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Perception and Patient Satisfaction with AYUSH Medical Services Provided at GTB Covid care Centre, Delhi in Covid-19 Positive Patients: Experiences and Challenges

Author: Paras Wani¹

Co Authors: Neetu Jain²

^{1,2}GTB AYUSH Unit, Directorate of AYUSH, GNCT, Delhi, India

ABSTRACT

In medical care, patient satisfaction is a key indicator of the quality of care. Many studies have agreed on the fact that measuring patient satisfaction is a useful tool for determining the effectiveness of health care delivery and the quality of medical care provided. Hence, present study was aimed to determine the level of patient's satisfaction with the quality of medical care services rendered by AYUSH unit of GTB Covid Care Centre and their perception towards integration of AYUSH services. GTB Hospital is a Covid designated hospital and AYUSH interventions were given to the Covid positive admitted patients. Study was conducted on 174 patients. Data were gathered through exit interviews of patients after obtaining their informed consent. The perception and attitude of patients was assessed using a predesigned and pretested questionnaire. Majority of the patients were satisfied after taking AYUSH Kwath/ AYUSH Joshanda and their perception was that AYUSH Kwath /AYUSH Joshanda is effective in decreasing the symptoms and it was found statistically significant, $P < 0.001$. Majority of the patients were of the opinion that AYUSH services should be integrated with conventional system. The study found that overall patients were highly satisfied with the AYUSH services provided by the health facility

Key Words *Patient satisfaction, AYUSH Kwath/AYUSH Joshanda, Covid-19*

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INTRODUCTION

COVID-19 is a communicable disease and clad to be pandemic of this century. As virus was novel, causation of disease and pathogenesis of Covid 19 was not fully understood. Studies have explored that these viruses can form drug-resistant mutants, which decrease the prevailing

drug's efficacy. So, these viruses can be a threat to the mankind from a very long time^{1,2}.

Immunity has major role to play in prevention and prognosis of Covid 19³. Many herbal medicines have immune-modulatory and antiviral property, and herbal immunomodulators can play immense role in prevention and control of

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COVID-19². In this context, the Government of India has recommended to take 'AYUSH Kwath / AYUSH Joshanda' to boost the immunity.

At the request of the Directorate of AYUSH, permission was granted to integrate AYUSH interventions recommended by the Ministry of AYUSH⁴ in GTB Covid Care Centre.

AYUSH Kwath / AYUSH Joshanda was prepared in the Kitchen and distributed early morning before breakfast⁶ to all the patients. Present study is conducted to assess the attitude and perception of patients towards integration of AYUSH services⁵.

Patient satisfaction is an important way to assess health care quality^{7, 8}. Studies have shown that there is a direct association between quality of care and patient satisfaction levels⁹. Patient satisfaction is a significant, effective, and widely used indicator for quality measurement in health care. The Ayurveda and Unani system of medicine are amongst the AYUSH medical care in India. These systems provide effective treatment by their holistic approach¹⁰. There are various hospitals and Unani dispensaries in the country^{9, 11}. Patient satisfaction surveys can be one of the important methods for evaluating the quality of services offered in health care facilities.

As integration of AYUSH services has been initiated as an add-on to conventional medicines with the preview to enhance immunity of patients. Patient satisfaction and perception of integration of AYUSH services has been monitored in this paper.

With this preview present study was conducted to determine the level of patient's satisfaction with services rendered by AYUSH unit of GTB Covid Care Center and their perception towards integration of AYUSH services.

MATERIALS AND METHODS

This was an open-labelled, observational study performed from May 2021 to June 2021. Subjects were confirmed COVID-19 positive cases admitted to GTB Covid Care Centre. Patients having moderate to severe category were given AYUSH Kwath / AYUSH Joshanda and effect of and the perception of patients about AYUSH kwath / AYUSH Joshanda was assessed. A questionnaire pre tested was used for the purpose. The AYUSH kwath / AYUSH Joshanda prescribed in all these patients were in addition to their standard conventional treatment as advocated by the Ministry of Health and Family Welfare, Government of India.

Study Population: Clinically diagnosed COVID-19 patients.

Eligibility Criteria

Inclusion criteria: Patients with

1. Age between 5 to 70 years.
2. Males, Females and Trans-genders.
3. Willing to participate in study.
4. COVID-19 positive patients admitted in GTB Covid Care Centre.

Exclusion Criteria:

1. Known sensitivity to any medicines
2. Serious stages of the illnesses

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3. Unable to take AYUSH Kwath / AYUSH Joshanda

Duration of Study: 3months

Present study was conducted in GTB Covid Care Centre. All the patients were explained about the study. Those willing to participate in the study were included in the study. After taking informed consent patients were inquired about the symptoms and were inquired about their general status, complaints and comorbidity. AYUSH kwath / AYUSH Joshanda were given in addition to the conventional medicines in accordance to the guidelines of Ministry of AYUSH, Govt.of India .Follow-up was done daily on day 0,7and 14 days. The perception and satisfaction of patient was also assessed after fourteen days. Data was analyzed using Graph pad statistical tool.

