

**TO STUDY THE ASHWAGANDHA GRANNULES IN THE
MANAGEMENT OF BALSHOSH (KUPOSHAN)**

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ABSTRACT

Swasthavritta is branch of Ayurveda which deals with prevention and management of disease with the help of nutritive Ahariya dravya having good palatability. Its primary objective is prevention of disease and promotion of health. Children are the wealth of tomorrow. We should take care of them if we wish to have a strong India. Only healthy children can lead the nation towards better tomorrow. By giving this Ashwagandha in 'Grannules' form the children of pediatric age group will be ready to accept it as it is rich in test with good palatability. The present study was planned to study the problem of Malnutrition and try to find the solution in the form of easily available, palatable, brimhana therapy like sadugdha Ashwagandha Grannules based on the scientific research methodology so as to enable as to fulfil our obligations towards the health needs of the community and nation.

KEYWORDS: Swasthavritta, sadugdha Ashwagandha Grannules.

INTRODUCTION

Swasthavritta is branch of Ayurveda which deals with prevention and management of disease with the help of nutritive Ahariya dravya having good palatability. Childhood is different

physiological state compared to adulthood. The health of a child depends upon the growth and development, which are unique in each person. A wide variety of factors affecting growth and development, one of which is nutritional factor. Growing children are most vulnerable to effects of undernutrition. Nutritionally deprived children do not gain weight and height. Nutritional status of children is an indicator of nutritional profile of the entire community. Growing children are most vulnerable to effects of undernutrition. Nutritionally deprived children do not gain weight and height. Nutritional status of children is an indicator of nutritional profile of the entire community.

In 1995, more than 200 million children under 5 years of age or more than 30% of world's children were undernourished. More than 1/3rd of the world's malnourished children live in India. Last year, malnutrition contributed to 7 million Indian children's deaths, nearly 2 millions before age one. High rate of malnutrition in India is disturbing. Malnutrition is widely recognized as a major health problem in the developing countries of the world. It is disease of multideprivation and poverty. Malnutrition not only affects the physical growth but also adversely affects mental growth. From all above we can say that Malnutrition has an enormous impact on social, economic, industrial, agricultural, cultural and other developments in the communities by impairing the physical and mental potentialities.

In Ayurvedic texts this condition is described as Balshosha, Whereas 'Kuposhanjanya Vyadhi' this term is used for 'Balshosha' in Vishwakosha (part 11) so we can co-relate Balshosha means Malnutrition. Consideration regarding disease and drug properties, it has been planned to study the "Role of Ashwagandha Grannules in the Management of Balshosha".

Ashwagandha is a popular brimhana drug used since years and Dugdha is best rasayan and brimhana. As we know Ashwagandha is Tikta rasakmak drug so for convenience and palatability of children it was converted in to Grannules form and then given to patients.

Present study is concerned with the preventive and curative concept of Malnutrition by means of Aahariya dravya Ashwagandha suggested by Aacharya Vagbhata.

AIM

To Study the Ashwagandha Grannules in The Management of Balshosh (Kuposhan).

MATERIAL AND METHODS

The children age group of 2-5 yrs, including those attending regular Aganwadi of nagpure with problem of poor weight gain, poor growth, lean and thin body complaints of Daurbalya. After taking a complete history emphasizing on milestones and dietetic history this problem is selected for present study. Ethical clearance from. Government Ayurvedic colledge nagpure. An informed written consent of all 30 patient of parents was taken in language best understood by them.

Plan of Study

Preparation of drug

Nagauri Ashwagandha was selected and Grannules were prepared in the department of Rasashashtra.

10 grams of Grannules were packed in small packets for exact dosaging and convenience of parents.

Selection of Patients

60 patients, who were fulfilling the criteria of diagnosis and criteria of selection, were selected randomly irrespective of age, sex, religion, educational and socio-economic status.

Group of Patients

All the selected patients were randomly categorized into two groups such as experimental group and control group. Ashwagandha Grannules 10 gms once in a day with anupan of Dugdha given orally for 3 months. Control group patients were given Kharjur daily once in a day with anupan of Dugdha for 3 months.

