"A COMPARATIVE STUDY ON HEALTH SECTOR IN SOUTH ASIA AND MIDDLE EAST COUNTRIES" (Patient Compliance Versed Patient Counseling)

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ABSTRACT

Background: Lot of articles shed light on the importance of drug adherence on communicable diseases as well in non-communicable diseases, however it failed to achieve proper therapeutic goal in individual concern, here the general perception on diseases and disorder stage found poor amongst the community, and poor status found on by customs practices followed in drug usages. The health care providers often failed on by giving proper guidance to the patient. This research studies highlighted importance of individual patient counseling and on by to creating public awareness programs amongst the community.

Methods: Primarily noted importance of individual patient counselling in respect to recently published article from south Asia as well in Middle East region, it were directly observed patient co0mments regarding this matter who treated from public as well in private sector, secondarily it considered expert opinion on this regards and this data presented such anomalies in existing health information system.

Results: A total of 463 experts' opinion validated, matters related existing health information system, and the customs practices followed amongst the community without knowing potential dangers of the drugs, it failed to get proper guidance on their medication from health care providers especially long term medication needy cases (hypertension, diabetics) and one for socially deterrent one, communicable diseases like tuberculosis.

Conclusions: This study enabled us to detect psycho sociological impact in customs practices followed on drug usages, it suggested the importance of individual patient counselling and one by creating public awareness programs among the community for commonest diseases.

Key words: Drug utilization, communicable and non-communicable diseases, patient counselling, health information,

INTRODUCTION

Patient compliance evolved from Latin word “complire” itself purports as fulfill their action, transaction, process or promise made by them. In health care system patient compliance means thorough understanding on their medication it takes greatest efforts on to meet therapeutic outcomes, Depend on medication behavior it designated into four terms “compliance” itself stands for proper counseling on medication and other health related information passed out, Adherence: means extent of person’s behavior influenced on recommendation made by the physician, Concordance: here patient and physician together build an entrusted partnership to achieve therapeutic outcome, Persistence: lifelong time capability of patient to adhere physicians’ instruction. Patient non-compliance depend on multiple facts, such as patient disease state (psychiatric), practice of poly pharmacy, frequency of administration, medicines with same organoleptic features and other physical attributes(color, size, shape, taste) especially in case needed prolonged medication, psych sociological facts like once the patient the patient felt reliefs, tendency to stop medication and other factors related on adverse drug effects, and cost related one ; usually the patient hesitated to consult physician, thinking it is better to go easy availability of medicines through over the counter instead of meeting proper channel[1, 2].

In communicable disease(tuberculosis) found poor status on follow up treatment in developing countries , it were estimated around two billion people infected with this deadly diseases, out of this assumed one third of the population cured remaining were found untreated or become in infectious state. The drug resistance and relapses reported as a fatality, or it considered as incurable one. If not treated well, the infected cases (around 30million) lead to emergence of 8 million new cases. According to WHO report 2006, (Global Tuberculosis Control; Surveillance, Planning and Financing) reported that majority of tuberculosis patient found in India (20 percentages) followed by china (14%) and inhabitants in Bangladesh (4%) and Pakistan (3%)

In India alone detected 1.96 million new cases annually, in which 0.8 million people new smear positive cases, out of them significant proportion reported smear positive pulmonary tuberculosis. This condition directly observed by the international bodies and recommended “DOTS” (short course program) to ensure adherence in tuberculosis patient. It needs client/observer watch on patient till the end of swallowing tablets through daily regimen and this process continued up to treatment success. However, the Recent article shows in 900 patients in Agra city in India, around one sixth of population found default treatment to accomplish therapeutic goal, Reason behind due to adverse drug reaction, No relief persisting symptoms and lack of proper counseling to the patient, and other inter alia related to alcoholic, domestic clashes, out of station so on[3], similar studies from another location from south India (Andhra Pradesh), one fifth of patient found non-compliant rural areas [4]. In earlier publication from Pakistan conducted in 621 individuals, warned real dangers of

noncompliance in positive pulmonary patient [5]. The DOTS therapy reached in pinnacle, however, the later studies shows more than one third tuberculosis patient, found noncompliance on this medication [6].

