

Emeritus Professor Doctor Samruay Shuangshoti's academic publications and citation analysis

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Even though one of the major responsibilities of all staff members in Teaching Hospital, researching is usually not considered the first priority and largely ignored. In this special article, we have given an example of academic person, Emeritus Professor Doctor Samruay Shuangshoti, by analyzing his academic publications and citations. We hope the result would be beneficial to others and may activate research activities in Chulalongkorn Hospital.

Professor Shuangshoti's publications and citations were collected between the years 1966-2001. Chi-square test was used to determine the association among 3 groups of journal (international journals, journal of the medical association of Thailand, and other Thai medical journals) and their likelihood to be cited in the literature. Of the 235 academic publications including 7 medical textbooks, 3 final reports and 225 articles in various medical journals, 152 publications (65%) have been cited 1,458 times. Chi-square test has demonstrated different chance of the 3 journal groups to be cited, with statistical significance ($P < 0.001$). Articles published in the international journals were more likely to be cited, followed by those in the journal of the medical association of Thailand. Only rarely have the articles in other Thai medical journals been cited.

We conclude that research projects aimed towards international publications should be encouraged and fully supported.

Key words: *Research, Publication, Citation, Journal.*

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ชนพ ช่วงโชติ, บุญชอบ มีนาภา. ผลงานทางวิชาการและวิเคราะห์การอ้างอิงผลงานทางวิชาการของศาสตราจารย์กิตติคุณ นายแพทย์สำรวย ช่วงโชติ. จุฬาลงกรณ์เวชสาร 2545 ก.ค; 46(7): 527 - 32

การวิจัยเป็นภาระงานหลักอันหนึ่งของอาจารย์ในคณะแพทยศาสตร์ แต่มักไม่ได้รับความสนใจมากนักและบ่อยครั้งถูกจัดเป็นงานอันดับรอง ๆ ในบทความพิเศษนี้ ผู้เขียนได้ยกตัวอย่างนักวิชาการท่านหนึ่งคือ ศาสตราจารย์กิตติคุณ นายแพทย์สำรวย ช่วงโชติ โดยได้ทำการรวบรวมผลงานตีพิมพ์ทางวิชาการ รวมทั้งวิเคราะห์การอ้างอิงผลงานทางวิชาการของท่าน โดยคาดหวังว่าผลที่ได้จะเป็นประโยชน์ต่อผู้อ่าน และอาจจะกระตุ้นให้เกิดการทำวิจัยเพิ่มขึ้นในคณะแพทยศาสตร์

คณะผู้เขียนทำการรวบรวมผลงานทางวิชาการของ ศาสตราจารย์กิตติคุณ นายแพทย์สำรวย ช่วงโชติ รวมทั้งการอ้างอิงผลงานดังกล่าวระหว่างปี พ.ศ. 2509 ถึง 2544 ได้ใช้การทดสอบทางสถิติไคสแควร์เพื่อศึกษาเปรียบเทียบโอกาสของผลงานทางวิชาการที่จะถูกนำไปอ้างอิง ของวารสารทางการแพทย์ 3 ประเภท ซึ่งประกอบด้วยวารสารทางการแพทย์ระดับนานาชาติจุดหมายเหตุทางแพทย์ของแพทยสมาคมแห่งประเทศไทย และวารสารทางการแพทย์ในประเทศ อื่น ๆ จากผลงานทางวิชาการจำนวน 235 เรื่อง ซึ่งประกอบด้วย ตำราทางการแพทย์ 7 เล่ม รายงานขั้นสุดท้าย 3 เล่ม และงานวิจัยที่ตีพิมพ์ในวารสารทางการแพทย์จำนวน 225 เรื่อง พบว่าผลงานทางวิชาการจำนวน 152 เรื่อง (ร้อยละ 65) ถูกนำไปอ้างอิงในวรรณกรรมทางการแพทย์ เป็นจำนวน 1,458 ครั้ง การทดสอบสถิติไคสแควร์ แสดงความแตกต่างของโอกาสการถูกอ้างอิงของผลงานทางวิชาการในวารสารทั้ง 3 ประเภทอย่างมีนัยสำคัญทางสถิติ ($P < 0.001$) กล่าวคือผลงานทางวิชาการที่ตีพิมพ์ในวารสารทางการแพทย์ระดับนานาชาติ มีโอกาสถูกอ้างอิงมากที่สุด ตามด้วยเรื่องที่ตีพิมพ์ในจุดหมายเหตุทางแพทย์ ของแพทยสมาคมแห่งประเทศไทย ส่วนผลงานทางวิชาการที่ตีพิมพ์ในวารสารทางการแพทย์อื่น ๆ ในประเทศ ถูกนำไปอ้างอิงน้อยมาก

