

Medical Science

# Barriers Towards Continuing Professional Development Among Academic Staff of Health Sectors Faculties In University of Gezira

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Professional development sustains staff competence through continuing improvement of knowledge, skills and performance. The aim of this study was to explore the barriers towards continuing professional development (CPD) activities among the academic staff of health sector faculties at Elrazi campus in University of Gezira. It was a descriptive exploratory, crosssectional, study including all the academic staff of health sector faculties at Elrazi campus in Wad-Medani city, University of Gezira. Questionnaire was designed to include, personal data, interest in CPD, internet services, and work-overload. Questions about different activities of CPD were included, e.g. research conduction over the past four years, reading of scientific journals and publishing of scientific papers and facilitation of these activities. On top of that, questions regarding, financial problem and the barriers, facing the academic staff towards performing CPD activities. It was found that, almost all teachers (96%) were interested in CPD. These courses were facilitated by the university according to 72% of the staff members. Internet services at the office were available to 55% of the teachers. 69% of the staff members admitted that, the university did not facilitate or support researches; as they expected despite this 62.5% of the staff members conducted a research over the past four years. In 75% clinical load affect research output. Only 45% of the staff read scientific journals regularly. 47.5% of the staff members did not publish any scientific papers over the past four years while 17.5% published more than four papers. The barriers towards publishing scientific papers were: lack of time in 54% the staff members, financial in 21%, family commitment in 14% and journal availability in 11%. It was found that, the strongest barriers to be engaged in professional development activities were as follows: financial, lack of time, work-overload. This was followed by family commitment, child care and lastly lack of motivation and interest. CPD can succeed only in settings, or contexts, that support it. Commitment and support from administrators is vital for success of CPD activities.

## **KEYWORDS**

## Introduction

ABSTRACT

Professional development (PD) is defined as "the process of improving staff Skills and competencies needed to produce outstanding educational results for students". (Golding, 2006). Educators must keep abreast of the important advances that are occurring in education. Additionally, professional development is increasingly seen as a systemic process that includes the development of all individuals involved with student achievement from the superintendent to the teaching assistants. (Golding, 2006). Career development efforts for adult learners are more likely to succeed if they are responsive to the learners' needs, offered at convenient times, and provided in a variety of forms. (Miedzinski, 2001). Professional development can succeed only in settings, or contexts, that support it. Probably the most critical part of that support must come from administrators. The outcome of every professional development initiative will depend ultimately on whether its administrators consider it important. (Harwell, 2003). A well-designed, thoughtfully planned and adequately supported professional development is a necessary ingredient in all educational improvement efforts. Professional development programs should take into account the motivational factors

that drive teachers to adapt and change consistently. (Othman, June 2011). University of Gezira began its path exploring problems of society, training professional cadre capable of utilizing the potential of the rural areas of Sudan and conduct basic and applied scientific research to serve the rural community, if, CPD is supported by faculties this can impact health by aligning the curriculum with community needs and develop strong cadre of community health workers and hence patient benefits. The aim of this study was to explore the barriers towards professional development and to identify some CPD activities among academic staff of health sector faculties in Gezira University.

## Materials & Methods

This study was conducted in health sector faculties of Gezira University in Wad Medani city, (Elrazi campus) Gezira State, Sudan, about 180 Km, south east of Khartoum, during the period of September 2014 to February 2015. Gezira University, is the second governmental university in Sudan, it was established in the year 1975 with four faculties, to serve the community. It is descriptive, exploratory, cross-sectional study. The Study Population was the academic staff of heath sector faculties at Elrazi campus, (Faculty of Medicine, Pharmacy, Applied Medical Sciences, Medical Laboratory Sciences and Dentistry). The academic staff of faculty of dentistry consists of two associate professors, seven assistant professors and seven lecturers. Faculty of applied medical sciences has two associate professors, ten assistant professors and ten lecturers. Faculty of Medicine has 18 professors, 18 associate professors, 24 assistant professors and four lecturers. Faculty of Pharmacy has one professor, two associate professors, eight assistant professors and eight lecturers. Faculty of Medical Laboratory Sciences has academic staff consisting of 20 members, two associate professors, five assistant professors and 13 lecturers. The total number of academic staff in all health sector faculties at Elrazi campus was 141 members during the study period. All academic staff members of health sector faculties at Elrazi campus were included in this study. The total number of the academic staff from health sector faculties who responded to the questionnaire and contributed to this study was 80, with response rate of 55%. Semi-structured questionnaire was sent to all academic staff in health sector faculties at Elrazi campus. The questionnaire was designed and validated. Questions were divided into specific domains of interest including academic staffs demographics; interest in CPD and motivation to CPD courses or work-shops, different activities regarding CPD like attendance of courses or work-shops, reading of scientific journals, conduction of researches, and cause of promotion. The SPSS statistical programme using Microsoft Windows 16.0 was used to process and analyze the data from the questionnaire. For clearing the data and check up variables, descriptive statistic was used; extreme values were removed from further analysis adjustment. Descriptive statistic was also used for cross tabulation and chi square test was used for analytic comparison between two variables for statistical difference and this was assessed by calculation and interpretation of the P-Value. A P-Value of less than 0.05 was statistically significant.

