



DROP OUT OF WOMEN DOCTORS FROM ACADEMIC PROGRESSION: AN OBSERVATION FROM ADMISSION DATA OF KERALA MEDICAL COLLEGES IN 2011.

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ABSTRACT Kerala shows women favourable demographic data. Rising feminisation among Kerala medicos was reported recently. Scientific studies on sex representation at various levels of medical education are scanty. This study is first of its kind from Kerala. Registration details of admitted students to various medical courses conducted by all colleges affiliated to KUHS in 2011 were examined for sex distribution. The sex ratio- number of females per 1000 males-for UG, PG Diploma, Degree and Super-specialities were calculated. The PG students were further grouped as preclinical and clinical; and medical, surgical, Paediatrics or Gynaecology. The data is presented in the table and sex ratio is presented in graphs. The sex ratio was 2099 for MBBS, 1847 for PG Diploma, 1107 for PG Degree and 139 for PG Super-specialities. Progressive fall in women favourable sex ratio from UG to super-speciality levels observed. It dropped from PG non-clinical to PG clinical subjects, but increased from surgical specialities to Medical specialities; in Paediatrics and sharply in Gynaecology. Female doctors suffer more gender discrimination than male doctors. They integrate family responsibilities with career, necessitating flexibility of work. Today's medical profession may be a male-favoured one. Perhaps empowerment of women starts from the lower strata of society and progress up. Drop out of women lead to lose of potential talent. Alternative work schedules, optimization of maternity leave and child care opportunities are required to support women in medicine. Changes in health care policies are needed to balance between work and home. This study was based on already available data. More focussed studies with robust methodologies are suggested.

KEYWORDS : Feminisation- medicos- female drop outs- academic progression

Introduction:

The state of Kerala is poorer on average from rest of India, but health care facilities are wide. Indicators of Physical Qualities of Life Index are well above all India levels. Against a negative sex ratio (943) at the National level, the figure for Kerala State (1084) is noticeably women favourable (Government of India 2013). The Female literacy rate rose from 89.81 in 1991 to 93.91 in 2011 (Government of Kerala 2011). Increasing female representation among medical students of Kerala was reported previously (Praveenlal Kuttichira 2013). An extension of that study was done to examine the extent of female representation at varying study levels and specialties in Kerala's medical colleges.

Methodology

Details of students registered in the Kerala University of Health Sciences in 2011 admission from 22 affiliated Medical Colleges for various medical courses were used for the study.

From the list of students registered for under graduate, post graduate and super speciality courses in medical sciences; the sex ratio of students were calculated as number of females per 1000 males. The PG students were further grouped - initially as preclinical and clinical and then among the clinical subjects as medical, surgical, Paediatrics or Gynaecology.

The data is presented in the table and sex ratio is presented in three graphs - the first on the sex ratio of UG, PG and Super specialties; the second on the sex ratio of the PG for preclinical and clinical subjects; the third on the clinical PG grouped under surgical specialties, medical specialties, Paediatrics and Gynaecology.

Results

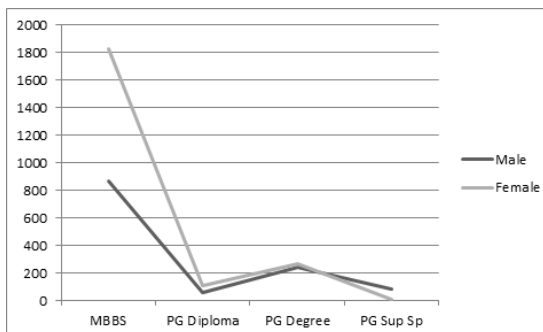
Number of male and female students registered for medical courses at various levels in 2011 batch is given in the table.

Table 1: Sex ratio of students admitted to medical courses at various levels in all medical colleges affiliated to Kerala University of Health Sciences in 2011.

course	Total	Male	Female	M:F ratio
MBBS	2699	871	1828	2098.74
PG Diploma	168	59	109	1847.46
PG Degree	514	244	270	1106.56
PG Sup Sp	92	84	8	95.24
PG N Cli	130	20	110	5500.00
PG Clin	583	290	293	1010.35
PG Surg	188	128	60	468.75
PG Med	248	128	120	937.50
PG Ped	73	30	43	1433.33
PG Obg	74	4	70	17500.00

The sex ratio for MBBS was 2099, for PG Diploma was 1847, for PG Degree was 1107 and for PG Super-speciality 139. It was a progressive fall in sex ratio from Under Graduate to super-speciality levels, through PG Diploma, PG Degree (Graph 1).

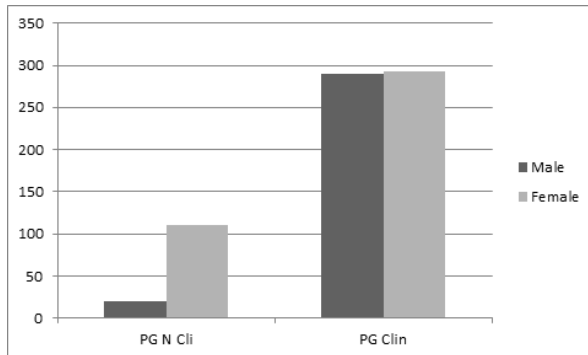
Graph 1: Sex ratio of students admitted to MBBS, PG Diploma, PG Degree and PG Super-specialty courses in all Medical Colleges affiliated to KUHS in 2011.



