

K.Krishnakumar, is an academician with outstanding records in Pharmaceutical Education and Research since 1990, after obtaining graduation in Pharmacy from the prestigious institution of College of Pharmaceutical Sciences, Manipal.

Dr.Krishnakumar chaired many key posts in the Pharmaceutical Statutory bodies and Professional organizations and had proved his leadership qualities in all those sectors and is continuously fighting for Qualitative improvements in the Profession of Pharmacy for the past three decades.

Now engaged as *Principal* St.James College Of Pharmaceutical Sciences, Chalakkudy is instrumental in making St.James College a Pioneer Institution among the private self finacing pharmacy colleges in the state.

Pharmafirst team made a worthful interaction with Dr. K. Krishnakumar to explore his 30 years of experience as a Pharmacy Professional in Education & Research.

1.Dr. Krishnakumar, Please share the factors that lead to the selection of Pharmaceutical Sciences as your career after graduation.

Initially, I took graduation in Chemistry from Keralavarma College with the inspiration from my mother,Mrs. Malathy and my Brother-in-law, Mr. C.S. Divakaran, both were Professors in Chemistry. Since I found Pharmacy as a unique platform to correlate my views with Healthcare, sought graduation in Pharmacy, to be an element in improving our society's wellbeing.

2.In your opinion, what are the major differences one can observe in the Pharmaceutical Education System in India since 1985?

Enough emphasis was not laid on strengthening the components of Community Pharmacy, Hospital and Clinical Pharmacy, while designing curriculum at Diploma and Degree levels of teaching before 1985.

The expansion of the role of Pharmacists received an important boost in 1990 when the term 'Pharmaceutical Care' was coined for improving the

A PROFESSIONAL WITH REMARKABLE CONTRIBUTIONS

IN PHARMACEUTICAL EDUCATION & RESEARCH



patient's quality of life. From then the profession has transformed itself from a product oriented focus to patient oriented profession.

Moreover, Total Quality Management (TQM) is becoming the universal mantra in every aspect of life. So, accreditation by national bodies is being specified to improve the quality of institutions and education. Presentation, listening, reading skills and researching attitudes of the students are given more emphasis nowadays, along with professional knowledge for overall personality development and to inculcate professionalism.

3. As an active part of KUHAS since its inception, how you rate the transformation of Pharmaceutical Education from DME/State universities to KUHAS?

As we all know, Medicine, Dentistry, Pharmacy, Nursing, Physiotherapy and allied Health sciences which were functioning under the University of Kerala, MG University, Calicut University, Kannur University and Cochin University of Science & Technology have all come under the same roof 'KUHS' in 2010 in Thrissur. This is being established mainly for ensuring proper and systematic instruction, teaching, training and research with uniformity in syllabus and academic programmes

throughout the State of Kerala in Medicine, allied health sciences and AYUSH systems. This step is very much towards creating efficient healthcare system in the state.

4. You have published around 150 research articles in Pharmaceutical Sciences till date in different subjects. Out of these, which subject is found to be useful for Pharmaceutical Industrial growth and how many of the articles got recognition through practical implementation?

Of all the articles I have published, the manuscripts with the aim of drug discovery, especially in the field of natural product analyses and scaffold development from shrimp have been identified by the scientific bodies as a component to be promoted. Hence, grants have been received and reports have been submitted. Industry has also sought our help for collaborative research in formulation of nano-components, scaffolding maneuvers as well as transfer of technology processes.

