Inter-observer variability in the advice provided by occupational physicians and nurses on Disability Discrimination Act (DDA) 2005: a cross sectional study

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ABSTRACT

Aim: To study the inter-observer variability of medical advice on Disability Discrimination Act, 2005 provided by Occupational Physicians and Occupational Nurses in the United Kingdom.

Method: Clinical Vignettes were constructed from randomly selected clinical cases assessed by a single Occupational Physician at a regional clinic of a large Occupational Health provider during January 2005 for advice on Disability Discrimination Act, 1995 (DDA). These vignettes included all necessary information to arrive at an opinion on the appropriateness and probability of the DDA.

After pilot testing these Vignettes were batched by systematic randomisation, Batch 1 and Batch 2. Each batch contained 10 clinical vignettes. These vignettes were distributed as booklets and electronic documents.

The paper and electronic booklets were sent to randomly chosen Occupational Clinicians (Occupational Health Doctors and Occupational Health Nurses) requesting them to participate in the study. Clinicians were asked to provide opinion on the likelihood of employee being disabled under the terms of DDA and the strength of the judgement on which they had formed an opinion, using a five point scale.

Results: The invitation was sent to 100 clinicians randomly selected to participate in the study. This included 24 nurses and 76 Occupational physicians. The participation rate was 46%. The respondents included Occupational Health Doctors and Occupational Health Nurses from various Occupational Health operational backgrounds. The data was collated from the completed clinical vignettes and tabulated using Microsoft Excel. The data was analysed using STATA, a statistical software.

Intra-class correlation coefficient (ICC) was used to calculate the variability. This is equivalent to kappa correlation for Binary and Multi-rater kappa coefficient for ordinal variables respectively. ICC value of 1 suggests complete agreement between clinicians.
and value of zero suggests no agreement at all. Overall there was significant inter-
variability in the advice provided on DDA (ICC=0.26). Amongst the clinicians, non-
accredited occupational physicians (AFOM/DOccMed) showed greater level of consistency
(ICC=0.52) followed by Accredited Specialists (ICC=0.34). Trainee Specialist Registrars
(ICC=0.28) demonstrated consistency better than the Occupational Health Nurses
(ICC=0.17). There was no statistically significant variability difference between mental
and physical health cases.

In 48.69% of cases, Clinicians were almost certain on the advice provided, in 42.69%
cases they were probably certain on their judgement and nearly 9% clinicians were
unsure and preferred to opt 50:50 option.

**Conclusion:** Overall, there was statistically significant inter-observer variability in the
advice provided on DDA. The consistency on the advice provided on the cases was small.
In more than 51% cases clinicians were not absolutely certain about their advice.

**Key words:** Inter-observer variability, Disability Discrimination Act 2005, Occupational
Health referrals.