The condition not different in chronic diseases like hypertension and diabetic mellitus, in which continuous medication needed, studies conducted in Pakistan, reported meagerly low adherence rate amongst the people [7] As one propounded in earlier studies from Aga Khan university hospital , the patient noncompliance higher in younger age , and one followed mono therapy, the customs practiced among the people, medication as a symptomatic relief even this diseases and disorder state needed continuous medication otherwise in later stage it leads to complication [8]. It needs to redefine barriers on accessing health services to the commonest man living in rural area, studies found in hypertensive patient most of them does not felt symptoms before diagnosis, here the people found little knowledge before diagnosing diseases onwards, however the patient got guidance how to manage their diet and medication from physicians, current scenario faced significant proportion relied on practice of complementary and alternative system of medicines and most of them failed availability of medicines in affordable rate, the notable facts found less interaction between health care providers and patient have major impact on to achieve therapeutic outcome, definitely it will improve drug adherence pattern through patient counseling, most of the studies highlighted barriers on to get quality of services to this needy people[9,10, 11,12], here the concerned government must have responsibility to take initiative steps onto address this problem. In south Asian countries hypertension pervasiveness rate found 27 percentage, here the overall fifty percentage unaware of later complication of this diseases like stroke, myocardial infraction, kidney failure, retinopathy so on, the studies found poor adherence rate at 80 percentage on this chronic diseases[10], We can arrive similar statement conducted in the Indian scenario, awareness about this diseases found good level among the people, but more than forty percentage people not known about their disease condition, and the later complicacies aroused due to uncontrolled hypertensive stages[11].

Studies shows knowledge on chronic diseases found poor in middle east region, the subjects conducted on 10156 individuals, in which less than half of the population found hypertensive amongst the senior citizen, region of Saudi Arabia, Iran (occupied Palestinian territory) and in UAE, out of them only one fifth of them found under controlled pressure[12].

Socioeconomic status of the individual person significantly affected in patient adherence [12, 13], The studies conducted in hypertensive patients from the region of Jordan and Lebanon, Adherence rate and quality of life interpreted based on Morisky Green & Levinsky scale, nearly half of them found non adherence to the physician's instruction, the pitiful situation aroused in case of widowed or divorced person who living lonely not at all bothered about their medicines,

A total of 19 articles reviewed from Egypt (4), Sudan (1), Libyan Arab Jamahiriya (1), Saudi Arabia (6), UAE (1),Kuwait(1), Palestine(1), turkey (1),Pakistan(1) highlighted the importance for patient adherence on medication, found varied from 1.4 % to 88% in different studies[14], Various studies pointed out that method used on to detect non-adherence were not identical one, in later studies, it noted general medication adherence tool (GMAS) subjected to chronic patient not suitable one for developing countries , opined that generally used Mo risky et al developed (MDRAW) Modified drug adherence workup tool not featured cost effective imperialism (CRNA), real challenges faced in developing countries[15],

Geriatric patient who switched on poly pharmacy with multiple diseases, the noncompliance rate found 10 to 33 percentages, guided on to catastrophic incidents like emergency department visits, followed unnecessary laboratory and other investigational procedures, eventually it leads cost of burden on patient, initially this disease were found preventable and curable[16,26]. Studies suggested needs to address enlist NCD medicines in cost effective manner. The author conducted studies on 24238 households The data shows that one fourth of household spending money for NCD medicines, and one in five households consuming hypertensive medicines and one in ten taking diabetic medication, the data shows BPD medicines consumed patients in large quantities, the victim made health expenditure 120 percentages higher than not one consumed one (NCDs).[17] In senior citizen, physician provided proper instruction, however the patient found poor knowledge inter alia connected with diseases [17]. The poor practices found in dietary management (factors like fruits better than sweets and deserts, salts increases their hypertension, importance of physical exercise). The above studies clearly indicated if once nuts provided to the patient through counseling clearly improves patient condition [13, 18].

