

	Subjects aged 65-74 (mean 68.7 years)	Subjects aged ≥75 (mean 78.4 years)
No of men: women	24:26	24:26
Previous medical illnesses*:		
Diabetes (non-insulin dependent)	1	
Thyroidectomy	2	
Cardiovascular disease	7	3
Transient ischaemic attack	1	1
History of trauma to shoulders	2	1
History of using walking aid for < 6 weeks	1	1
Painful shoulder:		
Mild	2	3
Moderate	13	7
Severe	3	6
Clinical diagnosis:		
Glenohumeral osteoarthritis	3	4
Tendinitis of rotator cuff	11	7
Chronic rupture of rotator cuff	2	4
Arthritis in acromioclavicular joint	2	1
Functional assessment (Katz scale):		
Totally independent	38	32
Dependent in three of the six functions (disabled group)	12 (3 men, 9 women)	18 (7 men, 11 women)
Occupation before retirement:		
Manual	7	5
Non-manual or housewife	43	45

*None of this group had shoulder symptoms.

Informed consent and approval of the ethical committee were obtained before the start of the study. All the subjects were interviewed and examined, during afternoons, by one of us (KKC).

Histories of illness, disability, trauma, use of walking aids, and pain were recorded for each subject. Pain was graded as none, mild, moderate, or severe. Functional disability was assessed with the Katz scale of index of independence in the activities of daily living.² The criteria of Cyriax³ were used to define lesions or rupture of the rotator cuff; those of the American Rheumatism Association for osteoarthritis of the knee⁴ to diagnose glenohumeral osteoarthritis; and those of Bateman and Fornasier⁵ to diagnose arthritis of the acromioclavicular joint.

The table shows the general characteristics and medical histories of the subjects. Twenty four subjects had symptomatic lesions and 10 had clinical evidence

of symptomatic disease of the shoulder joints. Most resultant disabilities were reflected in activities such as bathing, dressing, and toileting. Only 16 of the 34 subjects with a painful shoulder had consulted their general practitioner about it on more than two occasions; most accepted their symptoms and disabilities as an inevitable part of getting old. A possible frozen shoulder had been diagnosed by the general practitioner in six subjects, and 10 subjects had been advised that their symptoms were incurable due to age. The treatment offered by general practitioners had generally been physiotherapy or non-steroidal anti-inflammatory drugs; neither had conferred much benefit. Some patients had stopped the drug treatment because of associated side effects. No subject with shoulder pain had received a local intra-articular injection of steroid.

Comment

Our study suggests that an appreciable number of elderly people in the community are disabled because of disorders of the shoulder girdle. The disabilities seem often to go unrecognised, although they could possibly be reduced by intra-articular or soft tissue injection of steroid. Full assessment of patients by an occupational therapist, with provision of appropriate aids and appliances, might also improve their quality of life.

Although elderly people generally accept that illness and disability are part of the process of aging, we think that greater awareness is necessary among those who provide their primary care; examination of the shoulder girdle should be an integral part of the health screening of the elderly that has been suggested in the new general practitioners' contract.

- 1 Chard MD, Hazleman BL. Shoulder disorders in the elderly (a hospital study). *Ann Rheum Dis* 1989;46:684-7.
- 2 Katz S, Akpom CA. A measure of primary sociobiological functions. *Int J Health Serv* 1976;6:493-507.
- 3 Cyriax J. *Textbook of orthopaedic medicine*. Vol 1, 8th ed. London: Bailliere Tindall, 1982:144-8.
- 4 Altman R, Asch E, Bloch D, et al. Development of criteria for the classification and reporting of osteoarthritis: classification of osteoarthritis of the knee. *Arthritis Rheum* 1986;29:1039-49.
- 5 Bateman JE, Fornasier VL. *The shoulder and the neck*. London: W B Saunders, 1978:201-374.