After that status of patients was examined as per assessment criteria before start of the treatment and data was named as 'Before Treatment' (BT). Treatment was started and follow up patients was taken between 15 days. During this period patients were closely observed for progress in symptoms score. Regression was also kept in mind. After completion of treatment patients were assessed and the data was termed as after treatment (AT). data was termed as after treatment (AT).

OBSERVATION AND RESULTS**Statistical tests applied****For subjective parameter**

Before treatment (BT) and after treatment (AT) all subjective parameters were evaluated statistically with the help of 'Wilcoxon Signed rank test' for both the groups separately. And afterwards difference between before treatment score and after treatment score of both groups was compared by 'Wilcoxon Mann-whitney test'.

For objective Parameter

Before treatment (BT) and after treatment (AT) all objective parameters were evaluated statistically with the help of 'Paired t-test' for both the groups separately. And afterward 'Unpaired t-test' was applied to after treatment score of both groups.

Total effect of therapy of both the groups was also assessed**General Description**

53.33% patients were of Annad Awastha in experimental group, and 56.67% patients observed Kshiranad Awastah. This shows that Kuposhan can occur in any Awastha i.e. Kshirannad or Annad. No one patient was found in Kshirad Awastha.

53.33% female patients were observed in experimental group where as 50% female patients observed in control group. This shows that occurrence of malnutrition is equal in male and female.

70% patients of experimental group were belonging to Hindu religion 30% belongs to Buddha religion. In control group 66.67% were belonging to Hindu religion. This could be due to geographic distribution of Hindu community

86.67% patients were form poor class in experimental group where as 93.33% patients were from low socioeconomic group in control group. This again proves already proven relation between poverty and malnutrition.

53.33% parents of experimental group are literate and 43.33% parents of control group are literate this shows that illiteracy is related with malnutrition. But from this data we can not say every malnourished child belongs to illiterate family.

Whereas low socioeconomic status shows higher percentage of malnutrition.

Dashvidha Parikshan

86.67% patients were of Vata-pitta Prakruti in experimental group and 83.33% patients were of Vat-pitta Prakruti in control group.

63.33% patients were of Awar Sarta in experimental group and 96.67% patients were of Avara sarta in control group.

70% and 100% patients were of Awar Samhanan in experimental and control group respectively.

76.67% and 96.67% patients were of Awar Satwa in experimental and control group respectively.

86.67% patients were of Awar Bal in experimental group and 13.33% patients were of Madhyam Bal-

Whereas 93.33% patients were of Awar Bal in control group and 6.67% patients were of Madhyam Bal.

Sleep pattern of both groups were found out to be disturb i.e. 66.67% in experimental group and 66.67% in control group

Effect of Therapy on objective parameters

Effect of therapy was evaluated statistically by applying paired t-test between before and after treatment on both the groups. It was found that both the groups have significant effect on weight and Quetlet Index and in experimental group there were slightly significant changes in skin fold thickness.

P value of both weight and Quetlet Index is < 0.05 in both groups which implies significant result in weight and Quetlet Index.

Therefore we can say that both Ashwagandha and Kharjur are effective in improving weight in Grade I and Grade II of Malnutrition.

Difference between both groups was compared with the help of 'unpaired t-test' which was found to be significant in weight and Quetlet Index but not significant in height, mid-arm circumference, skin fold thickness and chest circumference.

Thus we can say weight gain in Ashwagandha is more as compared with weight gain in Kharjur because mean of experimental group is 0.86 where as mean of control group is 0.36 and p value is 0.005 which is less than 0.05.

This shows significant change in weight in experimental group.

Effect of Therapy on Subjective Parameter

Symptoms of Malnutrition were graded before treatment and after treatment data was evaluated.

It was found that all symptoms relieved significantly in both the groups after completion of the treatment except Jwara in experimental group and Jwar, Kasa, Panduta in control group as these symptoms are not present before starting or during the therapy.

