AWARENESS AND PRACTICE OF STANDARD TREATMENT GUIDELINES AND DRUG THERAPEUTIC COMMITTEE AMONG PRIMARY CARE PHYSICIANS

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ABSTRACT

This study was done to assess the awareness and practice of standard treatment guidelines (STG) among primary care physicians. To assess the concern, existence and participation of drug therapeutic committe among primary care physicians with affiliation to private or government health care. This was conducted as a cross sectional observational study surveyed across physicians Chennai after obtaining from our institutional ethics committee. Data was obtained using a validated questionnaire from allopathic physicians indulged themselves in private practice for at least five years. Study details were collected from physicians affiliated to either government or private institution for the last thirty-six months. Awareness, practice and status of academic training about STG were elucidated from everyone. Knowledge, existence and their participation in drug therapeutic committee (DTC) was collected only from physicians affiliated to any institution. Physicians with additional qualification were not invited for the study**.** Out of 220 physicians, 99 (47.1%) physicians had read a recent version of STG and 97 (46.1 %) physicians expressed they were able to practice current STG. Significant difference was seen between private and institution affiliated doctors in implementing STG (P-0.0245)(CI 1.386 ,0.799-2.406) .Similarly, the difference was significant between urban and semi-urban doctors in following STG (P 0.0200)(CI 0.477 , 0.255-0.895). Only 74 (34.2%) physicians had attended training for STG within one year. Only 19 of 133 (16.1 %) Physicians said that their institute has Drug therapeutic committee (DTC).:More training programme needed is among physicians to obviate the unawareness of standard treatment guidelines. Forming drug therapeutic committee in every institution is needed to uphold standard treatment practice at institutional level.

KEYWORDS: Drug therapeutic committee, irrational prescription, polypharmacy, standard treatment guidelines.

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INTRODUCTION

Background information

Standard treatment guidelines (STG) is defined as a systematically developed statement designed to aid practitioners and patients in making decisions about appropriate health care for specific clinical circumstances . Depending on disease prevalence, infection rate and resistance pattern, availability of health resources and medical professionals, cost that is spent for health development, every country is framing their own STG derived from guidelines of World Health organization. In India, STG is given by Ministry of health and family welfare as a part of National rural health mission programme. This consists of four parts , part I of guidelines is given selected infectious conditions like diarrhoea ,noncommunicable diseases like hypertension ,diabetes, ophthalmological conditions, gynaecological c onditions , selected general and dental surgeries . Part II of STG is concerned with guidelines and programme of diseases of national significance like tuberculosis, malaria, HIV etc. Part III and IV of STG discuss costing sheet of part I and Part II respectively[1] .

Need and purpose of the study

Unlike western scenario, Indian patients depend on primary health care professionals and most of the common illness is addressed by them. India builds adequate health resources to meet the primary care demand. At present, there are about 25308 Primary Health Centers (PHCs) is functioning in our country and 27,421 allopathic doctors are employed.[2] Apart from aforesaid figures, many primary care physicians are not affiliated to government or private institutions and engage themselves in treating patients with their individual units. They must oblige to follow STG in day-to-day practice to promote well-being of our patients. Hence this cross-sectional study was conducted to assess the awareness of STG among primary care physicians and common barriers faced by them in following these guidelines.

MATERIALS AND METHODS

Study permission and study Centre

Study protocol was approved by our institutional ethics committee which is registered with central drug control standard organization of India (CDSCO) and conducted from January to June 2015 by department of Pharmacology, Saveetha Medical College. Questionnaire was framed keeping our objectives in focus and validated by experts including a panel consists of pharmacologist, general physician and professor of biostatistics.

Sampling unit and sample criteria

In our study, the operational meaning of primary care physician was those who had finished bachelor of medicine and bachelor of surgery without any specialization and indulge them in treating patients for not less than five years was selected randomly from sampling frame. Physicians were considered as affiliated with either government or private institutions if they have been working in the same place for a period not less than thirty six months. Specialist was not included since our study focussed on treatment regarding primary care.

Sampling Procedure and Analysis

Based on purpose of our study, Simple purposive, convenience sampling was adopted. Since exact data from credible studies are few, complete enumeration sample size was followed during study period. Primary care physician who were willing to participate within study period was taken for data collection and analysis were drawn from those 220 physicians.