#### Results

The sample of study population consisted of 80 members of the academic staff of health sectors of Gezira University, during the period of September 2014 to February 2015. This represents the respondents teachers out of 141, (response rate was 55%). Not all teachers answered all guestions.

Table (1) Demographic	Data of the stu	dy population.
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	Frequency	Percentage (%)	
Age (years)			
31 – 40	37	47	
41 – 50	19	23	
51 – 60	17	22	
More than 61	7	8	
Gender			
Male	49	61	
Female	31	39	
Marital status			
Married	74	92	
Single	6	8	

57% (46) teachers had children at school age.

The number of professors in the sample was 11% (9), associate professors, 22.5% (18), assistant professors 32.5% (26), and lecturers 34% (27).

54 (68%) teachers have or had administrative position while 26 (32%) had not.

96% (77) of teachers were interested in continuous professional development.

Internet services at the office were available to 43(55%) teachers while 37 (45%) teachers had no access to internet services at the office.

Thirty teachers (38%) had available place for studying and writing at the university while 50 (62%) had not.

Clinical load affect research output in 57 (75%), and in 20 (25%) of the academic staff it did not affect the research out-

put. This is shown in (fig.1).

Sixty members of the academic staff (79%) had financial problem, and 20 (21%) did not have financial problem.

#### Figure (1) Effect of clinical load on research output.

Twenty five (31%) agreed that the university facilitated and supported research as they expected while 55 (69%) members of the staff did not agree. (Fig. 2)

**Figure (2) University support & facilitation for researches** 50(62.50%) of the staff members conducted a research over the past four years while 30 (37.50%) did not.

Thirty six, (45%) of the academic staff used to read scientific journals regularly.

Thirty eight, (47.5%) of the staff members did not publish any scientific papers over the past four years, 21(26%) members published 1-2 papers, 7 (9%) published 3-4 papers and 14 (17.5%) published more than 4 papers. This is shown in fig. (3).

Figure (3) Number of published scientific papers over the past 4 years

Barriers towards publishing scientific papers were as follows: time in 43(54%) members, financial, 17(21%), family commitment in 11(14%) members and journal availability in 9 (11%) members. This is illustrated in fig. (4).

Figure (4) shows barriers towards publishing of scientific papers

The strongest barriers to be engaged in professional development activities were represented; according, to the academic staff members as follows: (shown in table 2)

Financial as the first barriers in 44 members (55%) Time in 40 (50%), Work-overload as the third barriers in 33

(43%)

Family commitment in 25, 33%, child care in 19, (25%) Lack of motivation in 28, (36%) Lack of interest in 18, (23%)

#### Table (2) Barriers towards CPD activities

Barrier	Grade of strength (1) (Frequency & %)	Grade of strength (2) (Frequency & %)	Grade of strength (3) (Frequency & %)
Financial	44 (55%)	16 (20%)	20 (25%)
Time	40 (50%)	22 (27.5%)	18 (22.5%)
Work-overload	33 (43%)	27 (35%)	17 (22%)
Child care	19(25%)	28 (37%)	29 (38%)
Family commitment	25 (33%)	35 (46%)	16 (21%)
Lack of motivation	28 (36%)	24 (31%)	26 (33%)
Lack of interest	18 (23%)	28 (36%)	32 (41%)