Statistically when we compared both groups with “Wilcoxon Mann-whitney Test” which was found to be insignificant (Table no.17) but significant in Sphikshushkata and Jangh shushkata. That proves that Ashwagandha helps to improve weight as compared with Kharjur by giving relief in Sphikshushkata and Jangha shushkata

Effect on symptom score

Symptoms of Malnutrition were graded BT and AT and percentage relief was obtained.

Percentage of relief in symptoms was better in experimental group but statistically both groups show significant result separately. Therefore we can say that both groups are equally effective in relieving symptoms of Kuposhan.

In experimental group maximum percentage of relief were found in Bahushushkata, Agnimandhya, Janghashushkata which are 41%, 42% and 39%.

In control group percentage of relief in Bahushushkata was 25%, Agnimandhya was 41% and Janghashushkata was 20%.

Total effect of therapy

In experimental group 63.3% patients were improved and 26.6% patients were markedly improved and 10% patients remain unchanged.

In control group 46.7% patients were markedly improved, 46.67% patients were improved and 6.67% patients were unchanged.

Overall effect of Therapy

Average percentage of relief in Experimental Group is 31.6%.

Average percentage of relief in Control Group is 22%.

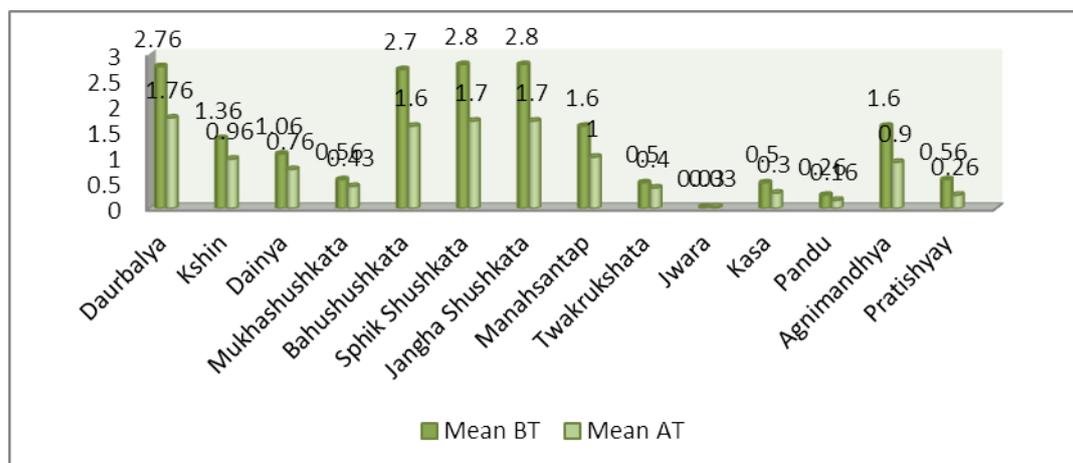
This show that Ashwagandha Grannules are more effective as compared with Kharjur in Grade I and Grade II malnourished children.

It was also found that improvement was fast and significant in Grade I malnourished child as compared to grade II malnourished child. It suggests that severity and chronicity affects the improvement.

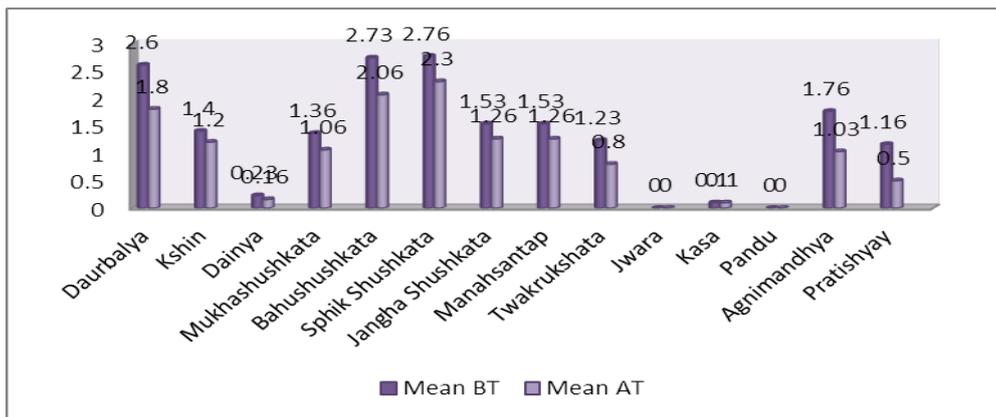
Most of the patients who remained unchanged are Grade II Malnourished and were belongs to low socioeconomic group and parents of such patients are very illiterate regarding health.