Statistical Analysis

Results was analyzed using SPSS software (Statistical Package for Social Sciences) Version 17 Data was entered using MS excel and Chi square test employed to find statistical significance between responses of two groups. 'p' value less than 0.05 was taken as significant.

RESULTS

Out of 220 physicians, 99 (47.1%) physicians had read recent version of STG and 97 (46.1 %) physicians expressed they were able to practice current STG. The average experience of our participants was 5.2 years. Significant difference was seen between private and institution affiliated doctors in implementing STG (P-0.0245)(CI 1.386 ,0.799-2.406) .Similarly, the difference was significant between urban and semi-urban doctors in following STG (P 0.0200)(CI 0.477 , 0.255-0.895). Only 74 (34.2%) physicians had attended training for STG within one year, training pertaining to STG was attended by more number of urban physicians , those who were affiliated to any institute than by the physicians serving at rural areas with affiliation or individual practice (P 0.046 CI 1.7961.004-3.023)(P 0.036 ,CI 0.779(0253-1.340).Only 19 of 133 (16.1 %) Physicians said that their institute has a drug therapeutic committee (DTC). The study findings are depicted in table 1 and 2.

Table 1
*Response to the questionnaire given by
primary care physicians*

Parameters Analyzed	Primary care physicians not affiliated with any institutions /hospitals (N-number)(%)	Primary care physicians affiliated with institutions /hospitals (N-number)(%)
Number of physicians answered	N-87 (39.45)	N-133 (60.45)
Are you familiar with the term , standard treatment guidelines (STG)	N- 87 Yes- 65 (74.7) No -22	N-133 Yes -113 (84.96) No -20
Are you familiar with STG given ministry of family welfare and health ,India ?	N-65 Yes – 61(93.8) No -04 6.2	N-113 Yes -96 (84.95) No -17 15.5
Have you gone through recent version STG given by ministry of health and family welfare?	N-57 Yes -38 (66.6) No -19 (33.33)	N-96 Yes -61 (63.54) No -35 (36.54)
Are you able to practice STG protocol in your treatment practice	N-57 Yes -33 (57.8) No -24 (42.2)	N-96 Yes -61 (63.54) No -25 (36.46)
Reason for not practicing Patients demand on polypharmacy Lack of efficacy in our scenario Lack of stock	N- 14 (58.33) N-10 (41.66)	N-09 (36) N-07 (28) N-09 (36)
Have you attended any CME /workshop regarding STG	N-65. Yes -33 (50.7) No -32 (49.2)	N-113. Yes – 98 (86.7) No-15 (13.2)
Within six months Within one year Within two years	9 `(13.84) 25 (38.46) 19 (29.23)	32 (28.31) 47 (41.59) 19 (16.81)
Is STG followed in your institution common medical /surgical illness?	Not applicable	N-113 Yes – 67 (59.29) No -46 (40.70)
Is Drug therapeutic committee exists in your institute?	Not applicable	N-113 Yes – 19 (16.81 No- 94 (83.31

Table 2
*Differences in training and practice of STG among rural and urban physicians,
private practitioners and physicians affiliated with hospitals*

Physician Profile	Number (%)	'p' Value	Odds Ratio (95% CI)
Number of private practitioners practicing STG	33 (37.9	0.0245	1.386 (0.799-2.406)
Number of physicians affiliated with institutions practicing of STG	61 (70.11)		
Number of practitioners working at semi urban area OF Chennai, practicing STG	69(57.5)	0.0200	0.477(0.255-0.895)
Number of practitioners working at urban practicing STG	86 (71.66)		
Number of private practitioners attended training in STG	53 (60.9)	0.046	1.796 (1.004-3.023)
Number of physicians affiliated with institutions trained in STG	98 (73.3)		
Number of practitioners working at rural trained in STG	24 (20)	0.0366	0.779(0253-1.340)
Number of practitioners working at urban trained STG	59(49.1)		

Table 3
Functions of drug therapeutic committee [19]