OBSERVATION AND RESULTS

Present study was aimed to determine the level of patient's satisfaction with the quality of medical care services rendered by AYUSH unit of GTB Covid Care Centre and their perception towards integration of AYUSH services. Study was conducted on 174 patients. Data were gathered through exit interviews of patients after obtaining their informed consent. The perception and attitude of patients was assessed using a predesigned and pretested questionnaire. The following observations were seen.

The mean age of the patients was 52 years SD \pm 14.Sixty percent (60 %) of the patients were

males and 40% were females. One hundred forty (80%) patients were severe on high flow oxygen and 34 (20 %) were in moderate category. The distribution of patients according to co-morbidity was assessed and it was found that 29 % patients had hypertension, 40% had T2DM, 20% had mucromycosis, 2% had hypothyroid, 7% had fungal sinusitis and 2 % had HTN and DM (Table 1, Figure 1).

The perception of patients regarding AYUSH Kwath/ AYUSH joshanda was assessed. It was found that out of 174 patients, 154 (88%) took AYUSH Kwath/ AYUSH joshanda daily and 18 (10.3%) took it off and on .

The perception of patients according to the fact that AYUSH Kwath/joshanda is helpful in recovery was assessed and it was found that 163 (93.67%) perceived AYUSH Kwath / AYUSH joshanda helps in recovery and 11(6.3%) did not find it effective. Wilcoxon single ranked test was used and it was found to be statistically significant ($p < .0001$). Majority of the patients were of the opinion that AYUSH Kwath/ AYUSH joshanda should be continued ($t = 36.49$ at of 173, $P < 0.0001$).

One Sixty out of 174 patients were of the opinion that integration of AYUSH services with conventional medicines should be continued. 14 patients were against the integration of AYUSH and conventional medicines.

No sociodemographic variables, that is, age, gender, marital status, religion, residence, and socioeconomic status, was found to be

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significantly associated with satisfaction score ($P > .05$).

Table 1 Distribution of patients according to Co morbidity

CO-MORBIDITY	PERCENTAGE
HTN	29.00%
T2DM	40.20%
MUCROMYCOSIS	20.00%
HYPOTHYROID	2%
FUNGAL SINUSITIS	7.00%
HTN AND DM	2.00%

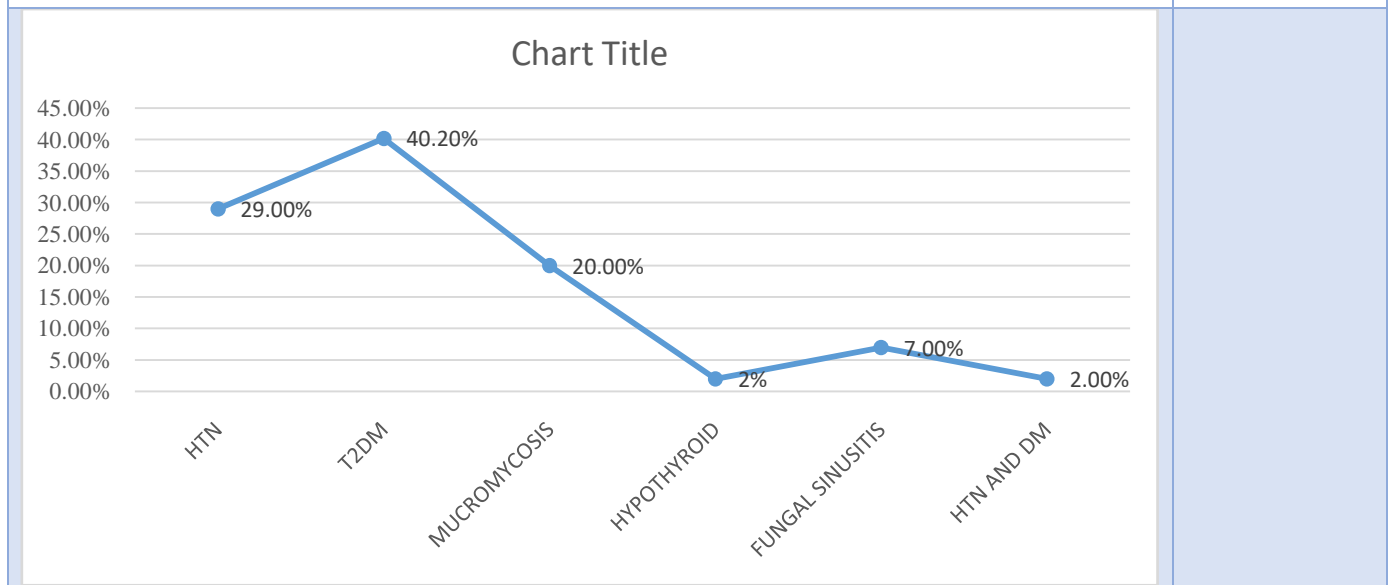


Figure 1 Distribution of patients according to Co morbidity

DISCUSSION

Present study was aimed to determine the level of patient’s satisfaction with the quality of medical care services rendered by AYUSH unit of GTB Covid Care Center and their perception towards integration of AYUSH services.