ผู้เขียนได้ให้ข้อสรุป และคำแนะนำว่า การวิจัยของอาจารย์ในคณะแพทยศาสตร์ ควรมีการพัฒนาและได้รับการส่งเสริมอย่างจริงจังเพื่อนำไปสู่การตีพิมพ์บทความวิชาการในวารสารทางการแพทย์ในระดับนานาชาติ

Researching and Teaching Hospital's Staff Members

It is undeniable that researching is one of the major responsibilities of all Teaching Hospitals' Staff Members. There, however, are always many other reasonable and non-reasonable "priorities" distracting us from it, and, we believe, only a "hand-full" of people (or even less) in the Medical Centers in Thailand have undertaken a full-length of academic path.

The purpose of this communication is to give an example of a person, Emeritus Professor Dr. Samruay Shuangshoti, who devoted his entire career in the Department of Pathology, Faculty of Medicine, Chulalongkorn University for academic work. We hope that this report will, to some extent, be beneficial for the younger generations, and, perhaps, light up research activities in Chulalongkorn Hospital.

Emeritus Professor Shuangshoti's Academic Publications and Citation Analysis

Emeritus Professor Shuangshoti kindly provided a list of his publications. Articles in medical

journals were divided into 3 groups including 1.) international medical journals, 2.) journal of the medical association of Thailand (JMAT), and 3.) other Thai medical journals, including Chulalongkorn medical journal. Citations were collected between the years 1966-2001. Articles cited in medical journals were retrieved mostly from a computer-based citation index, and those in medical textbooks were obtained manually from textbooks available in several medical libraries and personals' collection. Citations, which were made by one of the co-authors of a certain publication, were excluded. Chi-square test was used to determine the association among the groups of journals and their likelihood to be cited in the literature.

Table 1 summarizes all Emeritus Professor Shuangshoti's academic publications, which include 7 medical textbooks, 3 final reports in English, and 225 articles in various medical journals. Of these, 152 publications (65%) have been cited, 78 in medical textbooks and 139 in medical journals. The total citation time is 1,458, which can be divided into 267 times in

Table 1. Summary of academic publications and citations of Emeritus Professor Dr. Samruay Shuangshoti.

Publication types	No. of pubs	Total No. of pubs cited	No. of pubs cited in medical textbooks			No. of pubs cited in medical journals			Time(s) cited in medical textbooks			Time(s) cited in medical journals		
			T	F	Total	T	F	Total	T	F	Total	T	F	Total
Thai medical textbooks	4	3	2	-	2	2	-	2	9	-	9	7	-	7
English medical textbooks	3	3	1	3	3	2	3	3	2	4	6	2	33	35
Final reports in English	3	-	-	-	-	-	-	-	-	-	-	-	-	-
International journals	94	80	14	46	51	23	74	77	21	200	221	37	991	1028
J Med Assoc Thai	98	56	16	2	18	28	35	49	17	3	20	39	75	114
Chula Med J	29	9	3	-	3	8	-	8	8	-	8	7	-	7
Other Thai medical journals	3	1	1	-	1	-	-	-	3	-	3	-	-	-
Total	235	152	37	51	78	63	112	139	60	207	267	92	1099	1191

No. = number(s), pub = publications, T= Thai textbooks or journals, and F = Foreign textbooks or journals.

medical textbooks and 1191 times in medical journals.