1. Frame the standard treatment guidelines using fewest medicines, narrating proper dose & duration of treatment and mention criteria for referral.
2. Must ensure that any STGs developed, adapted or adopted are consistent with national STGs and the guidelines of any national disease programmes
3. DTC must ensure that all prescribers have a copy of the chosen STG;
4. DTC should make provision for review and updating of any guidelines that are framed by them
5. DTC should play an active role in educating all prescribers in the use of STGs , do follow-up and give feedback on whether prescribers are adhering to the STGs

DISCUSSION

Briefing of objective

The primary objective of our study was to know the awareness of STG framed for our population by among primary care physicians. Though overall percentage of awareness of STG among our primary physicians is encouraging, it is less than cent percent which is ideal in this context .Similar trend is seen among most of low and middle income countries (LMICs)[3] Unawareness and not implementing the STG affects all the dimensions of health care including rational use of drugs, essential drug utilization, polypharmacy and inequality in health care accessibility as a chain reaction which is described in our discussion.[4]

Discussion and corroboration of our findings

A standard treatment guideline is to promote rational use of medicines at all levels of health care. STG practice cannot be compromised; when it was not followed prescribers tend to give drugs that were not identified as essential drugs.[5] It is evident from various studies that essential drug utilization is low in Indian continent and irrational use drugs are amplifying rapidly, especially antimicrobial agents. A report by Indian Council of Medical Research (ICMR) pointed utilization of antibiotics increased three-fold in the last decade and hence antimicrobial resistance too. STG for all illness and particularly for antibiotics is must at all levels of health care and antibiotics usage as per STG has been proven to reduce the emergence of drug resistance in various countries.[6] There are ample evidences of inequality in standards of care given to our patients which can be attributed to less practice of standard treatment protocol. A study report of Kamala Krishnaswamy et al, National institute of Nutrition, Hyderabad shows that WHO – INDIA Essential Drug Program of Delhi society for promotion of rational use of drugs (DSPRUD) highlighted that STG must be implemented throughout the country to improve health care services of India. It must be followed by physicians failing which goals of primary health care will be unmet.[7] Common hindrances quoted by physicians in our study in establishing standard treatment in their practice were patients demand for polypharmacy, quick relief seeking tendency, less availability of stock at times in the pharmacy units and these reasons were reflected in other few other study findings as well.[8,9,10] STG avoids chaos and highlights standards of care to be given for patients with specific illness by their physicians. Wherever there is successful implementation of STG, polyphamacy and treatment related adverse effects are less and this is proved where specific guidelines followed for various diseases. STG also helps in planning and allocation of resources at institutional level.[11,12]

Suggestions from our study

Though at national level and in few states STG guidelines are available, periodic training must be given for all doctors to implement at every level of health sectors, supplying handbook of STG are few optimistic approach to enhance STG practice at national level.It must be coupled with stringent measures to reduce over the counter drugs, educating the public to follow physician promote practice of standard treatment guidelines throughout our country. Every physician must show positive attitude and commitment in updating themselves about standard treatment guidelines and perform ethical practice based on guidelines. Government should encourage every institution to frame their treatment guidelines and it can be asked for submission and review by panel members at regular intervals.[13,14,15,16]

Need at health institutions

Awareness of DTC is less and it is available only at few central institutions and corporate hospitals. At institutional level, formation of drug therapeutic committee (DTC), placing the stock depending recommendations of therapeutic committee and optimal utilization of it will promote standard treatment practice services. DTC assess the institutional disease pattern, assess the formulary need and recommend framing institutional standard treatment protocol. Guidelines of structure and formation of therapeutic committee is available World Health organisation internet information portal which can be read to form DTC in every institution. Functions of DTC are quoted in table 3.In many developed countries, DTC has been proven effective to implement STG protocol.[18,19,20]

Limitations

Our study was conducted at only one city, urban and semi-urban and this warrants careful extrapolation which can be contemplated with other studies with keen focus on drug therapeutic committee. Simple purposive sampling has its own limitations when compared with non probability random sampling to infer findings.

CONCLUSION

Lack of awareness and practice of standard treatment guidelines among health care professionals is considerable in our country. More training and encouragement needed for medical professionals to aid successful implementation of standard treatment guidelines. Formation of drug therapeutic committee in every institutions is required to frame and practice standard treatment protocol.

CONFLICT OF INTEREST

Conflict of Interest declared none.

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