

## Current status of Prosthetics and Orthotics education in West Africa

Akouetevi Aduayom-Ahego, Yoshihiro Ehara  
Graduate School of Health and Welfare, Niigata University of Health and Welfare

**【Introduction】** Few colleges offer courses related to the Prosthetics and Orthotics (P&O) rehabilitation in developing countries. The rate of people with disabilities in African countries is closely related to the poverty where there is little or virtually no access to education in the field of P&O. The aim of this study is to acknowledge the challenges in P&O education from the perspective of the practitioners and students in West Africa.

**【Materials and Methods】** In this qualitative study, the focus group composed of technicians and students in P&O field were requested to answer a survey. The questionnaires were distributed in Ghana and in Togo.

**【Results】** In terms of credentials, nearly half (46.2%) of all respondents in Ghana were physiotherapists and less than one third (23.1%) reported having the diploma certificates. These P&O technicians were trained in Tanzania while some others had certificate courses from Iran. Only three respondents (23.1%) reported having further training either in rehabilitation course, physiotherapy assistant course and WHO wheelchair training program. Moreover 77% of all respondents never participated in any P&O seminars or workshops. None of the respondents earned Master degree and above. Participants reported that P&O face many challenges (Table 1), mainly related to the lack of trained professionals, lack of infrastructure, lack of materials and machines including motions analysis devices for outcome measurements for the devices provided. Similar results also generated from the data collected in the neighboring country Togo (Table 2).

**【Discussion】** The findings highlighted in this study were not exclusive to other related medical fields in Ghana and Togo. Previous researches in rehabilitation and nursing field have also reported a number of challenges concerning human resources, lack of financial support, lack of infrastructure and lack of materials.

**【Conclusion】** An understanding of the current position and challenges in P&O in Ghana and Togo which represent an English and French speaking countries in the region can contribute to the development of strategies plans for a

sustainable rehabilitation service expansion in the African sub region.

Table 1. Challenges outlined in prosthetics and orthotics practice and education in Ghana

Challenges
<b>Practice</b>
Unavailability of materials
Financial aspects (lack of funding, lack of sponsorship )
Lack of infrastructure and facilities
Lack of machines
Lack of professionals
Lack of patients awareness of the availability of P&O services
Lack of workshops training
Lack of experienced workers
Lack of information concerning P&O services
<b>Education</b>
Lack of professionals
Lack of teaching material in biomechanics and P&O
Access to prosthetic books and journals

Table 2. Major challenges generated from the survey in Togo

Challenges
Lack of research equipment and facilities in P&O
Lack of continued education
Lack of research funds
Lack of biomechanics tools and motion analysis systems
Lack of experienced professionals
Lack of innovation in the P&O field

### 【References】

- 1) Akouetevi A.A. et al. Current position and challenges in prosthetic and orthotic education in Ghana. Niigata Journal of Health and Welfare; 2016, 16 (1); 26-34.
- 2) Akouetevi A.A. et al. Challenges in Prosthetics and Orthotics education in sub-Saharan Africa francophone country Togo. Ec Orthopaedics 2017; 6 (6); 230-137.