



RESEARCH PRODUCTIVITY; EVALUATION AMONG FACULTY MEMBERS AT DOW UNIVERSITY OF HEALTH SCIENCES KARACHI

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Article received on:

08/07/2014

Accepted for publication:

18/09/2014

Received after proof reading:

00-00-000

ABSTRACT... Research training at higher education level for clinical and teaching staff is important and there are methods to introduce research culture in employees at clinical and teaching departmental level. **Objectives:** To recognize and quantify the research productivity status of teaching and clinical faculty of (DUHS) Dow University of Health Sciences Karachi before and after its establishment in 2003. **Design:** Non experimental cross sectional study. **Period:** 1st October 2012 to 1st February 2013. **Setting:** Medical college Karachi. **Subjects and method:** Students of third semester were applied to sort out the ten years record from 1998 to 2008 of all researches conducted by faculty of Dow University of Health Sciences, published in international and national journals by using different online search engines. Research Output was measured in terms of the increase in the number of publications and quality of publications before and after the launch of Dow University. Data was entered in Microsoft office excel version 2007 and analyzed it in statistical package for social sciences (SPSS) version 17; Pearson chi-square was applied to test the statistical significance at 95% confidence interval. **Results:** Data of total 594 researches was found out between the years 1998 to 2008, 175 (29.5%) researches were published before the foundation of Dow university of Health sciences Karachi (2003) while 419 (70.5) researches were produced after 173 (45.6%) research papers were published in indexed journals before, "whereas" 206 (54.4%) were published in indexed journal after 2003. Original research articles were 152 (31%) before 2003, which rose to 339 (69%). Publications of article types such as case reports, case series, and short communication, editorials and review articles also increased to 80 from 23 after establishment of Dow University. **Conclusions:** From a total of 594 faculty researches o published in indexed and non indexed journals between the years 1998 and 2008; there was a significant increase in production after establishment of Dow university of Health Sciences Hence it is confidently reported that due to establishment of research committees after the founding, there is a promotion and facilitation of research activities among faculty members.

Key words: Faculty, Research, Publication, productivity.

Article Citation: Khan F, Taj Y, Ali A, Mohuddin H, yasin I, Qaisar H, Siddiqui N, Matin A, Sheikh MA. Research productivity; evaluation among faculty members at Dow University of Health Sciences Karachi. Professional Med J 2015;22(3):359-364.

INTRODUCTION

Research training at higher education level for clinical and teaching staff is important and there are methods to introduce research culture in employees at clinical and teaching departmental level¹. This may include conducting research methodology workshops, incentives for producing research papers, advance training and scholarships². "However", these initiatives have not been evaluated for their magnitude of effect in increasing research production.

Writing and printing articles in peer-reviewed periodicals is often a trial for faculty members.

"Nevertheless", these academic accomplishments are essential for their careers, facilitating in achieving promotion and tenure; establishing a personal best of scholarly work forms a basis for competing for grant funding's and up gradations.

The dynamics of inducing faculty to research culture research have been calculated for decades³. University engendered concepts founded on research are significant in supporting fiscal growth and effectiveness of developed economies⁴. The importance of research as an advance in pedagogy (the art of teaching) cannot be over emphasized. The teachers perfect

the course of assembling information in their specialties, impart student's openings to train and become skilled at any subject.

In, the course of gaining and propagating familiarity and skill many features influence faculty research yield. The educational *métier* of the faculty and the assessment and evaluation features were defined as indispensable for research achievements⁵. Teodorescu (2000) elucidated the helpful impact between faculty research yield and faculty participation in professional committees and attendance at professional workshops conferences⁶.

It has been reported that separable features, such as incentives and statistic characterization are interconnected with research efficiency. Also linked are organizations and establishments aspects entailing changeable features related to headship, values and guidelines. Well-timed publication practices, and adequate periods assigned to work on research were the acute variables that prophesied faculty output in publications⁷.

Peer acknowledgment or career expansion may be the crucial inspiration behind research journals. Academic individuals are the key artists in research work and eventually, it is their stimuli and encouragements that affect the yield of educational research. Spending academic time, financial reward and teamwork with peers is a positive motivator⁸.

Dow University's Department of Research after its establishment, offers a variety of research backing services, to help teach faculty members to write. Workshops are conducted regularly addressed towards improving writing skills, submission of manuscripts, and choice of the correct journal, handling writing time, and the construction and content of different article categories. Faculty members most of whom had not ever written for journals, were encouraged to work with qualified faculty writers after the workshop⁹. Peer assistance was offered during the course of manuscript progress and submission and as an essential

to review of manuscripts for resubmission¹⁰. Publication of peer-reviewed papers were followed and publication rates of participants increased, and continued at a higher level through 2008. A stopgap educational involvement with peer-support and mentoring resulted in an increase in publications by clinical faculty.