The perception of patients according to the fact that AYUSH Kwath/joshanda is helpful in was assessed and it was found that 163 (93.67%) perceived AYUSH Kwath / AYUSH joshanda helps in recovery and 11(6.3%) did not find it effective. Wilkocxon single ranked test was used and it was found statistically significant ($p < .0001$)

Majority of the patients were of the opinion that AYUSH Kwath/ AYUSH joshanda should be continued ($t=36.49$ at of 173, $p < .0001$).

No sociodemographic variables, that is, age, gender, marital status, religion, residence, and socioeconomic status, was found to be significantly associated with satisfaction. The findings of other studies are not directly comparable with this study, since, to the best of our knowledge, this is the first study that assessed the patient satisfaction level and perception of AYUSH services in conventional hospitals.

Our results are consistent with previous studies conducted by Nabi et al ¹² and Boovaragasamy and Narayanan ¹³, which have recorded high rates

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of satisfaction among patients visiting AYUSH hospitals. They recorded that 71.23% of patients found their experience with the health care providers as very good or excellent and in terms of satisfaction with service facilities, the rated them as very good or excellent ranged from 64.47% to 93.93% across the different AYUSH primary health centers. Nabi et al reported that more than 80% of respondents commented AYUSH doctor's service as satisfactory and good.

Contrary to our findings, Farha Naaz¹⁴ recorded that overall 43% and Anandaraj et al¹⁵ reported that only 41.8% of the patients were satisfied with the AYUSH hospital's medical services.

Many factors may be attributed to the high level of satisfaction in the present study. First, Covid 19 being a novel disease and there was no defined pretested protocol. The patients were anxious and stressed and had strong belief that AYUSH systems will enhance their immunity and help them fight this deadly virus. Second reason for acceptability and satisfaction was good doctor-patient relationship and also highlighted the professional competency of the AYUSH doctors.

The ingredients of AYUSH Kwath / AYUSH Joshanda are *Tulsi*, *Dalchini*, *Sunthi*, *Mirich* have proven anti-inflammatory, antimicrobial, anti-viral effect so patients felt better after taking AYUSH Kwath / AYUSH Joshanda and moreover patients were psychologically satisfied as AYUSH doctors visited them. If we analyse the individual ingredients of AYUSH

Kwath / AYUSH Joshanda we come to summarize the varied effects of the ingredients. *Tulsi* has antimicrobial (including antibacterial, antiviral, antimalarial), anti-diarrheal, anti-oxidant, anti-inflammatory, hepato-protective, cardio-protective, reno-protective, analgesic, antipyretic, immune-modulatory properties and given as a treatment for a range of diseases including features like cough, fever, asthma, anxiety, diarrhea, gastric, cardiac and genitourinary disorders^{17,18,19,20,21}. Due to these properties *Tulsi* enhances the defense mechanism against the infection^{22,23,24} and might have played significant role in reduction of symptoms. *Dalchini* is also a potent immune booster and is used in various ailments like flu, indigestion, edema, cough, etc.^{25,28}. *Sunthi* has also shown to increase humoral and cell-mediated immune responses^{26,27}. It has been also found to increase bioavailability, thus enhance the therapeutic efficacy of many drugs, vaccines and nutrients and have immune-modulatory, anti-oxidant, antiplatelets, antihypertensive, anti-asthmatic, antipyretic, analgesic, anti-carcinogenic, anti-inflammatory, anti-diarrheal, antispasmodic, anxiolytic, antidepressants, hepatoprotective, anti-ulcer, anti-thyroids, anti-apoptotic, anti-metastatic, anti-mutagenic, antibacterial, antifungal and anti-amoebic properties^{29,30,31,32}.

The above mentioned functions of different ingredients of AYUSH Kwath / AYUSH Joshanda can be attributed to the effect of

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AYUSH Kwath / AYUSH Joshanda and high level of satisfaction among patient's.

CONCLUSION

Overall findings showed that patients were highly satisfied with the integration of AYUSH services in GTB Covid Care Centre. Many factors may be attributed to the high level of satisfaction in the present study. The ingredients of AYUSH Kwath/AYUSH Joshanda have proven anti-inflammatory, antimicrobial, anti-viral effect so patients felt better after taking AYUSH Kwath/AYUSH Joshanda. The patients were anxious and stressed and believed that AYUSH systems will enhance their immunity and help them fight this deadly virus. The reason for acceptability and satisfaction was good doctor-patient relationship and also highlighted the professional competency of the AYUSH doctors. These findings underline the fact that treatment effectiveness has a more significant effect on patients' satisfaction as well as the interpersonal relations with doctor.

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