



Geriatric Mental Health

A TAILORED SPECIFIC APPROACH TO TREAT AETIOLOGY AND SYMPTOM DIMENSIONS OF BEHAVIORAL AND PSYCHOLOGICAL SYMPTOMS OF DEMENTIA (BPSD) IN ALZHEIMER DEMENTIA: A CASE SERIES.

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ABSTRACT

Dementia affecting approx. 50 million population in whole world, and it seems there will be exponential increase of cases by 2050. Alzheimer dementia most common among all. BPSD occurs with disease progression and causes overall burden in care givers with poor prognosis. Common BPSD symptoms causing excessive distress, psychosis, wandering behaviour, physical aggression, irritability, sundowning. Here we discuss 2 cases admitted in our ward, we treated both successfully with a tailored centred approach focussing on aetiology in one case and symptom dimension in another. A holistic approach is being highlighted in these case series of 2 cases admitted in GMH, KGMU.

KEYWORDS : Aetiology, Symptom, Holistic, Bio-psychosocial**INTRODUCTION:**

Behavioural and Psychological Symptoms of Dementia (BPSD), increase in clinical presentation, over illness course and causes a distress to care givers. It causes institutionalization, more functional disability, care giver distress, faster cognitive decline, reduce independence, more falls and physical complications.¹ Aetiology is complexed of BPSD, various psychosocial and biological factors play their roles in BPSD presentation so treatment approach should be holistic following a biopsychosocial management strategy.² Clusters of BPSD symptoms can be present in a patient so priority of symptoms should be treated, Caneyville et al found 3 cluster symptoms- A. Psychotic cluster includes delusions, hallucinations, B. Emotional-agitation, depression, anxiety, irritability, C. Behavioural- elation, apathy, wandering, hoarding etc.³ Medication for BPSD should be used judiciously for target symptoms particular underlying cause, used with non-pharmacological methods also, don't over use to sedate patients only.⁴

Case 1: Aetiology Targeted Based Management Strategy Of BPSD

A patient name Mrs. B 80-year widow Muslim female from Faizabad, UP was admitted in our ward with main complains of irritability, shouting in night, not identifying family members, sleepless nights from 4 months, after admission her diagnosis was kept as Delirium provisional, Her CT head showed diffuse cerebral atrophy, blood reports were within normal limits, urine microscopy revealed pus cells 7-9. The patient was started on Melatonin 10 mg HS initially, she did not sleep till 3rd day in ward, on detail examination it was found her left neck femur fracture was there she was operated and rod was fixed 5 months back, we took Orthopaedics dept reference, Xray Pelvis was repeated for rod fixation on 4th day it was normal. Patient used to complain pain at that site, we started Tab PCM 500 mg night dose 1 tab along with melatonin, patient slept for 3-4 hours that day. So PCM was added for 3 days, patient sleep improved after that, on 6th day in ward PCM was kept on sos basis, HMSE score was 17 and CT scan changes present plus clinical history showed memory changes so we made dx as F00 Dementia of Alzheimer disease (ICD-10). We plan to start her on T Donepezil 5 mg OD dose, after 2 days she complained of irritability, sleep issues again, excessive frequency of urine even we treated her UTI with T Levofloxacin 500mg HS. Donepezil was tapered to 2.5 mf, T Quetiapine 25 mg HS was started, patient did not have a proper sleep after 3-4 days of this regime, On 16th day Donepezil was stopped, she was continued on Quetiapine 25 mg HS and T Melatonin 10 mg HS, patient with these combination slept for 4-5 hours but nocturnal shouting presented, her orientation status was intact throughout day so delirium was excluded from day 2 in ward. Patient still did not sleep properly after that, on day 17th in ward we started Zolpidem 2.5 mg HS and melatonin was on sos basis, PCM was given also on sos basis. Patient had some improvement in sleep, we than made her treatment T Zolpidem 5 mg HS and Qutan 12.5 mg hs and sos with PCM sos from day 18th onwards, as per family members she showed improvement in her night behaviour, shouting and sleep disturbance improved she used to sleep for 5-6 hours sound sleep, as

per family members in day time she used to behave normally her irritability improved HMSE score was 19 this time. Patient was discharged on day 25th from ward.