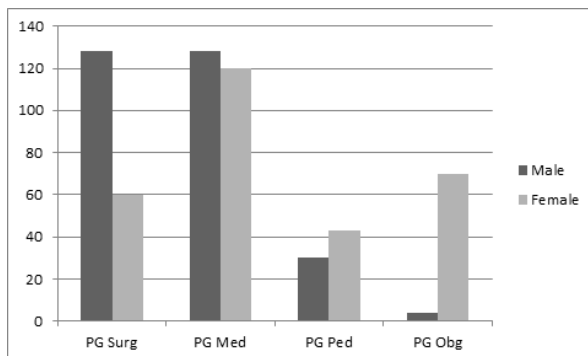
The sex ratio dropped from PG non-clinical subjects to PG clinical

subjects (Graph 2). However the sex ratio increased from surgical specialities to Medical specialities; then to Paediatrics and sharply to Gynaecology (Graph 3).

Graph 2: Sex ratio of students admitted to PG courses in Non clinical and Clinical subjects in all Medical Colleges affiliated to KUHS in 2011.



Graph 3: Sex ratio of students admitted to PG courses in surgical specialities, Medical Specialities, Paediatrics and Obstetrics & Gynaecology in all Medical Colleges affiliated to KUHS in 2011.



Discussion

Sex is the biological difference between males and females while gender refers to the economic, social and cultural attributes and opportunities accompanying it (WHO).

The working time productivity of women doctors is alleged to be low (Bashaw, DJ, Heywood JS 2001). Lower practice hours, higher leisure time and lesser emergency call influence the students' future speciality choices (Schwartz R Wetall1990), besides income, intellectual stimulation, role models, and prestige (Chang-Woo Lee 2013). The life style preferences seem more important for youngsters in general.

'Female doctors suffer more gender discrimination than male doctors' (Hostler SL, Gressard RP 1993). Even in an academic environment, 'despite substantial increases in the number of female faculty, reports of gender-based discrimination and sexual harassment remain common' (Phyllis L. Carr, Arlene S. Ash, Robert H. Friedman 2000). A study among Internal medicine house staff in Canada showed female residents experiencing gender discrimination by attending physicians, patients and nurses; at rates higher than male residents (Van Ineveld CH et al 1996)

Women prefer work with flexibility to integrate family responsibilities with career (Salter A.2007). If female medical students' speciality choice is decided by the preference for a comfortable life style, Obstetrics and Gynaecology should have been the last priority. In obstetrics, patients expect the consultant's presence in the labour room at the time of delivery, which would be an unpredictable day and time. With private practice outside the routine working hours in the hospital, all the Obstetricians working anywhere in Kerala are busy. Both Obstetrics and Paediatrics are related to reproductive and child rearing role of women. Traditionally women doctors are encouraged to prefer those specialities. Observations from this study support that view.

The choice of specialty could be related to gender. It was opined that male students opt for technical and instrument oriented specialties and

female students choose relationship oriented specialties (Phil JM, Heiligers 2012). Generally 'male students are more motivated by salary, status and the opportunity to implement technical activities while female candidates are motivated by humanist and altruistic reasons' (Huang Q, Sverke M 2007)

The gender representation in any profession is influenced by the training system. A male favoured segregation does exist in medical profession, while contrary prevails in Obstetrics (Alan Slater 2018). Expectations based on these patterns influence individual career choices of individual medical students, both boys and girls.

Alternative work schedules, optimization of maternity leave and child care opportunities were proposed to improve recruitment and retention of women in medicine (Jae-hee Ahn 2012) and changes in health care policies are needed (Chang-Woo Lee 2013). Perhaps empowerment of women starts from the lower strata of society and progress up. That could be another reason for relatively better women favourable sex ratio for courses lower in the ladder of academic progression.

Academic specialties can lose a major source of potential talent, if women are not encouraged to enrol and contribute (Jae-hee Ahn 2012). 'Presence of Women professionals at all levels and empowerment of them are required for improvement of the health and nutrition structure in India' (Buckshee K 1993). Women's capabilities are underestimated and they are disadvantaged at work (Subhash Kundu 2003) in general. It could be true for Medical profession also. Those with talents among the women doctors are to be found out and groomed for their success too.

This study was based on available data on sex difference among students who joined for Medical courses of Kerala at different levels. It was neither based on students' experience of discrimination nor on opinion survey among concerned others. All the opinions expressed in the discussions are personal views only and not logically drawn conclusions based on any scientific methodology. All these limitations are acknowledged. More focussed studies with robust methodologies are needed before arriving firm conclusions.

Acknowledgement

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