METHODOLOGY

Research Design

An investigation, planned to provide evidence for a hypothesis. a scientific experiment designed within the objective population was used with several repetitions to decrease an unsystematic approach. This proposal used a hypothesized expectancy constructed on interviews of test participants. The design of study was based on existing situation and was applicable. Difficulties in database assembly were tuned to improve the value of the comebacks and to increase the validity of the data

Research Study Population

This study was piloted with the objective residents of the existing and former faculties at DUHS before and after its inception. This campus was selected because of the vicinity and availability of the target population to the researchers. Open remarks from faculty members who responded echoed the significance of the study in hope of implication of planned researches and published work at DUHS.

Sampling Method and Sample statistics

This research study was conducted during 1st October 2012 to 1st February 2013 in Dow medical college located in the heart of the city of Karachi. Questionnaires were randomly distributed to students of Dow Medical College were to sort out the 10years record from 1998 to 2008 of all researches of faculty of Dow University of Health Sciences, published in international and national research journals by using different online search engines.

Assemblage of the finished surveys was tiresome; however, concluded with constant requests fifty

five questionnaires were acquired. The closing sample embodied 18% of the goal that is passable to guarantee the validity of the outcomes. Data of total 594 researches was found out. Our Research Output was measured in terms of the increase in the number of publications and quality of publications (publications in indexed journal or journal of international repute) before and after the inception of Dow University of health sciences Karachi. Data was entered in Microsoft office excel version 2007 and analyzed it in statistical package for social sciences (SPSS) version 17; Pearson chi-square was applied to test the statistical significance at 95% confidence interval.

RESULT

Out of 594 researches done in the years 1998 to 2008, 175(29.5%) researches were published (before 2003) while 419 (70.5) researches were produced after the inception of DUHS. 173(45.6%) research papers were published in indexed journals before 2003 whereas, 206(54.4%) were published in indexed journal after 2003. Original research articles were 152(31%) before 2003, this figure rose to 339 (69%) after the 2003. Article types such as case reports, case series, and short communication, editorials and review articles also increased to 80 after establishment of the university from 23.

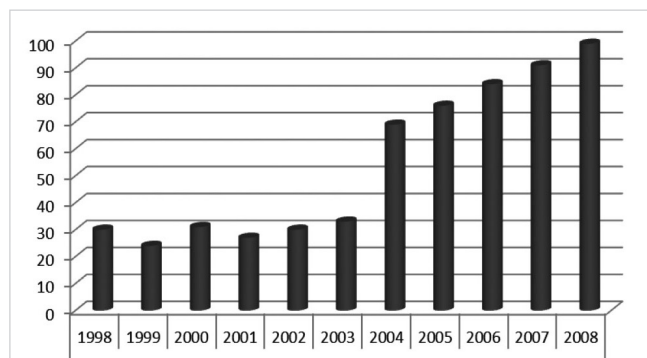


Fig-1. Published Reaserches before & after 2003

DISCUSSION

Research anticipations from faculty members have been increasing to a level to an extent that research backing and frequent publications are necessary criteria for tenure and advancement at every research university¹¹. Stress is applied to

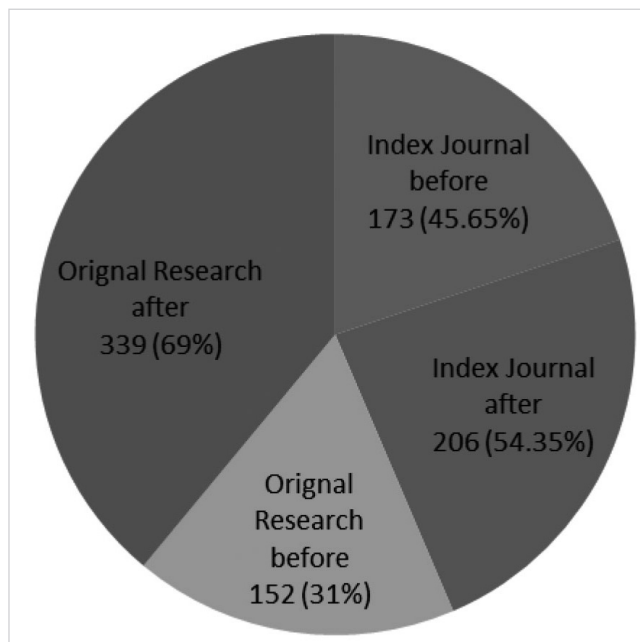


Fig-2. Original researches published in indexed & non indexed journal before & after 2003