(Accepted 11 January 1990)

Resuscitation: experience without feedback increases confidence but not skill

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Br Med J 1990;300:849-50

The accuracy with which doctors judge their clinical skills is crucial to managing patients successfully. Misplaced confidence can result in performing procedures ineffectively, and doctors are unlikely to see the need to improve their skills. In a previous study we found that nurses' confidence in performing resuscitation was unrelated to skill, but it was positively related to the number of cardiac arrests attended.¹ We report on a study of the relations among confidence, experience, and resuscitation skills in house officers attending a required advanced resuscitation training programme² and how they perceived the importance of their skills in influencing the outcome of a resuscitation attempt.

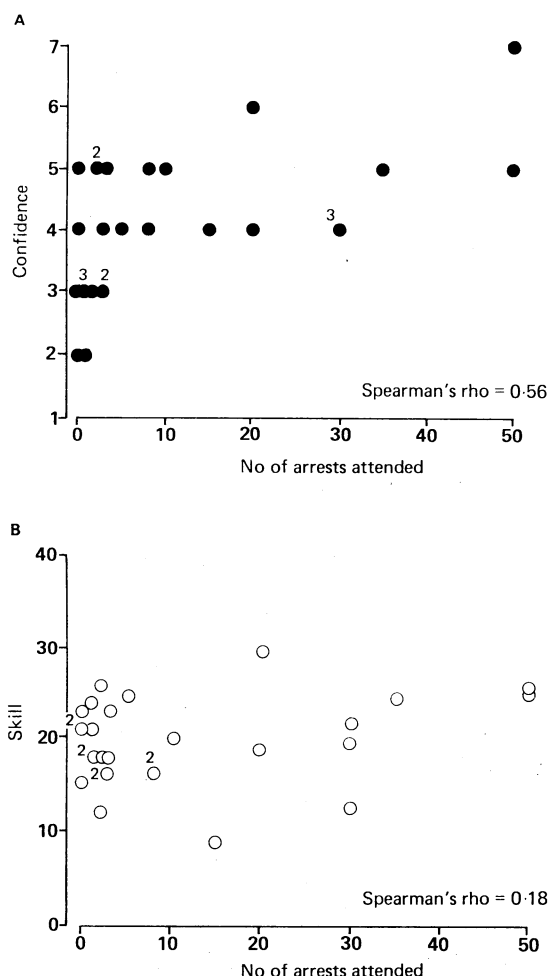
Methods and results

Twenty eight preregistration house officers starting their second appointment at the Royal Free Hospital took part in the study. They had received basic resuscitation training in medical school but no further training since qualifying.

Resuscitation skills were assessed by trained instructors (GW and WK), using a checklist based on the 1984 guidelines of the Resuscitation Council and the American Heart Association advanced cardiac life support course. The total score of 49 was derived from scores for basic resuscitation,^{1,2} bag-mask ventilation,^{1,3} and management of ventricular fibrillation.^{2,4}

Confidence in performing resuscitation was assessed using a seven point scale ranging from "not at all confident" to "extremely confident." Experience of resuscitation was measured by the number of cardiac arrests attended in the previous six months.

The perceived importance of the doctors' skills in influencing outcome was measured by asking them to rate on seven point scales the relative importance of the patient's age, the diagnosis, the doctor's skill, and the skill of the resuscitation team. They rated two hypothetical resuscitation attempts, one in which the



Relations between number of cardiac arrests attended and (a) confidence in performing resuscitation and (b) skill of preregistration house officers

patient survived and the other in which the patient died.

The doctors also rated how confident they felt when performing resuscitation, stated how many cardiac arrests they had attended in their previous six month appointments, and rated the perceived importance of their own skills to patient survival. Each doctor's resuscitation skills were then assessed without warning before the training programme started.

