

A Cross Sectional Study to Assess Prescribing Pattern of AYUSH Practitioners with respect to Allopathic Drugs and Rationality

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Abstract : Background and Objectives: Majority of Ayurveda, Unani, Siddha, Homeopathy, Yoga (AYUSH) practitioners use allopathic drugs. This study was conducted to assess frequency of use of AYUSH and Allopathic drugs, and rationality of allopathic drugs in prescriptions of AYUSH practitioners. **Methods:** This cross sectional study was conducted after collecting prescriptions from patients attending clinics of AYUSH practitioners over a period of 5 weeks. Total 401 prescriptions were collected from patients after written informed consent. National list of Essential Medicines 2003, India and other parameters like drug dose, route of administration, indication were used to assess rationality of Allopathic drugs. Descriptive statistics was used for analysis. **Results:** Total 1037 drugs were studied from 401 prescriptions of AYUSH medicine practitioners. Total 999 (97.65%) Allopathy drugs were prescribed which contained 620 (62.06%) single drugs and 379 (37.93%) fixed drug combinations (FDCs). 91.52% of total prescriptions contained only allopathic drugs. 19 (4.73%) prescriptions had combination of Ayurveda and Allopathic drugs while one (0.25%) prescription had combination of Homeopathy and Allopathic drugs. Out of 14 AYUSH prescriptions containing only AYUSH drugs, 13 (3.24%) prescriptions belonged to homeopathy and one to Ayurveda. Proper diagnosis was written only in 29 (7.23%) prescriptions. 64% of total prescriptions reflected irrational use of Allopathic drugs. Irrational prescribing practices were found high in FDCs (37.13%) as compared with single drugs (26.92%). **Conclusion:** Allopathic drugs are highly and irrationally prescribed by AYUSH practitioners. Maximum irrational prescribing practice was seen in FDCs as compared to single drugs. [Awale P et al NJIRM 2013; 4(4) : 105-107]

Key Words: AYUSH Practitioners, Allopathic Drugs, Rational Use.

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Introduction: The basic aim of therapy is to treat a particular ailment with effective, safe and quality drugs to achieve good quality of life. Rational prescription of the drugs plays very important role in this regard. Time to Time WHO develops guidelines and guide other nation's health programs for rational prescription of drugs¹. Indian Govt. reviewed its national essential drugs list in 2003 and updated it². Ayurveda, Unani, Siddha, Homeopathy, Yoga (AYUSH) health care practitioners play a major role in Indian health care system and majority of them use allopathic drugs. It is therefore important to assess prescribing pattern of AYUSH practitioners with respect to allopathic drugs and rationality.

As compared to single drugs, use of fixed dose combinations (FDCs) in prescriptions is alarmingly increasing in recent past and pharmaceutical companies are luring physicians to prescribe their FDCs even when they are not indicated³. There are

many popular FDCs in the Indian pharmaceutical market. Maximum FDC preparations comprise Vitamins, Cough suppressants, anti diarrheal, iron preparation, antacids and analgesics, and tonics⁴. The current index of medical specialties (CIMS) for the year 2006 lists more than 100 irrational combination brands. The monthly index of medical specialties, June 2007 has listed 136 irrational combinations. Even though the list of irrational combination is clearly mentioned in such indices, some physicians and unqualified medicine practitioners continue to prescribe such dubious FDCs to the patients. Responding to the allegations that irrational FDCs were being sold in many states, the Union Health Ministry has sought a report from the states on availability of FDCs, which have not been approved by the drug control section for their irrational combinations. Presently 294 FDCs are pending for approval by the DCGI. Out of the 294 FDCs, 78 FDCs are likely to get approval by DCGI under certain conditions².

This study was conducted to assess the actual frequency of use of AYUSH and Allopathic drugs, rationality of allopathic drugs in prescriptions of AYUSH practitioners. This study also assessed the frequency and rationality of FDCs in prescriptions of AYUSH practitioners.

