



Research Article

A CLINICAL STUDY TO EVALUATE THE EFFECT OF SARVANGA UDVARTANA FOLLOWED BY VIRECHANA KARMA AS ROOKSHA POORVAKA SHODHANA IN AMAVATA W.S.R. TO RHEUMATOID ARTHRITIS

Prerana Rai Singhal^{1*}, Kiran M Goud², Lolashri S J³, Vinay Kumar K N⁴

*¹PG Scholar, ²Professor, ³Asst. Professor, ⁴Reader, Department of PG studies in Panchakarma SKAMCH&RC, Bengaluru.

ABSTRACT

The change in the classification of Rheumatoid Arthritis under various headings over the past few decades gives an insight to the pathology that requires a deeper understanding. Considering the role of immune mediating cells, progressive involvement of multiple joints & other systems, reduction in functional capacity, no other group of diseases is responsible for greater loss of earnings. The incidence of Rheumatoid Arthritis increases between 25 and 55 years of age, after which it plateaus until the age of 75 and then decreases. *Ayurveda* understands this disease on the lines of *Ama* formation, *Agni mandhya* in *Rasavaha srotas* primarily, which over time dysfunctions all the 3 *Agni* (*Jatharagni*, *Dhatwagni*, *Bhootagni*) resulting in *Sthabdham kurute gatram*. The mainstay of treatment in Rheumatoid Arthritis comprises the early use of Disease Modifying Anti Rheumatic Drugs & Corticosteroids for induction of remission. As *Amavata* is an *Abhishyandha pradhana vyadhi*, adopting any *Snigdha* modality of treatment will cause complications, hence identifying the degree of *Sama - Nirama avastha* in *Amavata*, *Rookshana* is to be done prior to any *Snigdha chikitsa*. Hence, the aim of this study was to evaluate the effect of *Rookshana* before *Virechana Karma* in the management of *Amavata* / Rheumatoid Arthritis. In this present clinical trial conducted in *Varsha rtu*, 10 diagnosed patients of *Amavata* / Rheumatoid Arthritis were selected. Statistical analysis showed highly significant improvement $p < 0.001$ in almost all subjective & objective parameters of *Amavata*.

KEYWORDS: *Amavata*, Rheumatoid Arthritis, *Rookshana* and *Virechana Karma*.

INTRODUCTION

Amavata, a condition with signs & symptoms manifesting in three stages, was explained in detail by later scholars of *Ayurveda*. The need of which could be due to increased incidence rate. *Ama*, '*Sahetu sarvaroganam*' and *Vata*, '*va gati gandhanyoh*' explains why *Amavata* is a grievous disease when compared to all the other diseases in *Ayurveda*. As it primarily affects the joints (*Marma*) and having the involvement of *Rakta* in its *Samprapti* makes it a part of various diseases included under *Vatarakta*.

The gross presentation in *Amavata* mimic a type of Auto-immune disease called Rheumatoid Arthritis which is the most common persistent inflammatory arthritis. The clinical course of which is prolonged, with intermittent exacerbations and remissions.^[1]

The watchwords in *Amavata samprapti* are: *Vayuna Prerito Hi Ama*, *Shleshma Sthanaa Pradhavati*, *Tena-Atyatha Ama*, *Dhamani Prapadhyate*, *Strotamsi Abhishyandyati*, *Nana Varna*, *Atipicchilla*, *Agni Dourbalaya*, *Hrudayasya Gouravam*.^[2]

