A Study of Knowledge, Attitude and Practice among Clinical Faculty towards Senior Citizens Regarding Medical Care in a Medical College

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Abstract: In recent years there has been enormous expansion of the "graying population" all over the world and by 2025 it is expected to rise to more than 1.2 billion with 840 million of these in developing countries and about 50 million in the USA. In India population above 60 years age is 8% & is likely to rise to 19% by 2050. In the USA senior citizens above 65 years constitute 12% of population. The John A Hartfort Foundation of New York City in partnership with Association of American Medical College started Geriatric & Gerontology education for physicians in 2000. Since the elderly population in India is increasing as well, it is important to focus on medical students' knowledge and attitude towards the clinical and sub clinical problems of senior citizens. We often use stereotype negative statements about elderly patients like "lost case" or "dead investment". We should put an end to such derogatory attitudes towards senior citizens when they really need moral support and care. Material and Method: All clinical faculty members available in medical college were interviewed in months of June and August 2016. A special performa has been prepared after reviewing literature and with the help of psychiatrist and divided into five sections having personal particulars, knowledge, attitude, practice and suggestions. Results: Total 77 clinical faculty members participated in the study. Most faculty members (53 out of 77) were found to be very knowledgeable and score varied from 50% to 75%, The response about practices of faculty was found 72% to 98%. Their attitude was analyzed across two groups based on experience & age and not found statistically significant. Conclusion: Almost all clinical faculty members comprising of 77 participated in the study and most of them scored good marks. They have very positive attitude, achieving 68-88% response in 6 out of 8 statements. Their practicing results were 72% to 94%. This type of study is needed to be conducted in clinical faculty of various other medical colleges as well to get a clearer picture.

Keywords: Faculty Members, KAP, Medical Care, Medical College, Senior Citizens

I. INTRODUCTION

In recent years there has been enormous expansion of the "graying population" all over the world and by 2025 it is expected to rise more than 1.2 Billion with 840 million of them in developing countries and about 50 million in the USA. In India population above 60 years age is 8% [1] and is likely to rise to 19% by 2050. In the USA senior citizens above 65 years constitute 12% of the population. Diseases

and senescence - those over 65 years in the USA spend on average three times as much on health care as those under 65 years [2]. Most recently Sir James Sterling Ross commented, "Promote it, you do not heal old age. You protect it; you extend it."

Apparently healthy older adults need necessary care to protect them from unexpected sudden deterioration of their health and related preventable complications. Prevention at young age itself through healthy life style by regular physical exercise, healthy diet, avoidance of tobacco and alcohol are beneficial [3].

Aging is incurable and it begins at birth. The biology of senescence has functional, chemical, social, and psychological dimensions which include cellular aging, aging of organs and systems and age-associated diseases [4]. The John A Hartfort Foundation of New York City in partnership with Association of American Medical College started Geriatric & Gerontology education for physicians in 2000. The 40 participating institution have created innovative ways to teach about care of older people and help students attain needed competences [5].

In- depth knowledge in medical gerontology with community exposure may help develop well-oriented medical graduates to take care of aging persons. There is an urgent need for radical change in medical teaching to introduce desired changes in medical students' attitudes from the very beginning of their career. It is a Herculean job to accomplish though [6]. WHO predicts that by the year 2020 depression will be the leading illness associated with negative impact and disease-burden on human wellbeing, replacing communicable diseases and overtaking other conditions such as IHD, DM and neoplastic diseases [7]. Since population of elderly people is also increasing in India, it is important to focus on medical students' knowledge and attitude towards the clinical and sub clinical problems of senior citizens and aged patients. There is also need to train physicians in gerontology to change their attitudes and practice towards treating elderly patients. We often use stereotype negative statements for elderly patients like "lost case", or "dead investment". We should put an end to such derogatory attitude towards senior citizens when they really need moral support and care. We have not come across any similar study conducted towards senior citizens so far though some survey have been carried out about nursing students' attitude towards elderly patients. Therefore we have conducted this study.

Objectives: 1.To assess the knowledge and attitude among clinical faculty towards senior citizens. 2. To find out their practice while providing medical care to elderly patients. 3. To obtain suggestions of faculty members to improve quality of medical care to elderly patients.

II. MATERIAL AND METHODS

All clinical faculty members available in medical college were enrolled and interviewed with prior appointment in months of June and August 2016. Kogan's attitude towards old people (KAOP) was not found appropriate to study attitude of faculty members towards senior citizens since it is old version and also contains Anglo orientation sub scale. A special Performa was prepared after reviewing literature and with the help of psychiatrist [8]. Performa was divided into five sections having personal particulars, knowledge, attitude, practice and suggestions. Thus a pre-tested Performa with Likert scale Performa was ready [9] it was given to each faculty member who consented to participate in study and ethical clearance was taken. Participants were asked about their beliefs, emotions, behavior tendencies and affects. They were briefed how to attend the questions and tick one of the most appropriate options for each statement/questions [9]. Data was analyzed with descriptive statistics in form of proportion, percentage and chi-square test.