It needs proper interaction between health care providers to the patient, advocated suitable measures on to encourage self-report, the patient needs to be conducted interviews, in case of pulmonary patient needs to monitor the weight of metered dose inhaler, inspection on medicines refill rate, prescription claim data based through by insurance settings, and other pharmaceutical aids such as labeling, or by designing special medication calendars and medicines remainder charts. In certain cases the interpreted information on pharmaceutical package inserts contravened on to follow up proper therapeutic guidelines, however the quality and quantity of information provided on product's leaflet increases level of knowledge in patient as well as on health care providers, it needs conveys the messages to the patient through proper therapeutic channel [17, 18,19] the information provided in products inserts, should be in vernacular languages, and other pragmatic approach can be done like to construct container, caps, and system (by changing color codes, design, digital light, by alarming beep sounds so on), and on by using analyzer to detect

tracer compounds in patient's body fluids, gives more reliable and precise data, (e.g. HbA1c in diabetics), but found expensive one [20].

METHODOLGY

As the studies focus on health care providers, professional commitment, attitudes towards practicing, people concerned expectations as well as contributing factors on ethical dilemma, and dialectical peculiarities were noticed. The research based on direct personal contact and online reply by the respondents. For the justification, it used specific research tools, "questionnaire and interview guide" to study survey, point out that in qualitative and quantitative in nature, in fact questionnaire at large and interview guide at lesser extent to gather exhaustively bigger information in all 463 samples (physician – 179, Dentist 43, pharmacist 66, nurses 45, Researcher 52, professors-66) considered on this part of studies.

In the survey design, the most important facts to design standardized questionnaire, it free from personal bias, initially data collection done by observing on consumer's attitude, concerned general perception whole community in health care system, the researcher spend time in Dubai (UAE), Sohar, Muscat (Oman), in which large amount of international migrant met from the region of south Asia and middle east, and in south India, it takes four years and takes maximum efforts to reach in a conclusion. Here author not only closely inspected on attitude, and perception of people related on health promoting activities but also behavior of shoppers, and health care providers and other intermediate agencies (representatives, consultant agencies), systematic approach done throughout this studies to carry out functioning on this research studies which attributed in quantitative and in qualitative terms.

Sample techniques

For this study, simple stratified random sampling techniques as well as direct personal approach concerned through questionnaire, in this study researcher bottom out both primary and secondary data, the research survey limited only a few of the members distributed in wild geographic area. A total of 463 respondents are chosen using random sample techniques, in which lottery method used for the selection of respondents. And questionnaire designed closed one, the participants can mark any one of the option based on his/hers presumption.

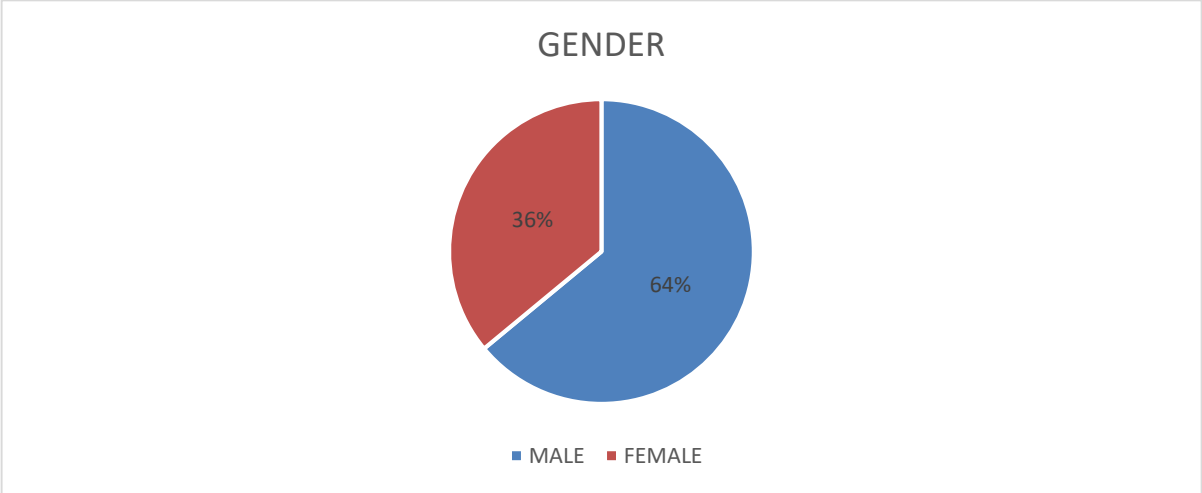
Time Dimension

The present studies were cross sectional one, as the nature of studies it have limitation on to conduct longitudinal research, repeated research articles relevant to topic published in different areas partially implicated failure on to implementation of health policy, without suggesting any

remedial solution, data collection for this research studies carried over eleven months from expert members under this subject consideration in south Asia (India, Pakistan, Bangladesh and, Nepal) middle east countries (Egypt, turkey, Saudi, Oman, UAE, Iran, Iraq, Jordan).