Material & Methods: Approval of institutional ethics committee was obtained before commencement of the study. This cross sectional study was conducted after collecting prescriptions from patients attending clinics of AYUSH practitioners over a period of 5 weeks. Total 401 prescriptions were collected from patients after written informed consent. National list of Essential Medicines 2003, India was taken as reference to assess rationality of Allopathic drugs. Parameters like drug dose, route of administration, indication were also used to assess rationality. Descriptive statistics was used for analysis.

Result: Total 1037 drugs were studied from 401 prescriptions of AYUSH medicine practitioners.

Table 1: Pattern of Drug prescription

ALLOPATHIC drugs	999 (97.65%).
AYUSH drugs	38 (3.66%)
Total drugs	1037

Total 999 (97.65%) Allopathy drugs were prescribed in 401 prescriptions .

Table 2 : Type of AYUSH prescriptions depending on drug contents

Drug contents	No. of prescriptions(%)
Allopathic drugs	367 (91.52%)
Allopathic & AYUSH drugs*	20(4.98%)
AYUSH drugs**	14(3.45%)
Total prescriptions	

*out of 20 prescriptions,19 (4.73%) prescriptions had combination of Ayurveda and Allopathic drugs while one(0.25%) prescription had combination of Homeopathy and Allopathic drugs.

**out of 14 AYUSH prescriptions,13 (3.24%) prescriptions belonged to homoeopathy physicians

which reflected highest rational prescribing practice frequency found in this study.The remaining one prescription belonged to Ayurveda.

Table 2 : Single Drug Vs. FDCs of Allopathic drugs in AYUSH prescriptions

Type of Allopathy drugs	No. of drugs(%)
Single drugs	620(62.06%)
FDCs of Allopathic drugs	379(37.13%)
Total Allopathy drugs	999(100%)

Table 3: Diagnosis as a rationality parameter

No.	AYUSH Physicians	No. of prescriptions	Diagnosis written	
			Yes	No
1	Ayurveda	302	23	279
2	Homeopathy	93	5	88
3	Unani	6	1	5
			29(7.23%)	372 (92.76%)
	Grand total	401	401	

Proper diagnosis was written only in 29 (7.23%) prescriptions among the 401 prescriptions of AYUSH medicine practitioners(Table 3)

Table 3: Rational use of Allopathic drugs

No. of prescriptions	Type of Allopathic drugs prescribed	Total no. of Allopathic drugs prescribed				
		Single drugs		FDCs		
		R	IR	R	IR	
A	302	267	220	8	285	780
H	93	77	47	0	79	213
U	6	7	2	0	7	16
		351 (35.13%)	269 (26.92%)	8 (0.8%)	371 (37.13%)	999
		620(62.06%)		379(37.93%)		999

A-Ayurveda, H-Homoeopathy, U-Unani, R-Rational, IR-Irrational

Irrational prescribing practices were found high in FDCs (37.13%) as compared with single drugs 269 (26.92%)

Discussion: In country like India AYUSH physicians play a major role in health care system. They are backbone of health care system especially in rural areas. Recent advances in clinical research, drug, medicine, diagnosis draw considerable attention to the prescribing practices of physicians. Rational prescribing practices are essential to reduce ADR, drug resistance.

This study was conducted to assess the actual frequency of use of AYUSH and Allopathic drugs, rationality of allopathic drugs in prescriptions of AYUSH practitioners. Study results showed that Allopathic drugs are highly prescribed (97.65%) by AYUSH practitioners. Irrational prescribing practice has reached to an alarming state with 64% of total prescriptions being irrational. Also this study focused on the irrational prescribing practice of FDCs. Maximum irrational prescribing practice was found in FDC group of drugs (37.13%) when compared with single drugs(26.92%). Similar results were seen in a previous study which showed that 75% of prescriptions contained FDC formulations and only 11% FDC prescriptions were rational³. Another study reflected comparatively higher use of FDCs in prescriptions⁵. It is the fact that AYUSH medicine practitioners are not trained in the Allopathy and they are unaware of rational use of Allopathic drugs.

Conclusion: Allopathic drugs are highly and irrationally prescribed by AYUSH practitioners.

Maximum irrational prescribing practice was seen in FDCs as compared to single drugs.

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