III. RESULTS

Total 77 clinical faculty members participated in the study, out of them 34 were Professors, 14 Associate Professors, and 29 were Assistant Professors. Members were analyzed in two categories, based on age 40 and below (38) and above 40 yrs (39) and experience 10 yrs or less (37) and above 10 yrs (40).

Table 1: Frequency Distribution of scores of Faculty members

Score (%)	Frequency	Percent
33	08	10
42	07	09
50	14	18
58	17	22
67	13	17
75	09	12
83	06	08
92	03	04
Total	77	100%

Majority of the faculty members (53 out of 77) were found to be very knowledgeable and scores varied from 50% to 75%, 8 faculty members had poor knowledge i.e, 33% while the top 12 faculty members were graded excellent (83% to 92% score).

Table 2: Attitude of faculty members towards senior citizens showing association

	Statements	%
1.	Stereotype statement like "lost case" or "dead	60
	investment" should not be used	
2.	Many physicians give less time & do not treat	35
	with seriousness	
3.	Entitled to same respect and treatment as young	85
	patient	
4.	Aging is normal process of human life& elderly	74
	are expected to tolerate their age	
5.	Lack of interest by physician lead to missing of	73
	serious ailment	
6.	A healthy elderly person can be as productive as	68
	middle age	
7.	Older patient have different care-needs than	88
	their younger counter part	
8.	If elderly accompanied by young care giver do	30
	you address patients only?	

Positive response varied from 60% to 88% except statement No. 2 and 8.

Table 3: Attitude: Association between experience less than 10 yrs and 10 yrs and more

		1					1
St	Statement Attitude		To	P			
		Stron	Agree	Stron	Disag	tal	value
		gly		gly	ree		
		agree		disagr			
				ee			
1	<10	15	07	05	10	37	0.749
	>=10	19	07	07	07	40	
2	<10	07	05	07	18	37	0.344
	>=10	11	10	06	13	40	
3	<10	28	06	00	03	37	0.446
	>=10	34	03	O1	02	40	
4	<10	21	04	03	09	37	0.046
	>=10	29	07	02	02	40	
5	<10	22	06	02	07	37	0.600
	>=10	24	05	06	05	40	
6	<10	19	09	04	05	37	0.945
	>=10	23	09	04	04	40	
7	<10	31	04	01	01	37	0.700
	>=10	33	05	00	02	40	
8	<10	07	06	09	15	37	0.126
	>=10	09	01	16	14	40	

Comparison for statement no. 4 above was found to be statistically significant.

Table 4: Attitude: Association between age 40 & below and above 40

St	atement	nt Agreement			То	P	
		Stron	Agree	Stron	Disag	tal	value
		gly		gly	ree		
		agree		disagr			
		_		ee			
1	<=40	14	08	07	09	38	0.630
	>40	20	06	05	08	39	
2	<=40	08	06	07	17	38	0.420
	>40	10	03	12	14	39	
3	<=40	29	06	-	03	38	0.650
	>40	33	04	-	02	39	
4	<=40	22	05	02	09	38	0.130
	>40	28	07	02	02	39	
5	<=40	23	07	03	05	38	0.700
	>40	23	08	01	07	39	
6	<=40	18	11	04	05	38	0.605
	>40	24	07	04	04	39	
7	<=40	32	04	01	01	38	0.689
	>40	32	05	00	02	39	
8	<=40	07	04	11	16	38	0.789
	>40	09	03	14	13	39	

Table 5: Practices: faculty members showing positive responses

Statements	Strongly
	agree/
	Agree
One should interact with the older patient	85%
while providing medical care	
Older patient differ from younger ones in the	82%
medical care	
There is a need to behave differently towards	72%
older patients	
One should devote more time while treating	92%
elderly patients	
More learning from other specialties while	89%
interacting with the patients	
One should notice positive change as one	90%
gains more experience	
Colleagues develop better expertise while	94%
dealing with more elderly pt	
One should derive professional satisfaction	94%
while dealing with elderly pts	
Working with elderly patients is a professional	81%
challenge	
One feels emotionally satisfied while treating	88%
elderly patients	

The response about practices of clinical faculty was found very high i.e, from 72% to 94%.

Table 6: Suggestions

Suggestions	%
More Gerontology should be included in UGs	96%
curriculum	
Geriatrics specialty should be included in all	95%
medical colleges	
Medical college hospital should have a special	88%
ward for older patients	
Special training is required for physician to	88%
treat senior citizens at this juncture	

IV. DISCUSSION

Aging is inescapable and we all understand that in future we all practicing doctors will gradually join the queue of elderly patients in various hospital/clinics and our students will take care of us in some geriatrics ward. If we personalize the problem like this, we may feel the burning end of issue right on our table for discussion.