DATA ANALYSIS:

Analysis classification of Data (Demographic Profiles)



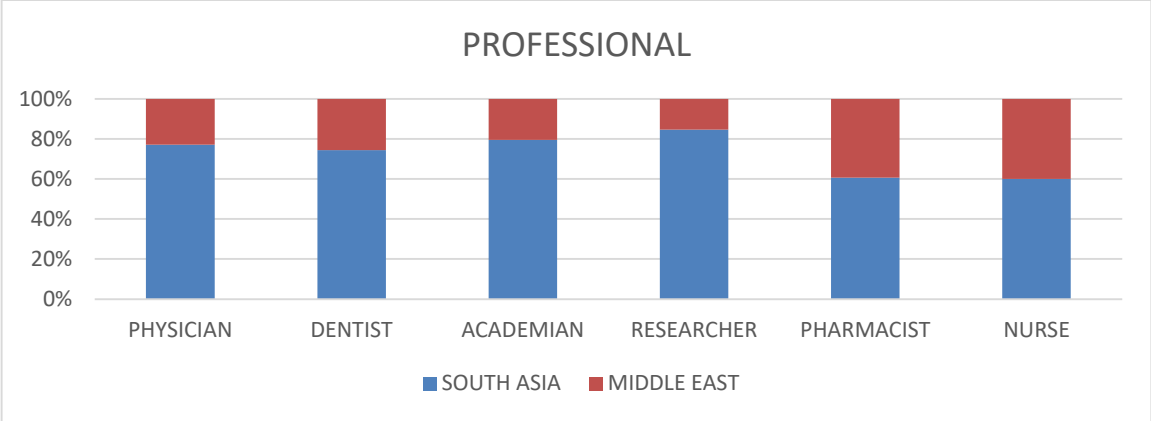
Demographic data profile almost research data interpreted, in certain extent it have crucial role to play based on subject studies, the analysis (Table 1) represented a total of 463 participant in which 296 participants were found male, and remaining 167 respondents were found female, the weightage given almost same for both sex (male/female)

Analysis classification of Data (Profession)

the subjects related on health care, almost all section of the societies who served in clinical field considered on this subject, here priority given to the physician because of all role on this relevant field subjugated (accustomed in their clinical practice), by them. Even this study under consideration education of participants, which reflected on this study many factors like quality of participants, behavior of respondents, research competencies, and innovative capabilities.

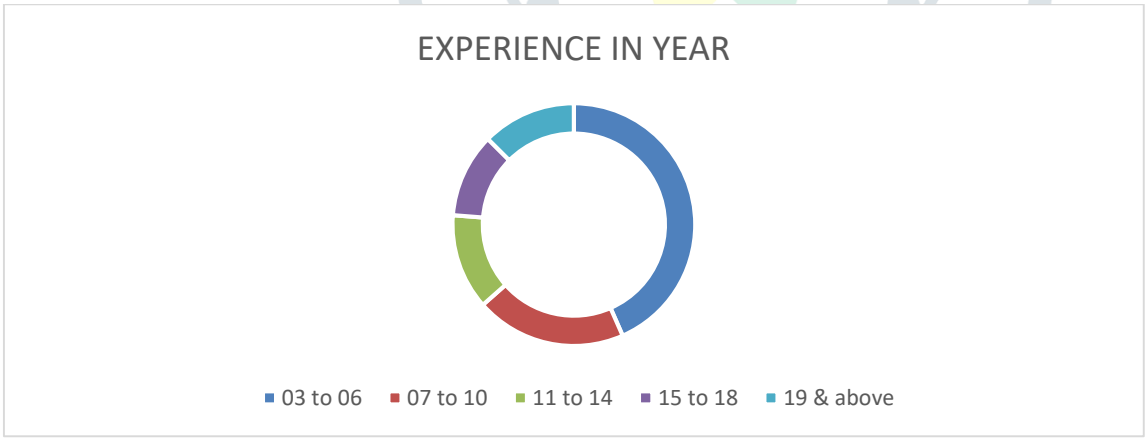
The analysis of above data represented different stake holders in health care field like physician, dentist, professors, researcher, pharmacist, nurses. In which overall 179 physician in the region of South Asia (138) and counterpart Middle East countries (41).Dentist being participated on this research studies a total of 43 from south Asian region (32), and eleven from Middle East. And a total of 78 highly experienced medical professors worked in familiar institutes around the globe, from the south Asian region (62), and counterpart from Middle East countries (16), and a total of 52 well expert researchers practicing in clinical field, from South Asian countries (44), from Middle East countries (8), and pharmacists who had good clinical exposure, a total of 66 pharmacist participated on this study from south Asian region (40) and Middle East (26), one of the major mediator in