The frequency of citation varies from 1 to 126⁽²⁾, with a mean of 9.5 (Table 2). Publications that have been cited more than 20 times were listed in the references.⁽¹⁻¹⁷⁾

Chi-square test demonstrated that likelihood of the 3 journal groups to be cited differs significantly ($P < 0.001$). Articles published in international medical journals are most likely to be cited, followed by those in the JMAT. Publications in other Thai medical journals have rarely been mentioned. (Table 3)

Difference of citation frequency among the 3 journal groups was not determined because none of the data groups was normally distributed. Besides, the frequency is more likely to be confounded by the fact that older articles have more chance to be

repeatedly cited as they have appeared in the literature for a longer period of time.

Discussion, Suggestions and Conclusion

Graduating from the Faculty of Medicine, Chulalongkorn University in 1960 and spending 1 year afterwards as a House Officer, Dr. Samruay Shuangshoti began very first few years of his career in pathology at the Department of Pathology, Chulalongkorn Hospital. He, then, undertook a residency program, 2 years in Anatomic Pathology with Dr. Paul D. Rosahn at New Britain General Hospital, Connecticut; and 2.5 years in Neuropathology with Professor Dr. Martin G. Netsky, one of the eminent neuropathologists at the time, at the University of Virginia, Charlottesville, USA. Dr. Samruay Shuangshoti was the first Thais who pursued

Table 2. Numbers of publications in journals cited.

	Cited (%)	Not cited (%)	Total (%)
International journals	80 (85)	14 (15)	94 (100)
J Med Assoc Thai	56 (57)	42 (43)	98 (100)
Other Thai medical journals	10 (31)	22 (69)	32 (100)
Total	146 (65)	78 (35)	224 (100)

Table 3. Summary of citation frequency.

Publication Types	Numbers of publications cited	Time(s) cited		
		Min	Max	Mean
English medical textbooks	3	3	31	13.67
Thai medical textbooks	3	1	14	5.33
International journals	80	1	126	15.46
J Med Assoc Thai	56	1	13	2.34
Other Thai medical journals	10	1	9	2.10
Total	152	1	126	9.5

Min = minimum, and Max = maximum

both the American Boards of Anatomic Pathology and Neuropathology in 1966. He was subsequently granted by the National Institutes of Health to work with Professor Netsky again in 1969 as an International Postdoctoral Research Fellow in Neuropathology.

Since the invaluable period abroad, Dr. Shuangshoti had continuously produced scientific publications even after his permanent return to Chulalongkorn Hospital in 1970 until his retirement in 1995. His major interests were the choroid plexus in health and disease and tumors of the nervous system. Dr. Shuangshoti has gained international respect in the field of neuropathology due mainly to his numerous publications, which have been repeatedly cited worldwide.

The analysis of Dr. Shuangshoti's citation index has provided several facts deserving mention. Obviously, articles published in international medical journals are more likely to be read, as reflected by numbers and times cited in the literature. This finding is, in fact, not surprising since these journals are listed in the Index Medicus and, thus, can easily be accessed. The only Thai medical Journal listed is the JMAT; a number of papers published in this journal have been cited although the chance and frequency of citation are lower. On the other hand, rarely have articles in other Thai medical journals been cited.

The above findings may be considered straightforward, but have left several points for the administrator. Most importantly, are there any other strategies to improve research status of our hospital? As alluded earlier, a significant proportion of the staffs is burden with other matters, especially routine works and teaching. Furthermore, additional possible time for research is taken away by many for private jobs.

Research activities, therefore, seem to be limited to few people or research groups, and to those who have to do it for academic promotion. Not unexpectedly, many of the people who did research merely for such purpose have stopped publishing any scientific papers soon after they pursued the desired academic position. Also, experience abroad with experts in the field is of particular crucial. A short period, such as one year, may not be enough to fully gain skills necessary for both service and research. Additionally, research projects aimed for international publications should be encouraged and strongly supported. Needless to say, there seem to be many more research obstacles, not mentioned. However, we do believe that, with a serious concern from the administrator, progress in research will be made in Chulalongkorn Hospital in the near future, and the activity will no longer be confined to some of the staff members. Otherwise, the Faculty of Medicine, Chulalongkorn University might disappear from the World Medical Literature.

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