

## A Thirty-Eight Year Analysis of Communication Skills in Undergraduate Medical Education: A Content Analysis

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The emphasis in the medical/health education literature on the need to develop communication skills among health care professionals is interesting.<sup>1</sup> Articles about communication skills in peer-reviewed publications have markedly increased over the last decade. We explore communication skills in undergraduate medical education documents in particular scientific journal articles. The present study was conducted to investigate literature about undergraduate medical education with the purpose of identifying characteristics related to communication skills over the past 38 years.

### Methods

A sample of 200 articles was randomly selected from 897 articles published from 1966 through 2004. A cut-off date of August 2004 was established to ensure papers would have been completely referenced in the appropriate electronic database by this date. Medline and ERIC databases were used as sources. Our search strategy included a search according to the following terms: communication skills, doctor-patient communication, interviewing skills, consultation skills and interpersonal skills. A database system was designed using Microsoft Access 2000 in order to organise sources and eliminate duplicated papers. The database was then imported into Epi-Info™ for analysis. Exclusion criteria included any non-English papers, non-Medicine papers, editorials and letters.

### Results

The most frequent titles related to communication skills (44.1%) and doctor-patient communication (30.1%). 70 % of the sample articles were research based (i.e., they employed specific methods to discover new facts, concepts, or ideas). There was a fluctuation in the number of papers between 1966 and 2000, after which there was a sharp increase between 2000 and 2004. The USA had the greatest number of papers (35.2%), followed by the UK (29.6%), the Netherlands (12.1%) and “other” countries (23.1%). Curriculum and teaching were the most frequent

topic studied (59.1%), followed by assessment (22.5%) and program evaluation (10.1%). Total analysis of pages produced a group mean page of 8.02 [standard deviation (SD), 4.11]. The quantitative inquiry approach was mostly employed (62%), followed by the evidence of the literature (28.1%) and qualitative inquiry approach (9.9%). Research design was specified by 57.7% of authors. The predominant mode of data collection was through mixed methods (54.9%), followed by questionnaire (29.6%) and videotaped record (15.5 %). The majority of papers were published in *Medical Education* (33.8%), followed by *Journal of Medical Education* (11.3 %) and *Medical Teacher* (10.1%). Most research was reported by psychology and psychiatric departments. There was also a fluctuation in the number of authors between 1966 and 2004. There has been a sharp decline from 5 in 1981 to 1 in 1988. After this, the numbers of authors increase dramatically to 5 and continue to increase. More than two-thirds of authors did not report their funding source.

### Conclusion

An analysis of communication skills in undergraduate medical education literature shows the growing emphasis on the use of communication skills to explore relevant issues and problems. The literatures on communication skills in undergraduate medical education reflect that the majority of studies on communication skills have not taken a qualitative approach. Consequently, they have not provided much opportunity for the in-depth inquiry that is essential for exploring the meanings, views, and attitudes of doctors and patients concerning doctor-patient communication.<sup>2</sup> Publication of articles on communication skills in medical education journals is becoming more popular. The increased numbers of authors per article over the study period may be indicative of increased interdisciplinary group effort. The lack of reported funding may be a problem of underreporting. This study informs those interested in communication skills literature of current trends and what they need to know for a more critical evaluation of this body of literature.

## References

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