clinical field like 45 nurses participated on this studies from the region of south Asia (27), counterpart from Middle East countries (18).



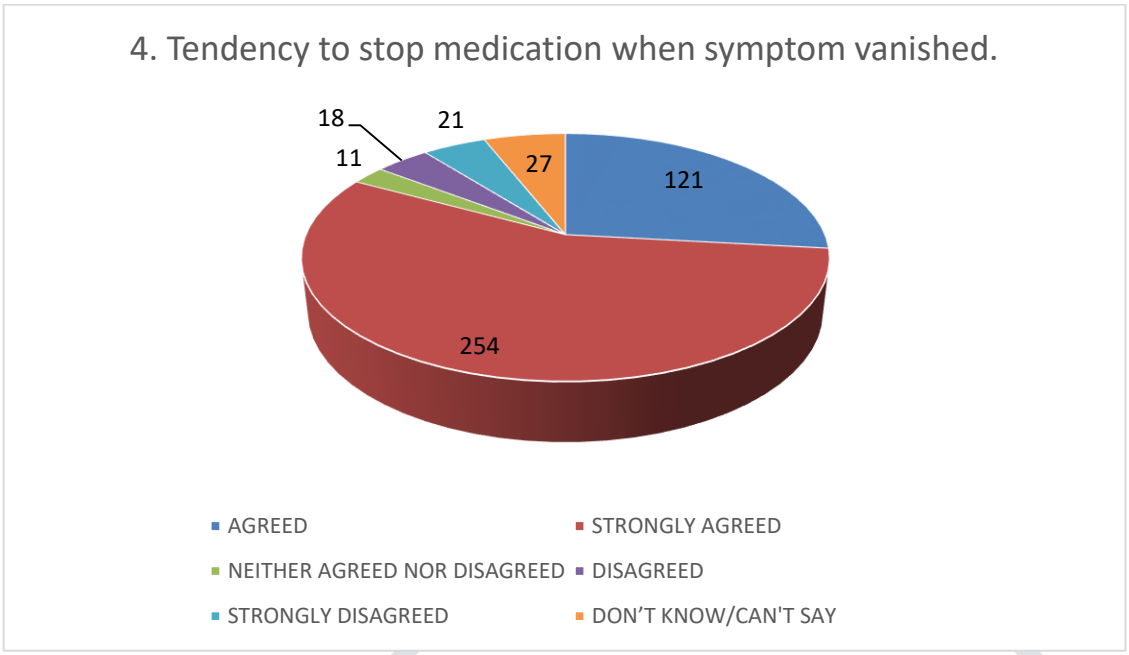
The above table illustrated on experience of health care providers in their clinical practices. Initially a total of 520 participants responded on this research studies, through online survey conducted by using Google forms (admaero2017@gmail.com, admaero2000@gmail.com, admaero2018@gmail.com,) and on by offline service through by personal approach. However, 57 participants rejected due to incomplete data, and on by below three years experiences found. Based on subjects considered importance of experience in clinical fields' minimum of three years

