Skilled health workforce in India does not meet WHO recommended threshold

The density of the total health workforce is estimated to be 29 per 10,000 population but only 16 per 10,000 for trained workers

The skilled health workforce in India does not meet the minimum threshold of 22.8 skilled workers per 10,000 population recommended by the World Health Organisation, shows research published today in the online journal *BMJ Open*.

Estimates of non-health workers engaged in the health sector and technically qualified health professionals who are not part of the current workforce is able to be provided in India for the first time by the study as it is based on data from two sources.

The authors retrieved data on the number of registered practitioners, such as doctors, nurses, physiotherapists and dentists, from published literature and websites of professional councils and organisations.

They also estimated the number of qualified and unqualified healthcare workers actually working in India using the 68th round (July 2011–June 2012) of National Sample Survey Organisation (NSSO) data on 'Employment and Unemployment Situation in India' - a household survey conducted every five years.

As well as registered practitioners, the health workforce in India includes many informal medical practitioners, such as traditional birth attendants, faith healers, snakebite curers, and bonesetters without formal education or training.

The total size of health workforce registered with different councils and associations was 5 million, but the NSSO estimated the size of the workforce to be 1.2 million fewer at 3.8 million.

Based on the registration data, the density of the total health workforce was estimated to be 38 per 10,000 population, but the NSSO data found it be lower at 29 per 10,000 population. In eastern and rural states total health workforce density was lower than the WHO minimum threshold of 22.8 per 10,000 population.

According to the registry data the density of doctors and nurses and midwives per 10,000 population across India was 26.7, whereas the NSS0 data put it at 20.6.

The estimates also reveal "an alarmingly large presence of unqualified health professionals," as adjusting for adequate qualifications of health workers reduced the workforce density from 29 to 16 health workers per 10,000 population.

The presence of unqualified health professionals in the health system is not unique in India. Unqualified health professionals are usually the first point of contact for rural and poor population in many low-income and middle-income countries.

The data also showed that approximately 25% of currently working health professionals do not have the required qualifications as laid down by professional councils, and that 20% of adequately qualified doctors are not in the current workforce. More than 80% of doctors and 70% of nurses and midwives were employed in the private sector.

The researchers point to several limitations of their study, including the registration data being inadequately updated and likely to include deceased, unemployed and

professionals who have migrated overseas, and the survey data being self- and also outdated reported.

Nevertheless the authors were able to conclude: "Distribution and qualification of health professionals are serious problems in India when compared with the overall size of the health workers.

"Policy should focus on enhancing the quality of health workers and mainstreaming professionally qualified persons into the health workforce."