- 5. As Principal of St.James College of Pharmaceutical sciences for the past 13 years, please inform the major milestones in the management of the institution?
- a. Development step by step from UG, then moving onto PG & Pharm D programmes need a systematic follow up of inspections, from both the affiliated bodies and scientific bodies.
- b. We strive for generating knowledgeable, disciplined, Pharma Professionals who can face challenges efficiently.
- c. Acquiring DSIR approval exclusively in St James College of Pharmaceutical sciences in Kerala was a major mile stone.
- d. To bring in collaborative research and consultancy projects with industries is an ordeal but we succeed by focusing on these tasks.
- e. Successful conduct of Job fair "OUSHADHA UDYOGAMELA" for all the Pharmacy graduates in the entire state of Kerala is another break through.
- f. Exhibitions like "OUSHADHA VIGNAN", Inter collegiate extracurricular activities, Sports, All India IPA quiz etc. are being taken up as separate assignments, so that the students are coming out in flying colors in almost all the events.
- g. Getting Proficiency Awards and ranks at University level, Overall Best Pass Percentage and sponsorships for projects have many a time, been the pride of St. James College of Pharmaceutical Sciences. We are glad that our faculty and our students are co-operating for uplifting the name and fame of our institution.
- h. We have an annual research journal, 'Journal of Pharma Innovative Research' (JPIR) with ISSN

No: 2350-1332, helps us to extend our research updations to public.

6. Can you share experiences as Controller of Selection & Admissions of KSSPCMA for the past 10 years and the quality and quantity of candidates coming for new admissions?

We have a protocol which shall be meticulously followed. The process starts from 3 months before the commencement of admissions. Initially with the permission obtained from AFRC (Admission Fee Regulatory Committee), the controller by admission management committee will be appointed. Enquiries keep progressing on various issues and we sort out any type of clarification that crops in both from the side of students, parents, institutions and the management. Regarding student quality, I would say, that there are 3 categories are existing which are as follows. The first category with excellent grade of more than 95% who are unable to step into Medicine degree, fall under this group. The second category is a set of students with 80 to 90% marks, who voluntarily opt for B.Pharm & Pharm D courses and the third is an average group of students but are very much interested to be a part of health care team. We are witnessing these three categories every year. Students will be allotted to colleges strictly, as per the guidelines framed in the consortium. Recently we have observed more number of female candidates choosing this field.

7. How do you rate the position of various Pharmacy organizations in Kerala and their contributions in uplifting the profession during the past 10 years?

Various professional organizations like IPA, KPGA, KGPA and APTI seem to function and they contribute their level best for the growth of Pharmacy Profession. For example, I can say, IPA regularly provides knowledge through its journal publication, on various aspects in Community and Clinical Pharmacy as well as the latest advancements in the field of Medicine. We do exhibitions, rallies and hold competitions in public places to spread awareness on the importance of Pharmacy, as unity is always strength. Long back, the Pharmacists were just considered as compounders. But with the advent of extremely drug resistant type of disease manifestations, mutation due to the existing pollution, realization is now seen in the society regarding the necessity of Pharmaceutical interventions and successful medical outcomes.

8. You have successfully conducted many workshops and seminars in the Pharma Sectors during the past 13 years using the present platform as Principal. What is the

magic behind the great performances?

We have conducted many conferences, seminars and workshops in all branches of Pharmacy. The most vital reason is the magical support of my Management. They have always been supportive and satisfy our needs & expectations to perform any type of mega event. Next I should say, my sincere faculty members, who have extraordinary organizational skills and systematically carry out the tasks with team spirit. HODS help me in designing the scientific sessions and applying for grants. I have to thank the scientific bodies DST, DRDO, ICMR, CSIR etc for encouraging us, by providing sufficient funds for the proper conduct of the programmes. Last but the most important fact, are my students with amazing talents and work with utmost unity and team spirit. All these put together, is the magic of my success.

9. As a Professional Pharmacist in the Educational sector, can you pinpoint the handicaps of Pharmacy Profession in Kerala?

Presently, the Pharmacy Profession is more patient oriented. Hence, the necessity of our Profession in alleviating the problems related to multiple drug regimen, adverse reactions, drug interactions and medical errors in prescription, administration and dispensing can be focused with utmost care. The existence of a Community Pharmacist should be definitely insisted in a medical shop. The importance in counseling should be emphasized more for the betterment of the society.

10. In your opinion, what are the areas requiring priority in the health care system to provide quality treatment to the common man and the role of Pharmacists in the system.