Because the disease is predominantly in *Sama Avastha*, the signs & symptoms tend to aggravate during *Pravruth* & *Varsha Rtu* or in *Anoopadesha*, thereby increasing the prevalence rate. The classification of treatment of diseases based on *Sama & Nirama Avastha*, is the basis of *Amavata Chikitsa Sutra*.^[3] Hence, when channels are obstructed by *Medas & Kapha Dosha* in *Vata Vyadhi*, *Snehana* & *Brumhana* is not the 1st line of treatment. Instead, *Rookshana* is to be adopted first,^[4] the

indications of *Rookshana* are *Abhishyanatwam*, *Marma Sthana Vyadhi*, *Maha Dosha*.^[5] As *Amavata* is an *Abhishyanatva Pradhana Vyadhi*, *Rookshana* would be the 1st line of treatment before adopting any *Snigdha* modalities. Indications of *Rooksha Poorvaka Snehana* are *Mamsala*, *Medura*, *Bhuri Shleshma*, *Vishmagani*.^[6] Has *Amavata* fulfils these criteria, *Rookshana* in the form of *Sarvanga Udvartana* followed by *Virechana Karma* was adopted in 10 diagnosed cases of *Amavata* w.s.r. to Rheumatoid Arthritis.

Aims and Objectives

1. To evaluate the effect of *Sarvanga Udvartana* followed by *Virechana Karma* in *Amavata* w.s.r. to Rheumatoid Arthritis.

Materials and Methods

Source of data

A minimum of 10 patients with the *Lakshanas* of *Amavata* (Rheumatoid Arthritis) during *Pravruth* and *Varsha Rtu* were selected for the study from the OPD and IPD of SKAMCH&RC, Bangalore, irrespective of sex, religion and socio-economic status.

Diagnostic criteria

- Patients having signs & symptoms of *Amavata* like: *Angamarda* (body pain), *Aruchi* (loss of appetite), *Trishna* (thirst), *Alasya* (lack of enthusiasm), *Gourava* (heaviness), *Jwara* (Fever), *Apaka* (indigestion), *Sandhi Shoola* (painful joints), *Sandhi Shotha* (inflamed

joints), *Sandhi Asahishnutha* (tenderness), *Sandhi Stabdhata* (stiffness).

- Criteria for diagnosis of Rheumatoid arthritis according to- The 2010 ACR-EULAR Classification Criteria for Rheumatoid Arthritis.^[7]

Inclusion criteria

- Patient's in between the age 20-60 years
- Patients with *Lakshanas* of *Amavata*
- Patients fit for *Rookshana*
- Patients fit for *Virechana Karma*

Exclusion criteria

- Any other systemic disorders which interferes the course of treatment.

Study design

A clinical study with pre-test and post- test design was conducted on 10 patients with *Lakshanas* of *Amavata* w.s.r. to Rheumatoid arthritis.

Intervention

10 patients who fulfill the inclusion criteria were selected.

Assessment of clinical profile

Subjective parameters

Table 1: *Sandhi Shula* (Pain in joints)

No pain	0
Pain occasional, can be managed without drug	1
Pain frequent and can be managed with some pain killer	2
Pain persistent and unmanageable even with drug	3

Table 2: *Angamarda*

No <i>Angamarda</i>	0
Occasional <i>Angamarda</i> but patient is able to do usual work	1
Continuous <i>Angamarda</i> but patient is able to do usual work	2
Continuous <i>Angamarda</i> which hampers routine work	3
Patient is unable to do any work	4

Table 3: *Aruchi*

Normal desire for food	0
Eating timely without much desire	1
Desire for food, little late, than normal time	2
Desire for food only after long intervals	3
No desire at all	4

Table 4: *Trishna*

Normal feeling of thirst	0
Frequent feeling of thirst but quench with normal amount of liquids	1
Satisfying quench after increased intake of fluids but no awakening During night	2
Satisfying quench after increased intake of fluids with regular Awakening during night	3
No quench after heavy intake of fluids	4

Table 5: *Gaurava*

No feeling of heaviness	0
Occasional heaviness in body but does usual work	1
Continuous heaviness in body but does usual work	2
Continuous heaviness which hampers usual work	3
Unable to do any work due to heaviness	4

➤ *Rookshana* was done by *Sarvanga Udvartana* with *Triphala Choorna* and *Bashpa Sweda* for 7 consecutive days. Duration - 30 min and till *Samyak Swinna Lakshana's* respectively.