### Discussion

The total number of the academic staff participated in this study was 80, 61% were males and 39% were females. The majority (47%) were in the age group 31-40 years. 92% were married (table 1) and 57% had children at school age. Regarding the academic status, the majority were lecturers (34%), followed by assistant professors (31%), associate professors (22%) and professors (13%). Almost all teachers (96%) were interested in continuous professional development and this means that the academic staff liked to be up to date in the field of professional development. Internet services at the office were available to 55% of the teachers, this indicated, that nearly half of the academic staff had no internet services and this might affect research output as well scientific writing. This was unlike the result of the study which was carried out by Wilbur K, among pharmacists in Qatar in 2010, where approximately one-third had no or inadequate internet

#### access in the workplace. (Wilbur K, 2010).

The majority of the academic staff (62%) had no place for studying or writing at the university. This could affect scientific writing as well as research output.

According to the staff members, in 75% clinical load affected research output, this meant that, they had less time for research; this was an indicator that more staff was needed for clinical coverage. The majority of academic staff (79%), had financial problems, this might affect research output and other professional development activities.

Minority (31%) of the academic staff agreed that, the university facilitated and supported research as they expected while majority (69%) did not agree. (fig.2). Putting in mind the majority of the academic staff had financial problem; the university should support researches as they expect to satisfy their needs when conducting researches.

Sixty two and half percent (62.5%) of the staff members conducted a research over the past four years. This indicated that despite, clinical load, financial problem, and lack of support from the university the academic staff were doing researches. This was similar to the study performed in 2008, by McNicholl MP, et al in Northern Ireland, in NHS Trust, they found that over half of the respondents stated they had participated in a research project. (McNicholl MP,et al. 2008).

Regarding reading scientific journals regularly only 45%; of the staff read scientific journals regularly, this is in contrast to the study carried out by Bcuk, D, and Newton in United Kingdom where 87% of the doctors in the study read scientific journals regularly. (Bcuk, D, Newton T, 2002). It was also unlike the results of the study performed in 2008, by McNicholl MP, et.al in Northern Ireland, in NHS Trust, they found that a significant number read health care journals. (McNicholl MP, et al. 2008).This result indicated that scientific journals might not be available in the library for the staff, in addition only approximately half of the staff had internet services at their offices.

Regarding publications, approximately half of the staff members (47.5%) did not publish any scientific papers over the past four years, 26% published 1-2 papers, 17.5% published more than four papers, and 9% published 3-4 papers. (fig.3) This may be explained by the lack of internet services as well as the work-overload and lack of place for writing .Although, over the past four years, 60% of the articles of Gezira Journal of Health Sciences were written by academic staff of heath sector faculties of Gezira University and the total articles of this journal, were 196 since it was first edited in 2003 under supervision of Deanship of Graduate studies and Scientific Research, and the participation of academic staff of sector faculties in the written articles was 68% of the total articles.

The barriers towards publishing scientific papers were: lack of time in 54% the staff members, financial in 21%, family commitment in 14% and journal availability in 11% (fig. 4). It was clear that more than half of the staff members had real problem in having time to write scientific papers and work-overload may be part of this problem as well as poor time management by staff. It was noted that; journal availability was the last barrier for publishing scientific papers; this may be explained by the availability of Gezira Journal of Health Sciences which may help the staff in publishing scientific papers.

The strongest barriers to be engaged in professional development activities were documented by the academic staff members as follows: the first three barriers were: financial in 55%, lack of time in 50%, work-overload, 43%. This was followed by lack of motivation in 36%, family commitment in 33% and child care in 25%, and lastly lack of interest in 23% (table 2). This result should draw the attention of the administrators of health sector faculties to support the academic staff financially and to have enough working staff to spare time for performance of different PD activities. In addition, any staff member should be encouraged to perform PD activities by providing him or her with appropriate work environment. This finding, was more or less similar to the findings of the study which was carried out by Wilbur K, among pharmacists in Qatar in 2010, he found the major obstacles towards CPD, were poor timing (66%) and excessive workload (56%).(Wilbur K, 2010). In a study conducted in Egypt by Mohamed Ibrahim OH, to determine continuous education (CE) preferences of pharmacists in Egypt (2012), he found that, respondents of the survey expressed enthusiasm towards CE activity, but cited common barriers to participation, as well as employer-and technology-based obstacles. (Mohamed Ibrahim OH, 2012).