As I already said, counseling especially in case of chronic problems such as diabetes, hypertension, peptic ulcer, life-style diseases, COPDs, autoimmune disorders etc can be emphasized. Updating on the latest type of drugs, disease conditions with a thorough knowledge on Pharmacology and therapeutics is essential. Students need to be exposed on the novel techniques of genomics, proteomics and high throughput screening techniques for newer drug discovery process against the rapidly mutating species. Only a knowledgeable, updated Pharma Professional can address the issues in an efficient manner. Hence, we need to insist on Quality for prosperity of the nation.

11. What are your suggestions to improve the syllabus of the Diploma, Graduate, Post Graduate and Pharm D

courses, benefitting the common man during their service?

Regarding B. Pharm, recent amendments were made in the semester pattern and uniformity has been brought in, throughout the nation. The implementation of 'Practice School' is a boon as logical thinking & practical view is going to be more helpful to the students in the present scenario. In Pharm D curriculum, more emphasis is being given to Therapeutics, Pathophysiology and Pharmacology. There are a lot of changes made in the syllabus of D.Pharm when compared to the old one. Thus, more importance is given for practical oriented training and presentations in the present syllabus which would benefit the student fraternity.

12. Which position was the most enjoyable one during the past 30 years of service after Graduation? And kindly narrate the experiences in that role.

I have always been a Principal from the time I completed my Post Graduation. My services started initially in a Diploma College and then I am continuing as Principal in a degree college. As you know, this is a most responsible, answerable position. I wholeheartedly discharge my duties to the best of my ability, to bring name and fame to my Institution, with the help of my faculty and my students. My faculty cooperate in all ways and sincerely give me a helping hand in bringing Grants, Consultancy and Industry Collaborations. It is real pride and utmost happiness when students bring laurels to the institution both in curricular and extracurricular activities. Many a time, my students have received the University Ranks and Kalamani awards, All India IPA Elocution award etc. wherein I experience, the best moments in my life.

13. Please share your valuable message to Pharma Community for better performance as quality service provider in health care system?

We, Pharmacists, are powerful tools to avoid dangerous drug interactions and adverse health effects. Hence I would like to insist that the following responsibilities are mandatory for Pharma community to provide quality service.

- As a Community Pharmacist, medication safety has to be ascertained, by understanding patient's medication regimen which certainly improves health outcome through patient counselling.
- Pharmacists, who are a vital part of QC & QA, should concentrate immensely to bring out safe & therapeutically active formulations as novel medicinal

agents.

- According to the present theme of 58th National Pharmacy Week celebrations 2019, "Pharmacist: Your medication counselor", more attention is insisted to Pharma Counseling in educating the patients on their life style, food habits and rational use of drugs to maintain a healthy life.
- Clinical Pharmacists should strive to reduce the rate of drug-related problems in a hospital, through medication reconciliation by simplifying the regimen, listen to the patients, educate and evaluate adherence of follow up.
- Pharmaceutical Industry can play a prominent role in reducing the cost within the health care delivery system.

14. Kindly give the quantum of support rendered by your family members in performing the multiple tasks?

My entire family has contributed to my Professional upliftment. During the initial days, when I joined as Principal of Subbarayalu College of Pharmacy, Coimbatore, my Mother, Late Mrs. Malathy, Professor of Chemistry, Sree Narayana College, was instrumental in instilling novel ideas for upbringing the academic activities in the institution.

My father, Late Mr. Prabhakara Menon who was an Assistant Excise Commissioner, has shared his expertise that helped me to face and tackle issues in administration, in a cool & efficient manner. My wife, Dr. Jalaja S. Menon, who is an Assistant Professor in Kerala Agricultural University, Thrissur, gives a lot of valuable suggestions and input in both the academic and administrative activities. My Father-in-law, Late Mr. S.R. Menon and Mother-in-law, Mrs. Komalavally, have given full support and motivation during my Ph.D programme.

Thus, all my family members have immensely extended their help and support for my successful career in the Profession of Pharmacy. At this juncture, I should also thank my teachers, guides, friends and all my well-wishers.

At the outset, Pharmacists who are a part and parcel of health care team should certainly be sincere, responsible updating on the latest advancements in the field of Medicine periodically, and work for the betterment of our society.