Percentage of improved and markedly improved patients was encouraging.

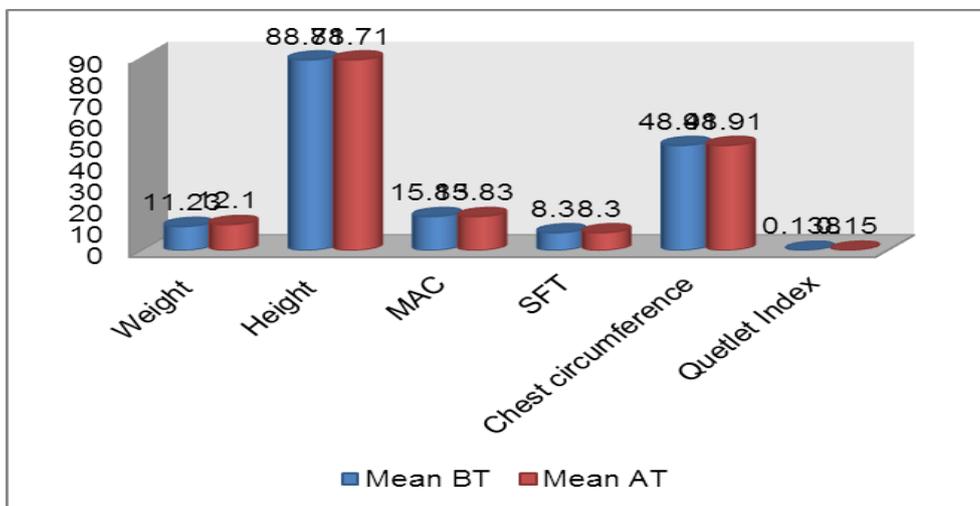
Malnutrition is not only disease caused due to physical imbalance but it's a disease caused due to socioeconomic imbalance and disparity. So its very interesting to study effect of Ahariya dravya Ashwagandha and Kharjur on such patients, and also to study the severity and duration of relapses in those patients who were improved significantly in the present study. A long duration study is needed for that. As per the design of present study entitled "Role of Ashwagandha Grannules In The Management Of Balshosha (Kuposhan)", results are encouraging and there is large scope for further studies.



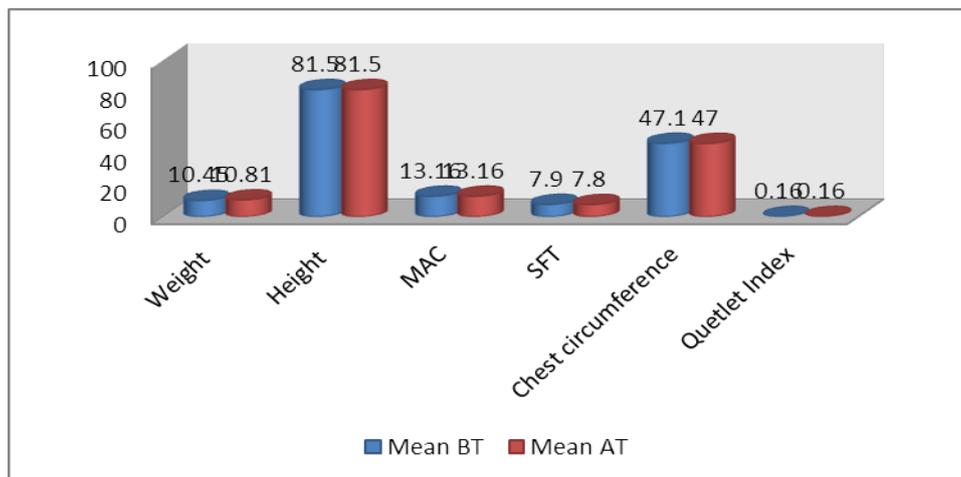
Graph 1: Graph showing Wilcoxon Signed Rank Test Of Symptom Score Of 30 Of Malnutrition Of Experimental Group.