Most of the faculty members had good to excellent knowledge about gerontology except very few. Faculty members' attitudes varied from 60%-88% which may be the effect of upbringing particularly inculcation of a value system in childhood that elders have to be respected and cared for. The oriental cultures like those of India and the socio-religious setting in our country may also be responsible for this. This may be because of Indian cultural, social and religious background and Indians demonstrate greater respect to elders. Attitude was analyzed by dividing faculty into two groups based on experience (less than 10 yrs or more than 10 yrs) and it was not found statistically significant except for statement 4 whereas less experienced members not agreeing with the statement "aged persons should tolerate their age and they should be treated" means that aged person should also be treated. Other two groups based on age i.e. 40 or less and more than 40 yrs did not show any significant change. Thus faculty members had positive attitudes towards senior citizens. This is in contravention of western countries as brought by BMJ [3]. To infuse changes in the medical students' attitudes we need to change our negative attitudes to be positive role models for the future doctors. More targeted experiences with generally healthy older people as patients may be needed to significantly improve students' attitudes toward older patients [10]. As far as practice is concerned, response to questions was overwhelming i.e. 72 to 94%. Most (85.6%) of the faculty members belonged to joint family and have elderly persons in family.

Nazia Khan found in her comparative study of 88 participants, students who had cared for older adults, reporting a more positive attitude [11]. Mehta et al has also shown in their social work that the offspring of adult take responsibility to provide for the needs of their parents and parents frequently help their children to establish their own families [12]. Medical students in Singapore have positive attitude towards the elderly. It is important that their medical curriculum continues to have an increasing geriatric component in view of increasing aging population [13]. In

India National Institute of Society Defense of Ministry of Social Empowerment runs 1 yr PG diploma in Geriatric Care and other courses in old age care providers [14].

V. CONCLUSION

Almost all clinical faculty members comprising of 77 participated in our study. Most of them scored 50-70 % marks and top 12 got excellent grading. Their attitude was very positive achieving 68-88% response in 6 out of 8 statements. No change was notable in attitude of faculty based on their experience and age. Their practicing results were 72% to 94% as most of the clinicians have senior citizens in their families. We have some limitation as such there was not sufficient existing research on doctors' attitude towards older patient from cultural perceptive. This type of study needs to be carried out on clinical faculty of various other medical college to get real assessment.

REFERENCES

- [1] K Park, Preventive Medicine and Geriatrics, Text Book Preventive and social Medicine, Publishers M/s Banarsidas Bhanot 23rd Edition.
- [2] Geriatrics and gerontology Education for physicians: The JAHF/AAMC Partnership Corinne H Rieder. Academic Medicine 79Sv, 2004.
- [3] RajVir Bhalwar Chief Editer, Gerontology, Text Book Public Health, Published by Department of Community Medicine AFMC in collaboration with WHO 2009, 1st Edition.
- [4] Medical students knowledge and attitudes towards senior citizens and aged patients. BMJ 329:1307-c 2004.
- [5] Corinne H. Rieder, EdD- Executive Director, The John A Hartford Foundation, Inc.
- [6] Prof (Dr) Jogenanda Pramanik MD. A radical change in medical teaching and training system-A Herculean job to accomplish. Academic medicine 79, pp. 615-616, 2004.
- [7] Depression in later life, Robert C Baldwin, Oxford University Press, 2010.
- [8] Change in medical students and doctor's attitude toward old www.ncbi.nlm gov Pub med Central by R Samra-2013.
- [9] Analyzing Likert Data Journal of Extension, Article No. 20, Vol 50 April 2012.
- [10] Changing medical students' attitudes about older adults and future older patients. Shue CK, McNely K, University of Missouri-Kansas City School Medicine. MO 64108, USA.
- [11] Nazia A Khan, Dr Kelly Cotter faculty mentor, Student attitude about older adult : Caring and cultural assimilation, California State University Sacramento. (najia_khan_csus_mcnair_2010-11 pdf)
- [12] K Mehta, P Tan & V Joshi, Attitude towards older adults, Singapore Social Work student. Asia Pac J Soc Work 10, pp.40-54, 2000.
- [13] SK Cheong, Tech Yee, Wong, Gerald CH Koh, Attitude towards The Elderly among Singapore medical students. Ann Acad Med Singapore 38, pp. 857-861, 2009.
- [14] National Institute of Social Defense, Ministry of social Science and Empowerment, Govt of India.