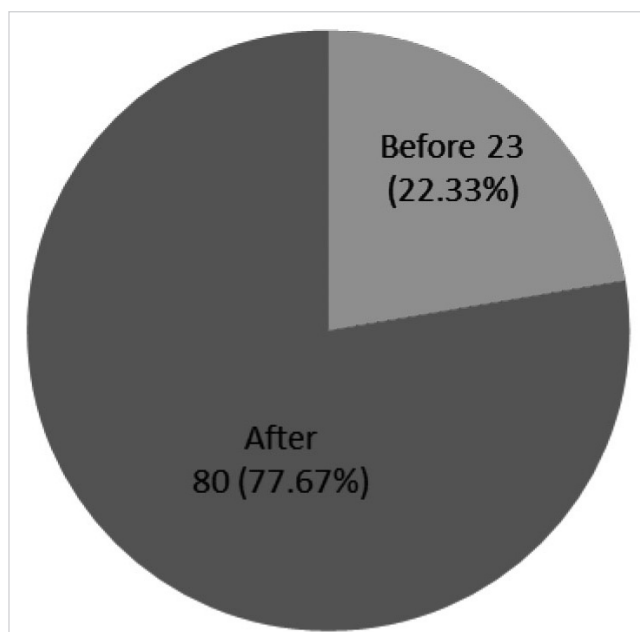


Fig-3. Other article types

increase research activity has also risen within traditional colleges. A communal endorsement for the increasing significance of research in the faculty is the assertion that research and teaching are closely connected. Research backs teaching, by maintaining the course content current and displaying for students a model for intellectual

stimulus and critical thinking¹².

The present study examined research characteristics of faculty members before and after the foundation of Dow University. The object of our study was to appreciate if the same predictive relationships generalize faculty of our institution with global higher education organizations. Several institutes ideally present their faculty incentives about research, most faculty members in research-associated universities are industrious in research and teaching¹³. A great stress is placed on faculty output that results in activities like conference presentations, publications of original articles and books¹⁴. This highlighting exists because such yield adds to the scientific literature and contributes credibility and commendations both to the individual researcher and the institute.

Faculty importance for research is measured by departmental support, interest, and value for research. Resource and time limitation may create a strain on research so that members with higher workloads tend to be less dynamic¹⁵. One study found five areas of stress among faculty members: acknowledgment, time limitations, departmental stimulus, professionalism, and student interaction. Several global theories of faculty work link productivity to career phases, in a linear mode, so that faculty in senior ranks exhibit greater productivity¹⁶. Faculty members involved in demanding activities are less likely to publish; on the other hand those who described overseeing postgraduate students or had achieved expertise in research methodologies were more productive.

There are different types of motivations that predict outcomes across life stages. Fundamental motivation is when a person participates because of choice and pleasure of the activity itself, while extraneous incentives leads a person to get involved in the activity because of external pressures¹⁷.

A decline in productivity is seen in the academic career, after upgrade to professor and retirement.

The constancy with which departments and institutions relate their criterions, principles and outlooks modify faculty members "values and motivations" about academics. Faculty members progress and develop as researchers by scrutinizing and analyzing their own work;¹⁷ and their evolution is reinforced by consistent feedback. However, many institutions are not successful in giving faculty members actual feedback, and faculty themselves may be nervous about conversing their work because they feel exposed to disapproval or evaluation of their performance¹⁸. Individuals insights of themselves as skillful and proficient in their work is the foundation to put forward effort and participate fully in professional tasks¹⁹. To achieve this culture, motivation for teaching, and over-all wellbeing is related to faculty success. This culture was seen after the establishment of Dow University there was a steady increase in publications from the faculty members. (Fig1) The customary outlook in how the faculty valued original work, also accounted for the rewarding increase in original work published in indexed journals (Fig 2).

Before the establishment there were a handful of other study types like case reports, short communications, editorial report and reviews, there was a significant increase after 2003 (Fig 3)

We also enclosed in each questionnaire a text with the marker "Comments" Its aim was to request contributors to supply added points to appreciate their circumstances and situations. Males and new members were more active in publishing research than their female colleagues. Therefore, features that linked most with research productivity were: designation; research period, and determination, whereas teaching demands and work load had a negative impact²⁰.

Our results showed that it was possible for faculty members who acquired selected training on research skills were active in publication of articles.

Also we validated the advantages of faculty incorporating research into classes; Faculty

productively introduced students to towards research by introducing teaching methods such as problem-based learning²¹. The potential for this approach is to; promote e students' research skills and motivation, and undergraduate researchers report that their involvements were both educational and pleasurable^{22,23}. Regular journal club, research workshops, basic research skills training, employment of research faculty, research awards, and annual research exhibitions to increase research productivity were applied in Dow University after its inception.

A significant increase in publications in the indexed journals was seen after these interventions witch is a constant positive rising trend.

CONCLUSIONS

Publications are the key fruitage of scientific research, and they are the modes of transmitting new findings. Publication in indexed journals is among the measures for evaluating faculty research performance.

Such studies are vital in developing countries like ours where backing for research is restricted and decisions and policies have to be made at higher levels to invest the limited resources in scientific research and other educational goals.

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