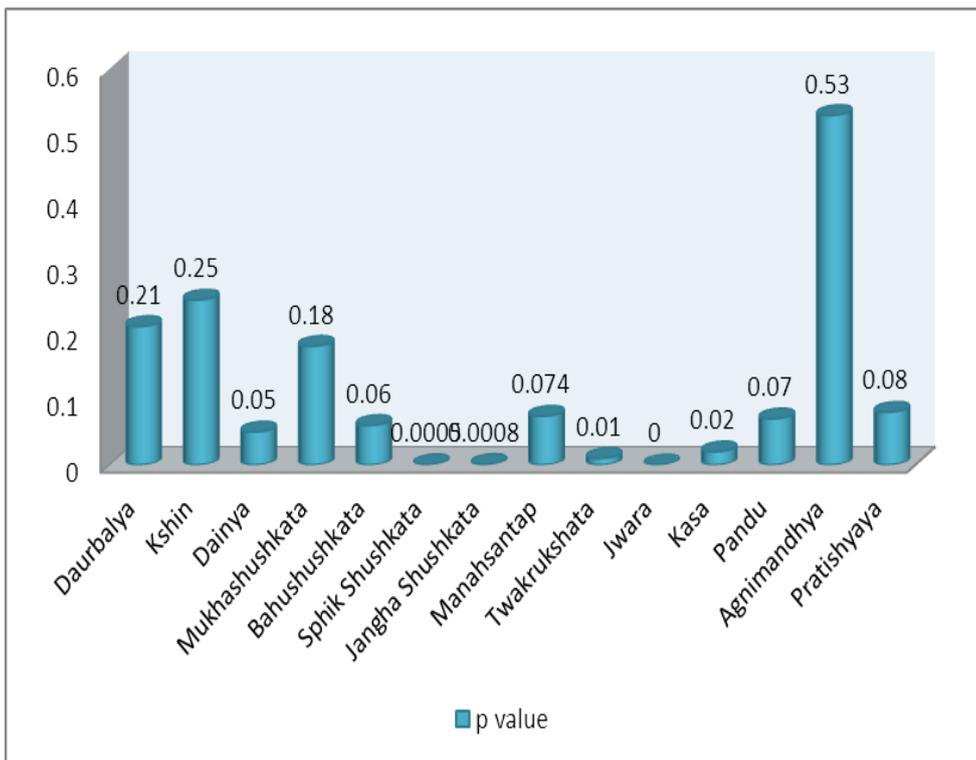
Graph 2: Graph showing Wilcoxon Signed Rank Test Of Symptom Score Of 30 Malnutrition Of Control Group.



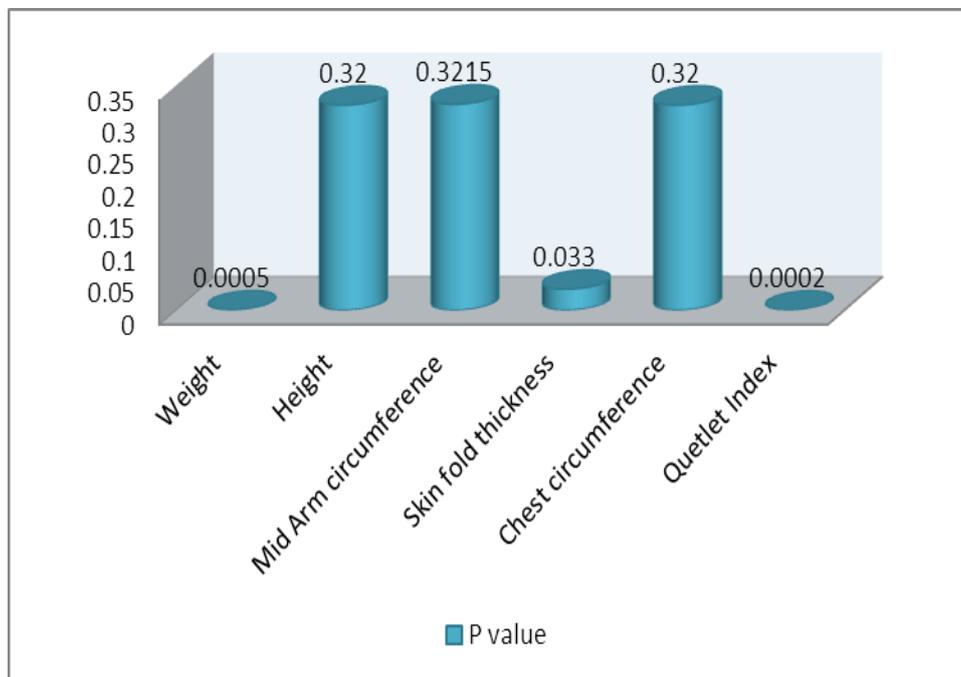
Graph 3: Graph Showing Paired t-test Of Objective Parameters Of 30 Patients Of Malnutrition Of Experimental Group.