➤ *Pathya: Laghu Ahara* (*Ganji: 1part Shashtika Shali, 6 parts of water, ½ tsp of Panchakola Choorna, three Annakala* for 7 days during *Rookshana*).

➤ *Arohana Krama Snehapana* (*Shodananga*) was done with *Shunti Gritha* with *Ushna Jala Anupana* based on the *Koshta* and *Agni* till *Samyak Snigdha lakshanas* were observed.

➤ For 3 days of *Vishrama Kala, Sarvanga Abhyanga* with *Brihat Saindhavadi Taila* followed by *Bashpa Sweda* was done.

➤ The next day, *Virechana Karma* with *Trivrut Avalehya* and *Ushnajala Anupana* was conducted based on *Koshta* of the patient after *Sarvanga Abhyanga* and *Bashpa Sweda*.

➤ Based on *Shuddhi, Samsarjana Krama* was advised.

Table 6: Jwara

No fever	0
low grade fever once or twice/ week	1
low grade fever 3 to 4 / week	2
low grade fever at least once/day	3
Continuous low or high grade fever	4

Table 7: Alasya

No Alasya	0
Starts work in time with efforts	1
Unable to Start work in time but complete work	2
Delay in start of work and unable to complete work	3
Never able to start the work and always like rest	4

Table 8: Apaka

No Apaka	0
Occasional indigestion once or twice/week in one meal	1
Occasional indigestion 3 - 5 times/week in one meal	2
Indigestion 3 - 5 times/week in both meals	3
Indigestion after every meal	4

Objective parameters**Table 9: Grip Power**

Standard Sphygmomanometer was taken and the cuff was wrapped in a roll. Then the cuff was inflated using the apparatus bulb till 50 mm of Hg, then the patient was asked to press the cuff with his hand to the maximum strength. The readings were noted and recorded according to the following pattern.

Ability to press > 86 mm Hg	0
Ability to press 76 - 85 mm Hg	1
Ability to press 66 - 75 mm Hg	2
Ability to press 56 - 65 mm Hg	3
Ability to press 50 - 55mm Hg	4

Table 10: Pressing Power

A standard Sphygmomanometer was taken and the cuff was wrapped in a roll. Then the cuff was inflated using the apparatus bulb till 50 mm of Hg, then the patient was asked to press the cuff against a table then the readings were noted and recorded according to the following pattern.

Ability to press >86 mm Hg	0
Ability to press 76 - 85 mm Hg	1
Ability to press 66 - 75 mm Hg	2
Ability to press 56 - 65 mm Hg	3
Ability to press 50 - 55mm Hg	4

Table 11: Sandhi Shotha (Swelling in joints)

No Swelling	0
Mild swelling	1
Slight more in comparison to milder one	2
Moderate swelling covering prominences of joint	3
Profuse swelling	4

Table 12: Stabdhat (Morning stiffness)

No stiffness	0
Early morning stiffness upto 30 minutes	1
Early morning stiffness more than 30 minutes and less than 45 minutes	2
Early morning stiffness more than 45 minutes	3

Table 13: Sparshasahishnuta (Tenderness)

No tenderness	0
Tender and bearable	1
Tender and wince	2
Tender winced and withdraw	3

Observations

In this study, the age of all patients was in between 35-55 years

Majority of patients were female (6)

Among signs & symptoms, *Sandhi Shoola* was observed in all patients (100%)

Sandhi Shotha was observed in all patients (100%)

Angamarda was observed in 10 patients (100%)

Aruchi was observed in 10 patients (100%)

Trishna was observed in 7 patients (70%)

Gourava was observed in 10 patients (100%)

Jwara was observed in 8 patients (80%)

Alasya was observed in 9 patients (100%)

Apaka was observed in 9 patients (90%)