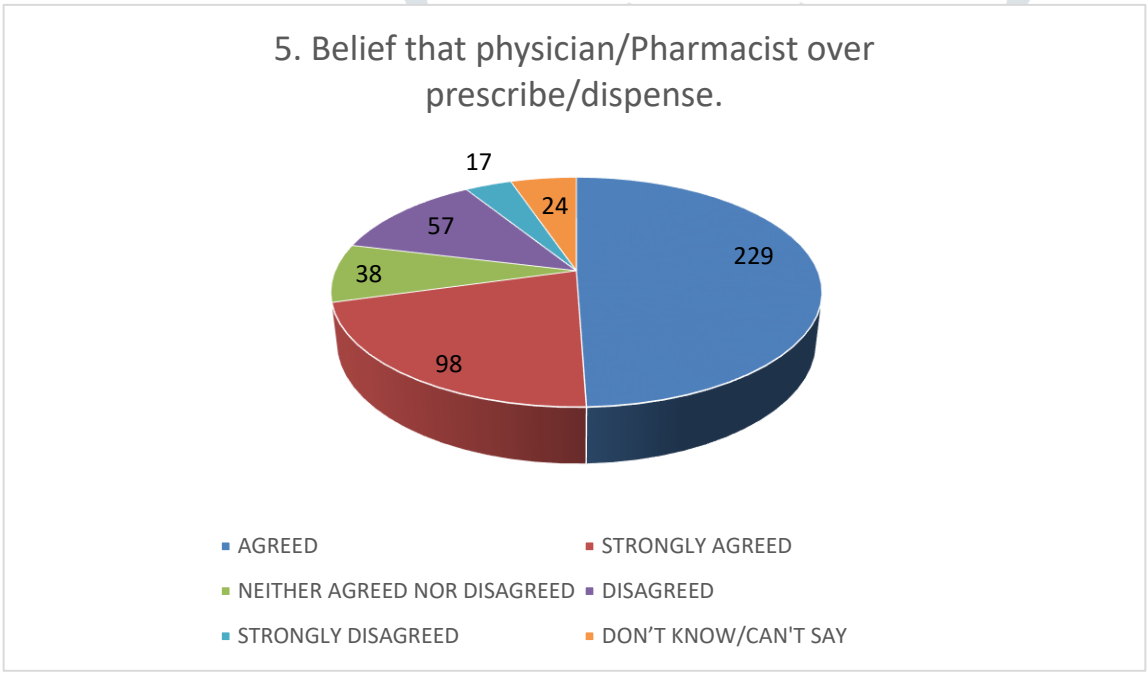
Finally selected a total of 463 participants to those who experience between 3 to 6 years found (201+43.19%), between 7 to 10 years (93+20.08%), between to 11 to 14 (59+12.74%), between 15 to 19(52+11.23%), between 20 and above (58+12.52%)