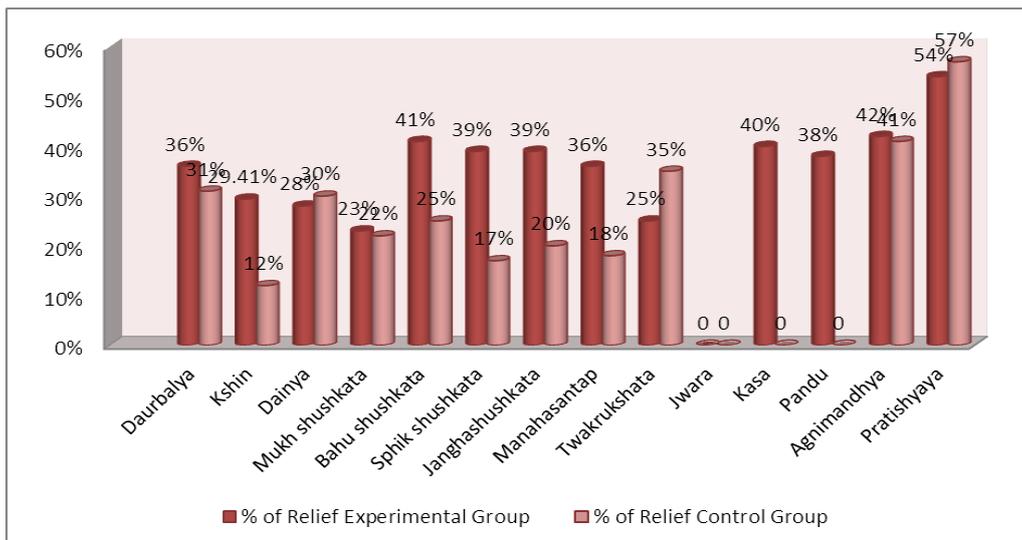
Graph 4: Graph Showing Paired t-test Of Objective Parameters Of 30 Patients Of Malnutrition Of Control Group.



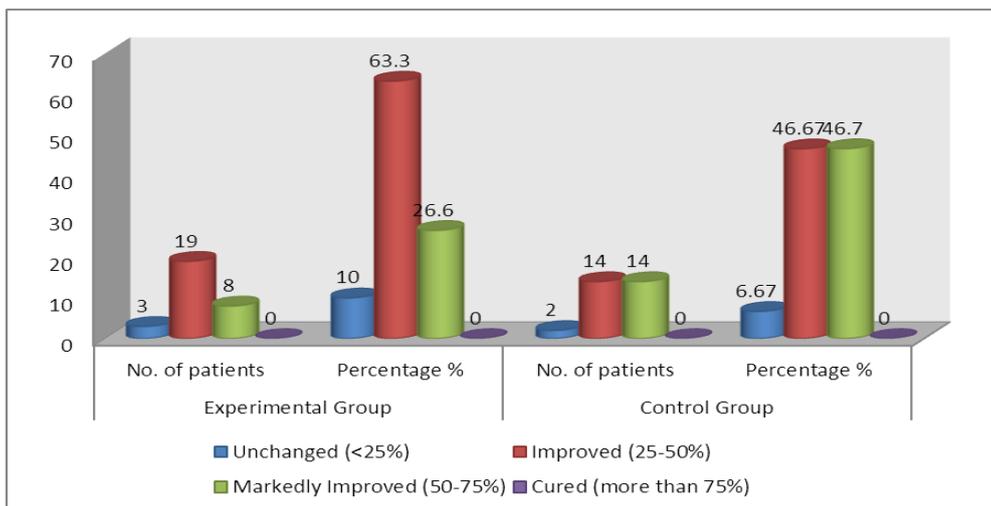
Graph 5: Graph Showing Comparison Between Two Groups Symptoms Of 60 Patients Of Malnutrition By Wilcoxon-Mann-Whitney Test.



