a report estimating the demand for psychologists in adult mental health services. This report included proposed services such as mental health promotion, mental health services at primary care level, services for people with severe mental health problems, and residential, community and specialist services. The report concluded that 7,300 clinical psychologists and 1,200 counselling psychologists would be required to deliver adult mental health services based on the existing numbers requiring psychological intervention. This represented a recommended ratio of 1 in 5,781. This contrasts with the non-evidence-based 1 in 25,000 ratio recommended for generic adult community mental health teams in Ireland (Department of Health & Children, 2006). The number of psychologists working in the NHS in England was 4,850 WTEs, representing a 1 in 10,131 ratio (BPS, 2004). This represented a shortfall of 3,650 WTEs.

According to the NHS Scotland Workforce Planning report (NHS Education for Scotland, 2009), there were 537.7 WTE clinical psychologists and 40.5 WTE other applied psychologists employed in the NHS Scotland in September 2009. This represented a national clinical psychology staffing level of 1 in 9,008. This composite figure did not reflect variable staffing levels across the different age ranges, with a ratio of 1 in 8,758 for those aged under 20, 1 in 8,643 for those aged 20 to 64 years, and a ratio of 1 in 26,568 for those aged 65 and over.

Although no recommendations were given in this 2009 NHS Education for Scotland report as to how many psychologists were required (to address psychological needs), previous reports (e.g., NHS Education for Scotland, 2002) had suggested that each WTE psychologist needed to process a caseload of 86 service users annually. While the NHS Education for Scotland (2009) report did not recommend a caseload throughout figure, it indicated that psychologists spent 63% of their time in direct service provision, 10% in the clinical training/supervision of others, 9% in management activities, 5% in research and audit, and the remaining time in their own professional development activities or other activities (e.g., travelling to clinics). A relatively low median caseload size and a relatively low figure of 36% of time engaged in direct work among a sample of Irish psychologists (Dowd, Sarma & Byrne, 2011) may partially reflect a decreased emphasis on direct work with service users and a small but welcome shift towards a shared care or consultant role model (Management Advisory Service, 1989).

This second method of estimating the number of psychologists required involves taking consideration of a number of different issues including individual differences in the prevalence of mental health problems across demographics of the population, as well as the workload of a psychologist. Hence, an advantage of this method is that it gives service providers a better idea of how staffing levels need to be organised across different care groups in the population, depending on individual need.

**Conclusion**

The population- and needs-based methods of estimating psychology staffing requirements do not yield significantly different findings. For example, the recommended 1 in 5,000
ratio by the Management Advisory Service (1989) does not diverge significantly from the 1 in 5,781 ratio recommended by the BPS (2004) that was based on individual need across different service areas. In Ireland, the 647.34 WTE psychologists (Breaden & Woods, 2010) represents a ratio of 1 in 6,546 of the general population, or a shortfall of 201.66 WTEs based on the above 1 in 5,000 ratio. To the best of our knowledge, no Irish study has yet calculated a recommended ratio based on individual need across different service areas.

Perhaps the reason for the similar estimates produced by the population- and needs-based methods is that the two methods are actually not distinct from one another. The former provides a recommended ratio, that although more general, is still based on prevalence rates in the general population. The needs-based method is also based on prevalence rates, although as it is based on more in-depth investigation of the population, it may yield slightly more accurate findings that take into account the demographics of a given population.

Both methods have their own use at different levels of management. Population-based ratios will provide similar recommendations for the total number of psychologists needed as ratios that are based on individual needs of different clinical cohorts. The former may be useful at a higher level of management in providing a recommendation of how many staff are required for a given population size. At a lower level of management (e.g., within the profession of psychology itself or at a local level) ratios based on individual service needs will assist in the distribution of staff numbers across different service areas and in different locations, depending on the identified needs of those areas.

Even in a context of having one psychologist per 5,000 general population, taking a “conservative view” that only 10% of the area population requires psychological intervention (Carr, 2000), psychologists might need to carry a caseload of up to 500. Clearly, the latter is not feasible. Going forward it would be useful to examine current workloads of psychologists in Ireland, and to explore the possibility of other disciplines and mental health professionals providing some of the services in consultation with, or under the supervision of, psychologists (e.g., shifting towards a shared care or consultant role model; Management Advisory Service, 1989). The latter could lead to a more effective utilisation of psychologists’ time and experience. Indeed, the BPS (2004) made suggestions regarding how other healthcare workers could be involved in providing the services currently carried out by clinical psychologists. These included health promotion officers, health psychologists, counsellors, primary care mental health workers, voluntary services coordinators, as well as assistant and associate psychologists.

References