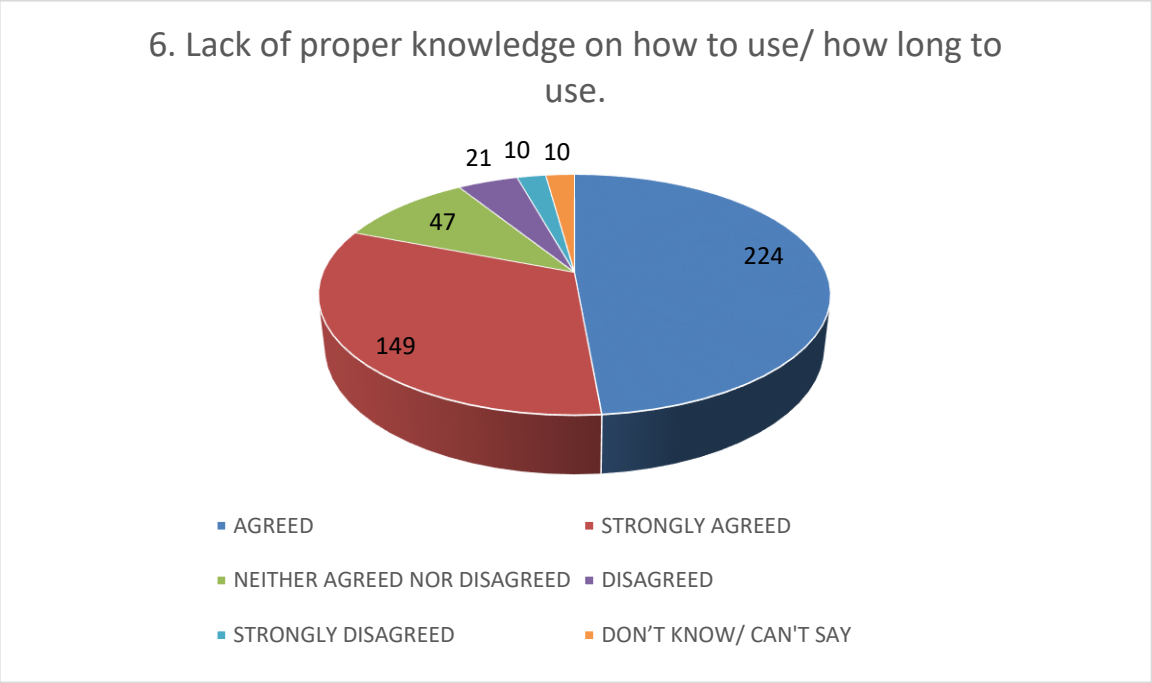


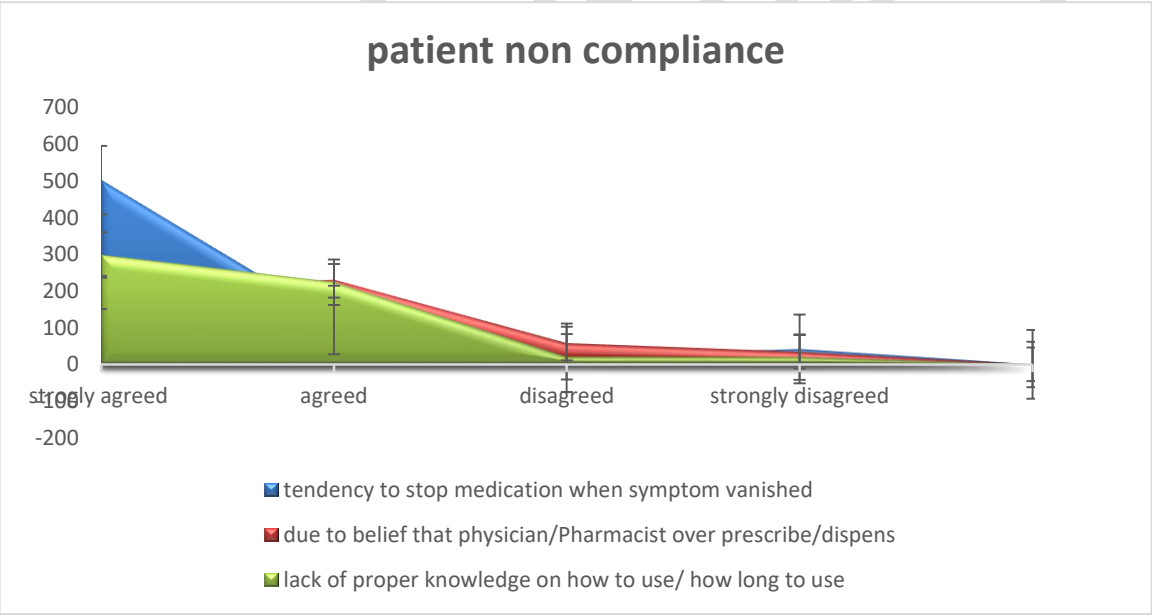
4. Analysis of classification of Data (Patient noncompliance versed patient counseling)

"Would you recommend most common reason behind patient's Noncompliance?"