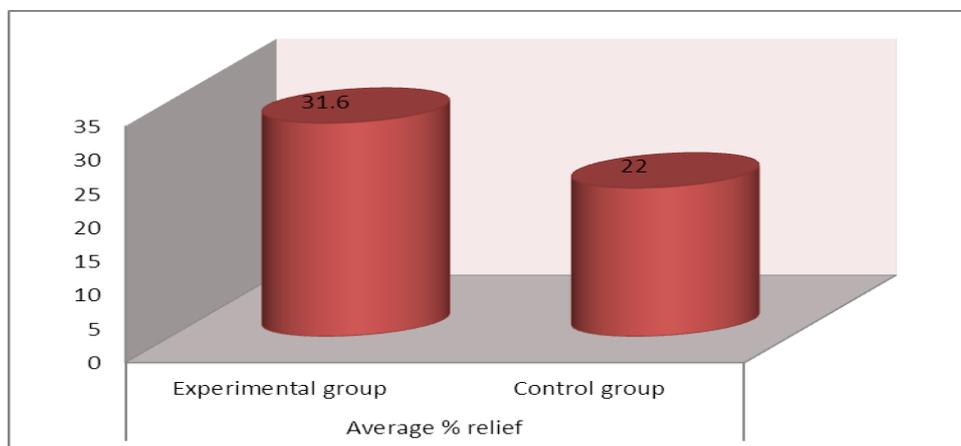
Graph 6: Graph Showing Unpaired t-test Between Both Groups Of Objective Parameters Of 60 Patients Of Malnutrition.



Graph 7: Graph showing Percentage of Relief In Each Symptom of 60 patients of Malnutrition.



Graph 8: Graph showing Total Effect of Therapy on 60 patients of Malnutrition.



Graph 9: Graph showing Overall Effect Of Therapy Of Both Groups.

DISCUSSION

India is home to the greatest population of severely malnourished children in the world. More than 1/3rd of the world's malnourished children live in India. Day by day malnutrition is becoming very serious problem not only in India but also in world.

According to Ayurveda causative factors of Malnutrition are ruksha annapana, pramitashana, shoka, excessive consumption of cold water, shlaishmic stanya pan etc. In modern science the causative factors are insufficient intake of food, improper cultural practices, recurrent respiratory infection, helminthiasis, malnourished mothers, poverty etc.

Regarding samprapti of Balshosha, there are two main entities i.e. vata-kapha prakopa and srotorodha, which ultimately leads to improper nutrition and emaciation of dhatus. However in some patients, due to insufficient and improper food intake, only vata predominance is seen, which leads to decreased circulation of ahar rasa to uttarottara dhatus leading to emaciation.

Modern science describes emergency management of complications like Hypothermia, Hypoglycemia etc and supplementation of energy dense foods. Whereas Ayurveda explains Brimhana therapy, Balya gana many Brimhaniya herbal drugs, Ghrita etc.

These preparations not only fulfils the energy needed but also improper the intake of diet by agitation of jatharagni.

Ashwagandha along with Dugdha is stated effective by Vagbhata for treating malnutrition. As he has not mentioned the form of drug thus Ashwagandha in Grannules form was given to the patients of Malnutrition along with Anupan of Dugdha and this group was termed as experimental group.