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RESEARCH AND PUBLICATIONS

- A KAP Study & Survey of eating habits among faculty of Med College. The Indian Journal Of Nutrition and Dietetics. ISSN0022-3174,
- A Survey on practicing Healthy lifestyle by BCC through E-mail. Journal of Evolution of Medical and Dental Sciences. ISSN2278-4748 pISSN2278-4802
- A Study on Depression among Medical Students of Private Medical College. JEMDS ISSN 2278-4748 pISSN2278-4802
- 4. The pattern of Consumption of fruits and vegetable among medical students. Journal of Science eISSN2277-3290
- 5. Booklet: "Healthy life Style" available on internet and also e-mailed to about 1500 people of all section of society including medical professionals and which has been further disseminated by them benefitting others. Author has received appreciation. He is educating needy person to adopt healthy life style by delivering lectures and demo in various forum including medical fraternity.
- Blog: https://www.mtatva.com/en/author/dr-jai-prakash/ written articles on general well being, health, environment, nutrition etc

AWARDS:

- a) Awarded Certificate towards success of small pox eradication WHO 1977 by Regional Director WHO and Union Health Minister of India.
- b) Awarded Senior Scientist award in Second International Workshop on Micro nutrients and Child Health at All India Institute of Medical Sciences-2014 New Delhi.
- c) Awarded Scholarship in Second International workshop, held at All India Institute of Medical Sciences New Delhi to give feedback on Scientific paper presented by various speakers.

ACHIEVEMENTS

- 1. Participated and contributed in National level workshop on "Clinical management of Malaria" at Directorate of National Anti Malaria Programme, Government of India Delhi.
- Organized and celebrated Word Red Cross Day with the theme " Indiscrimination" at MH Belgaum
- Chairman of various Scientific Paper Presentation during XXV, XXVI, XXVII, XXVIII Annual Conferences held by Karnataka Association of Community Health in Karnataka
- 4. Participated as speaker in First Mysore international Conference on topic "Healthy Life Style". Chaired scientific session on Non Communicable Diseases and .Presented a study conducted on "Depression among Medical Students in Private Medical College of South India" in the same conference
- Presented KAP study among clinical faculty while providing medical care to senior citizens in medical college. in 4th International Congress on healthy aging.

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RESEARCH WORK & PUBLICATIONS

- 1. Published a paper titled "Epidemiology of Burn Injuries" in Medical Journal Armed Forces India, Oct 1994.
- Published apaper as third author on Stress Injuries among trainees in the Journal of the Indian Society of Aerospace Medicine in 2004.
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Life fellow of Indian Psychiatric Society

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In National Journals

- 1. Study of Stressful life events in relation to psychiatric illness in Armed Forces personnel AFMRC Project DGAFMS, Min of Def GOI 1991
- 2. Benzodiazepines: Overview with special reference to benzodiazepine dependence Industrial Psychiatry Journal, Vol 6:No 2 Jul 1993
- 3. Violent Behaviour in Psychiatric In patients Medical Journal Armed Forces India (MJAFI) 1994;50:2 pp109-12
- 4. Graves disease with Organic brain syndrome -A case report Medical Journal Armed Forces India (MJAFI) 1994;50:2pp219-20
- 5. Psychiatric evaluation of Human Immuno deficiency Virus seropositives in Armed Forces Medical Journal Armed Forces India (MJAFI) 1994;50 pp275-8
- 6. Military Psychiatry in India Indian Journal of psychiatry Vol 52 (Suplement) 2010 pp 314-316
- 7. Study of events in serving personnel and its association with psychopathology in their children: a multicentric study.Medical Journal Armed Forces India (MJAFI) 2011;67:pp225-9
- 8. Mind and consciousness in Yoga-Vedanta: A comparative analysis with western psychological concepts Indian Journal of psychiatry Vol 55 (Suplement) 2013; pp 182-6

In International Journals

1. Therapeutic and prophylactic utility of the Memory enhancing drug Donepezil hydrochloride on cognition of patients undergoing Electroconvulsive therapy: A Randomized controlled trial - Journal of ECT. 22(3):163-168 Sep 2006

Chapters In Book

Prabhu HRA, Srivastava K, Bhat PS: Manual of Hospital safety published by,AFMC Pune (India) (2009)

- 4. Research projects done
- 1. Study of Stressful life events in relation to psychiatric illness in Armed Forces personnel (AFMRC PROJECT) -1991

- 2. Violent Behaviour in Psychiatric In patients. 1994published in Medical Journal Armed Forces India 1994
- 3. Psychiatric evaluation of Human Immuno deficiency Virus seropositives in Armed Forces. 1994.
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- 5. Study of life events in serving personnel and its association with psychopathology in their children: A multicentric study. (AFMRC PROJECT No 3353/2005) 2005.
- 6. Epidemiological profile of psychiatric morbidity of school going adolescent children of Armed Forces personnel and civilian personnel in Delhi. 2005-6.