Case 2: Symptom Domain-based Management Strategy Of BPSD

A patient Mrs. M, 76 years Muslim widow female from Lucknow, admitted in our ward for complains of sleep disturbance, wandering here and there in night, shouting and spitting on others from past 6 months, her forgetfulness symptoms started from last 3 years or so, slowly for recent things after 2 years of memory complains only se had compromised her ADL activities of daily living, she used to get dependent on family members for all her basic activities and she had poor self-concern also. She had a left hip fracture twice in past, last fracture was 6 months back after which her symptoms started, in ward her blood reports came within normal parameters, her CT scan showed prominent sulci and ventricles with diffuse cerebral atrophy. We made her Dx F00 Alzheimer dementia as her HMSE was 14 along with neuroimaging scans. In ward we observed floccillation and searching behaviour in first 2 days in ward we maintain her sleep hygiene properly and melatonin 5 mg was kept on sos basis. After 4 days in ward her delirium subsided CAMS score came from 4 to 1, she was oriented to time place and person. Now her main symptom was wandering and hoarding sticks left which were main issue for family members too, we rule out all underlying causes for BPSD no pain no infection no electrolyte imbalance was found, so we focused on her symptoms domain and we started her on Tab Escitalopram 5 mg OD dose after meals, after 3-4 days as per daughter main care giver her language, her wandering behaviour and hoarding of objects was reduced 40-50% as reported patient in ward behaviour remain calm and silent on bed now, her sleep and wandering behaviour improved. Care giver were counselled properly to maintain a sleep wake schedule for her in house, to plan a activity schedule like telling her to wash her utensils, cleaning bedsheet and also sitting in garden for 10 minutes daily in morning to relax also, Patient was discharged on only T Escitalopram 5 mg OD only on follow up after 2 weeks she was improved informed by daughter and also on scale assessments.

DISCUSSION

In both above cases we approach the patient with an approach to treat aetiology first and if no cause was found we went to treat symptom domain after that, Specific behaviour intervention is essential in managing BPSD like encourage patients for day-to-day activities, skill teaching to be there along with the drug therapy as we tried in patient M both drugs and non-pharma therapy activity schedule for good response.⁵ A study conducted in 2012 a meta-analysis concluded that citalopram reduces the agitation on NPI score compared to placebo significantly so we use escitalopram in our case in low dose which helped in wandering tendency and agitation in our case.⁶ SSRI also helped in cases of BPSD with hoarding as their mechanism to enhance serotonin which gets reduced in the cleft in hoarders, so based on the mechanism escitalopram was used in our subjects to target both agitation and hoarding behaviour. Stein et al in his studies found poor response of hoarding response to escitalopram

in 466 cases, but in our case, we found positive outcome.⁷ Pain is an important factor which remain unrecognised in elderly because of communication and cognitive decline in subjects it acts as a perpetuating cause for BPSD agitation, as per American Geriatric Society for such BPSD patients Stepwise Protocol for treatment of Pain was studied in RCT Paracetamol safer in elderly was initiated, after addressing pain the severity of BPSD patients also reduced as Cohen Mansfield agitation score went down after 8 weeks, we also concluded in our subject that when pain was treated judiciously the sleep improved in patient for few hours 3-4 and also day time behaviour improved so it was a target oriented to treat cause.⁸ In our patient Mrs. B we started her on Zolpidem and very minimum medicines were started, with good sleep hygiene schedule we tried to improve her sleep very minimum doses we used mainly Quetiapine 12.5 mg hs and Zolpidem 5 mg sos, Zolpidem induces restoration of normal pattern mainly initiation phase well tolerated in elderly with low risk of dependence.⁹ Too much pharmacological intervention are not so useful in treating BPSD it just causes side effects load, we saw in our patient B that too much sedatives initially did not fulfilled our target rather reducing her drugs treating her pain main cause was far more right approach in our subject.¹⁰

CONCLUSION

We concluded from our both cases that a biopsychosocial approach is a good way and a holistic method of treatment is best in treating BPSD cases. To treat the underlying cause specifically and to treat symptom domain on priority basis is a good clinical practice, the approach of one case cannot be generalised it's a good clinical holistic tailored approach to treat such subjects and treating with a clinical team effort with specific role brings good results.

Conflicts Of Interest: Nil.

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