Experience was associated with increased confidence (Spearman's rho=0.56) but not with increased skill (Spearman's rho=0.18) (figure). A one sided test of the differences between the two correlation coefficients was of borderline significance (95% confidence interval 0.87 to -0.11; $z=1.59$; $p=0.06$). Doctors thought that their resuscitation skills and those of the cardiac arrest team were much less important when the patient died

than when the patient survived. The median difference for perceived importance of own skills for when the patient survived compared with when the patient died was 1.50 (95% confidence interval 1.00 to 2.00; Wilcoxon's matched pairs signed ranks test: $z=2.20$; $p<0.05$); the median difference for perceived importance of team skills was 1.0 (95% confidence interval 0.53 to 1.58; Wilcoxon's matched pairs signed ranks test: $z=2.4$; $p<0.05$). The perceived importance of the patient's age and clinical diagnosis was unchanged by the outcome of the resuscitation attempt.

Comment

These results suggest that the confidence of pre-registration house officers in performing resuscitation is artificially inflated by attending cardiac arrests. Many factors affect the outcome of a resuscitation attempt, so doctors can attribute more or less importance to their own skills on different occasions. There is a well described tendency to invoke competence after success but not question it after failure,⁴ and this is evident in our study. Though this tendency protects self esteem, it may stand in the way of a realistic perception of competence.

These results agree with those from a study of trained nurses^{1,5} and suggest that the phenomenon of experience increasing confidence but not competence is pervasive, certainly with regard to resuscitation skills. Experience is no substitute for training. Giving more feedback on performance during training, as well as pointing out the erroneous confidence that experience sometimes brings, may improve the relation between confidence and competence.

Copies of the resuscitation skills checklist may be obtained from the authors.

- 1 Wynne G, Marteau TM, Johnston M, Whitley CA, Evans TR. Inability of trained nurses to perform basic life support. *Br Med J* 1987;294:1198-9.
- 2 Kaye W, Wynne G, Marteau TM, et al. An advanced resuscitation training course for preregistration house officers. *J R Coll Physicians Lond* 1990;24:51-4.
- 3 Gardner MJ, Altman DG. *Statistics with confidence*. London: British Medical Journal, 1989.
- 4 Miller DT, Ross M. Self-serving biases in the attribution of causality: fact or fiction? *Psychol Bull* 1975;82:213-25.
- 5 Marteau TM, Johnston M, Wynne G, Evans TR. Cognitive factors in the explanation of the mismatch between confidence and competence in performing basic life support. *Psychology and Health* 1989;3:173-82.

(Accepted 22 January 1990)

Correction

Increasing suicide rates in young adults

A printer's error occurred in this paper by Dr Adam Lowy and colleagues (10 March, p 643). The 95% confidence interval for the rise in suicide rate among people aged 35 and over was -1.4% to 2.8%, not 1.4% to 2.8% as printed.

ONE HUNDRED YEARS AGO

Much has been said concerning the undoubtedly evil effects of excessive tea drinking. Dr. F. Mendel has recently enjoyed opportunities of studying the results of an unbridled abuse of coffee, and his results are now published. The great industrial centre round Essen includes a very large female population. Whilst the women of the working classes in this country are often addicted to dosing themselves with tea that has stood too long, it appears that the workmen's wives at Essen drink coffee from morning till night. Some consume over a pound of Ceylon coffee weekly, and one pound contains over sixty-four grains of caffeine. In consequence, nervous, muscular, and circulatory disturbances are frequent. The nerve symptoms are characterised by a feeling of general weakness, depression of spirits, and aversion for labour even in industrious subjects, with headache and insomnia. A strong dose of coffee causes the temporary disappearance of all

these symptoms. The muscular symptoms consist of distinct muscular weakness, and trembling of the hands even during rest. The circulatory symptoms are marked by a small, rapid, irregular pulse, and feeble impulse of the apex of the heart. Palpitations and heaviness in the precordial region are frequent. The hands and feet feel very cold, and the complexion becomes sallow. Dyspeptic symptoms, chiefly of the nervous type, are very common. Acne rosacea is seen in a large number of the sufferers. These coffee drinkers cannot be cured by simple abstinence from their favourite drink, with substitution of milk as a beverage. They require rest from work, open-air exercise, cold ablutions followed by friction, and small doses of brandy. Care must be taken, especially when a large body of working women are under the care of a medical officer, lest the first and last items of treatment do not lead to malingering. (*British Medical Journal* 1890;i:309.)