The findings of this study was similar to the study conducted by Schweitzer DJ, Krassa TJ, 2010 where ten research studies published between 1990 and 2008 addressing barriers to nurses' Continuing education (CE) participation were located. The most frequent deterrents found were the cost of attending CE, inability to get time off from work to attend CE, and child care and home responsibilities. (Schweitzer DJ, Krassa TJ, 2010).

The barriers towards CPD activities documented in this study were similar to the result of the study conducted by Anne' O'Donne, in Liberty College in Ireland, which that; showed the first three top barriers to CPD, were, time management, financial and family commitment,( O'Donne 2006), and to the study carried out by Saidi G, and Weindling AM, in Royal College of Pediatrics (UK), they found the main difficulties in achieving CPD were variable financial support and pressure due to extra work. (Saidi G, Weindling AM,2003)

These findings were also similar to the result, of the study carried out by Zibrowski et al; they found that, lack of time was the main barrier towards education despite the interest of the staff and regardless of their background training in education. (Zibrowski, et al, 2008)

In a study carried out by Barnes E, et al aimed to summarise findings from a literature review professional development (CPD) and its of dentists' engagement in continuing effects on improving oral health care for patients, they found that factors affecting participation included time since graduation, costs, work and home commitments, postgraduate qualification, interest and convenience. (Barnes E, et al, 2013)

A comprehensive review of the published literature was conducted by Donyai P1, et al, 2011in GB, to identify studies of the uptake of, or attitudes to CPD in GB in a decade. Barriers to CPD were identified as: lack of time, financial costs and resource issues, understanding of CPD, facilitation and support for CPD, motivation and interest in CPD. These findings were similar to the findings in this study. (Donyai P1, et al, 2011)

In terms of perceived barriers to CPD, lack of time was expressed as a barrier by the largest proportion of doctors, as was insufficient clinical cover, lack of funding, and remoteness from main education centres as reported by the study in Sco-taland carried out by Ikenwilo D, Skatun D, 2014. (Ikenwilo D, Skatun D, 2014)

A study carried out by Mark Waters & David Wall in Birmingham, UK, found that time is the major barrier in 49.2% for GP trainers for Certificate in Medical Education. These results were similar to the results of this study. (Mark Waters & David Wall,2007). A study conducted by Leggate M, Russell E to describe the current and intended continuing professional development activity of dentists in general and community practice. The most commonly identified barriers to further qualifications were heavy clinical commitments (78%), with 73% citing the substantial cost with no additional benefit. (Leggate M, Russell E,2002).

In a study performed by, Lloyd B, et al in UK, among health

professional workers in allied health; they found, that, workload and insufficient staffing were the main barriers to PD. (Lloyd B, et al, 2014).

#### Conclusion

Almost all academic staff members in this study were interested in continuous professional development and attended courses or workshops about professional development and these courses were facilitated by the university. Internet services at the office were available to about half of the academic staff and the majority had no place for studying or writing at the university. The majority of academic staff had financial problem. Minority of the academic staff agreed that, university facilitated and supported research as they expected. Over half of the staff members in this study conducted a research over the past four Approximately half of the staff members were promoted because of research. About half of the staff members did not publish any scientific papers over the past four years and the barriers towards publishing scientific paper include: lack of time, financial, family commitment in and journal availability. The strongest barriers to be engaged in professional development activities were: financial, lack of time, work-overload, lack of motivation, family commitment and child care and lack of interest.

#### Recommendations

Resourcing of continuous professional development and supportive services, such as an easy access to internet services (including web sites for CPD), research funding and scientific journals availability should be a priority for the administrators of University of Gezira..

There should be a special library or an office for studying and writing for the academic staff in each health sector faculty with improvement of infrastructure.

Financial problem for the academic staff should be sorted out by increasing the salaries to meet their demands in the field of professional development, as well financial incentives as a tool for possible improvement in the future.

Work –overload and clinical load should be managed by increase the number of academic staff and by proper time management.

There should be a co-odinator for CPD, making a link between the leaders of heath sector faculties and the administrators of the University of Gezira.

Development of partnership and collaborative activities in the field of CPD with other health sector faculties inside and outside the country should be the apriority for the leaders of health sector faculties.

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