Ashwagandha was selected because of its properties which are mentioned below. If we look for the properties of Ashwagandha it is evident that it has properties like Vatakaphaphahara, Balya, Rasayana, Kshayapaha which are essential for the treatment of Malnutrition. Tikta rasa of Ashwagandha has properties like Krumighna Twak Mansayo Sthirakarano, Jwaraghna, Deepana, Pachan. Thus it acts on Rasa Dhatu, Mansa Dhatu which is involved in the Samprapti of Malnutrition. As Ashwagandha is Tikta rasatmak drug, patients of age group of 2 – 5 years was unable to take it regularly so it was specially converted in Grannules form for good palatability and taste.

Dugdha also has properties like Balya, Brimhana shoshhara, Kshayahara. Its Madhur Rasa, Sheet Veerya is Satmya for pediatric age group. In control group Kharjur was used. Importantly all these above said drugs are freely available. It was also reviewed from the work done so far that research scholar did not work on this same topic before. Keeping foresaid facts in mind study was undertaken entitled "Role Of Ashwagandha Grannules In The Management Of Balshosha (Kuposhan)". In control group Kharjur was used which was established by Vd. Sapna Bagde at Shree Ayurved Mahavidyalaya, Nagpur in year April 2005.

Importantly all these above said drugs are freely available. It was also reviewed from the work done so far that research scholar did not work on this same topic before. Keeping foresaid facts in mind study was undertaken entitled "Role Of Ashwagandha Grannules In The Management Of Balshosha (Kuposhan)".

CONCLUSION

Malnutrition is not only disease of that individual child; it's a disease of society.

It is a disease which is caused due to socio-economic imbalance and disparity in society. Main causes of Malnutrition in India are Poverty, Overpopulation and Illiteracy. Though emergency management is available in Modern Science but it is very temporary management.

- After going through Ayurvedic and Modern Literature we can conclude that Balshosha correlates with malnutrition.
- Vata-kapha dominant Tridosha and Rasavaha, Annavaha, Mansavaha srotas are involved in the Samprapti of Malnutrition.
- Ashwagandha was more acceptable and very palatable in Grannules form. As patients were from pediatric age group, they were ready to accept such tikta rasatmak medicine in Grannules form which is sweet to taste.
- Maximum number of patients was from low socio-economic group (86.67%).
- Maximum patients were of Vatpittaj Prakruti (86.67%).
- More weight gain was found in Grade I malnourished children.
- No sex difference observed.
- Both experimental and control groups are effective in the treatment of Malnutrition with statistically significant result separately.
- Mean change in the Sphik shushkata in experimental group was 1.16 and in control group was 0.46 and P value was 0.0005.

- Mean change in Jangha Shushkata in experimental group was 1.16 and 0.5 in control group and P value was 0.0008.
- Mean change in weight in experimental group was 0.86 and in control group was 0.36 and P value was 0.0005.
- Mean change in Quetlet Index in experimental group was 0.014 and in control group was 0.005 and P value was 0.0002.
- In experimental group 63.3% patients were improved, 26.6% patients were markedly improved and 10% patients remain unchanged.
- In control group 46.7% patients were markedly improved, 46.67% patients were improved, 6.67% patients were unchanged.
- Average percentage of relief in experimental group is 31.6%
- Average percentage of relief in control group is 22%
- No side effects of the therapy were found.

Thus this study entitled “Role Of Ashwagandha Grannules In The Management Of Balshosha (Kuposhan)” shows encouraging results. But keeping in mind social imbalance of the society, poverty, overcrowding we can not say that this therapy is only remedy for Malnutrition. Long duration of clinical trial with hospitalization with Panchakarma and use of other Ayurvedic medicine may yield more fruitful results. Therefore there is wide scope of research on this topic for upcoming research scholars.

However, I did not claim my topic of study is a distinguished one and the outcome credited through my work is a milestone in the field of research but the small work, which has been carried out sincerely is a beam of ray in the field of research particularly in Ayurveda.

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