4. Tendency to stop medication when symptom vanished.
18
21
11
27
121
254
AGREED
STRONGLY AGREED
NEITHER AGREED NOR DISAGREED
DISAGREED
STRONGLY DISAGREED
DON'T KNOW/CAN'T SAY


5. Belief that physician/Pharmacist over prescribe/dispense.
17
24
57
229
38
98
AGREED
STRONGLY AGREED
NEITHER AGREED NOR DISAGREED
DISAGREED
STRONGLY DISAGREED
DON'T KNOW/CAN'T SAY





On the above diagram illustrated view on patient compliance of 463 health care providers which directly suggested the importance of patient education, rating scale used, magnitude of six ranges, based on positive and negative comments, marked as strongly agreed, agreed, neither agree nor disagreed, disagreed, strongly disagreed, valued as 2, 1, 0, -1,-2, the table shows (Question number 5) aggregated values for tendency to stop medication when symptom vanished. (251*2+121*1+11*0+18*-1+21*-2=563), here twenty seven participants withdrawn to comment on this statement. In (Question number 6) Noncompliance rate due to belief that physician/Pharmacist over prescribe/dispense, the aggregated values interpreted as (98*2+228*1+38*0+57*-1+17*-2=333), Out of selected 463 participants twenty four withdrawn to comment on this statement, and (Question number 6) On by lack of proper knowledge on how to use/ how long to use(149*2+224*1+47*0+21*-1+10*-2=481), only ten person not commented on this subject matter.

RESULTS AND DISCUSSION

Chronic disorder and diseases like diabetic mellitus; hypertension needed continuous medication, but often failed to get proper guidance on part of health providers [20]. It needs to build a team work amongst the health care professionals [21].The "American diabetics association" statement shows in ten developing countries from Middle East region Egypt, Saudi Arabia, UAE, Iran, and Lebanon and in south Asian countries like India, Bangladesh, Sri Lanka it found more than seventeen percentages (from Middle East) and twenty five percentages (South Asia) don't have any further visit on their consultants. The reviewed on 34 articles in Middle East region Kuwait (2),Palestine (2), Saudi Arabia (5), Iran (3), Israel (3), Jordan (1), Oman (5), Libyan Arab Jamahiriya (1), Egypt (2), UAE (4), Turkey (1), most of the studies drawn attention on public health education, highlighted the importance of patient counseling, related on proper dietary management, exercise, and other habitual changes adopted in their lifestyle, and to manage medicines and instructions given by the physician, often physician's overload work failed to give proper guidance and to ensure patient compliance in medication, in contrast community were found lack of awareness on the consequence of suffering diseases, it also noted barrier on to achieve proper therapeutic goal due to sociocultural beliefs amongst the community[22,23,24].

The government misery intervention usually leads to poor outcome in economic development due to lack of support for productive, healthier community. Now this statement captured special attention because of increased in rate of non-communicable disorder, which needed continuous medication to prevent later complications, as well in communicable diseases onto limit spread out of this condition [24, 26].

In developing countries out of pocket expenditure made higher for chronic diseases like diabetics, and hypertension, it needs public health sector strengthened, the present scenario encountered in number of NCD patients with growing adult population. The public sector needs to appoint family health physician at the primary level, this studies emphasized one for health education amongst the people concerned on life style oriented diseases like diabetic, and hypertension so on [17, 26].

We can made logical solution on this matter, the average rate of drugs consumed by the patient, (1 to 21items), values obtained 6.07 as compared WHO standard (1.6 to 1.8 percent), and often neglected potential dangers of drug interaction, and adverse drug reaction especially geriatric patient switched poly pharmacy, partially suggested practice of poly pharmacy and by disease mongering situation, and the prescribers preferred branded medicines instead of generic medicines as recommended one cost effective treatment for this poor patient, Even the Prescriber's Perception regarding quality of generic medicines and cost effective treatment still found unrealistic because of there is no initiative steps taken concerned authorities to monitor existing price control system as well as stigma attached by role players connected with pharmaceutical industries on relevant

terms[27]. The following statement partially implied, we can't deny expectation of people on health care providers were found poor, it needs to highlighted due to present condition, due to scenario found that one "WHO" pharmacotherapy followed for hypertension statistically significant 50 to 70 percentages compare to anti-diabetic medicines 36% to 93%. Another major concern, needs to advocate patient noncompliance, the treatment for non-communicable diseases like tuberculosis , globally threatened one, it have major impact developing countries like in India due to burdens of diseases among this community.

This studies noted some of the facts and barriers in succeeding patient compliance through by proper interaction, it detected identifiable risk factors on existing system practiced in developing countries, it needs to develop new treatment line amongst the health care providers, here health related talks should encouraged amongst the community, in this realm utilization of social media have major role to do this work in hasty manner to upgrade present situation.

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