

Expected role of medical technologists in diabetes mellitus education teams

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Summary **The expected role of medical technologists within diabetes mellitus education teams was surveyed. In addition to items regarding laboratory examinations and results themselves, good communication with patients and education team members was highly required. When medical technologists sufficiently follow this role, it would aid patients to cope with life with diabetes mellitus.**

Keywords: Communication, diabetes education, professionalism, SMBG

Diabetes mellitus (DM) is a global health issue and clinical laboratory activities are of great concern in DM practice (1). DM education is crucial for patient management (2,3) and is often performed by a professional team consisting of physicians, nurses, pharmacists and dietitians. Some teams include medical technologists (MTs) (2,3). However, the content of education for which MTs are responsible is not always uniform on DM education teams. Furthermore, the role of MTs within DM education teams has not been studied, unlike that for other professionals such as nurses (4).

The present survey was thus conducted using a questionnaire that asked the question, "what roles are MTs expected to play on your DM education team?", to other professional members in facilities across the Kyusyu area, a wide region in the south of Japan. Because many DM patients are covered by facilities with a primary care function, which often have active DM education teams (5), these facilities were enrolled in this survey. The area included about 380 facilities at which DM-expert physicians worked in primary care capacities. The questionnaire was randomly distributed

to approximately one-third of the facilities. Then, self-reported responses given in a free-writing manner were returned anonymously. A total of 89 questionnaires were completed.

The major expected roles of MTs in DM education teams are listed in Table 1. Overall, the role was not only for patients but for team members. Naturally, most roles were associated with laboratory examinations and results. There was a relatively relevant need for education regarding self-monitoring of blood glucose tests. Although MTs generally specialize in performing precise examinations, items such as ensuring quality control on examinations did not necessarily rank high. Good communication with patients (providing information, guidance and teaching) and team members (presenting an interpretation of the results, providing information) was widely required.

The expected role of MTs in DM education teams was described from the viewpoints of other professional members, while there were several limitations to this survey (*i.e.*, small sample size, qualitative study design, lack of detailed information regarding the answerers and facilities). Since the roles of MTs have not been characterized to date, the present data, obtained based on real needs, would be useful for establishing the significance of MTs within the scope of DM education teams. In particular, training communication with both patients and team members is necessary for MTs to be recognized as professionals of DM education. Allowing

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Table 1. Summary of major answers to the question "what roles are MTs expected on your DM education team?"

Answers	N (%*)
For patients	
Provision of information on DM-related examinations and their results	47 (53%)
Guidance (e.g., skills or pitfalls of glucometer usages) for SMBG	34 (38%)
Lecture in DM education classes	9 (10%)
For team members	
Presentation of interpretation of examinations and their results from MTs' views in the meeting	18 (20%)
Provision of information on examinations (e.g., recommendation, introduction of new tests)	16 (18%)
Quality control regarding examinations (e.g., glucometers)	11 (12%)

SMBG, self-monitoring of blood glucose; DM, diabetes mellitus; MT, medical technologists. *Total number was 89.

MTs to successfully follow this role may help patients to cope with life with DM.

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