Grip Power ranged in between 70-80 in all patients (100%)

Pressing Power ranged in between 70-80 in all patients (100%)

Stabdhatata was observed in 10 patients (100%)

Sparshasahishnuta was observed in 10 patients (100%)

Table 14: Statistical analysis of results on Subjective Parameters

Subjective Parameter	Mean		Mean Diff	SD	SE	t-value	p-value	Remark
	BT	AT						
<i>Sandhi Shoola</i>	1.7	1.2	0.5	0.52	0.16	2.99	<0.05	S
<i>Angamarda</i>	2.7	1.6	1.1	0.31	0.10	10.99	<0.001	HS
<i>Aruchi</i>	2.4	1.1	1.3	0.48	0.15	8.50	<0.001	HS
<i>Trishna</i>	2.4	1	1.4	0.51	0.16	8.56	<0.001	HS
<i>Gourava</i>	2.6	1.1	1.5	0.52	0.16	8.99	<0.001	HS
<i>Jwara</i>	2.6	0.5	2.1	0.99	0.31	6.67	<0.001	HS
<i>Apaka</i>	2.4	1.2	1.2	0.42	0.13	8.99	<0.001	HS

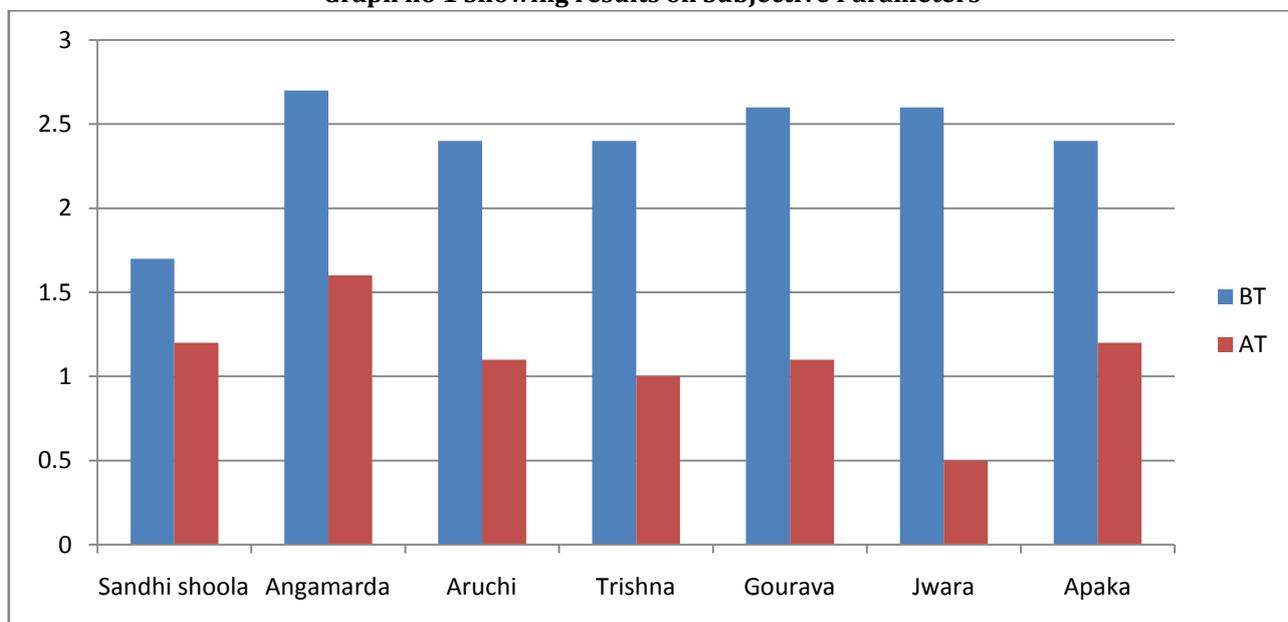
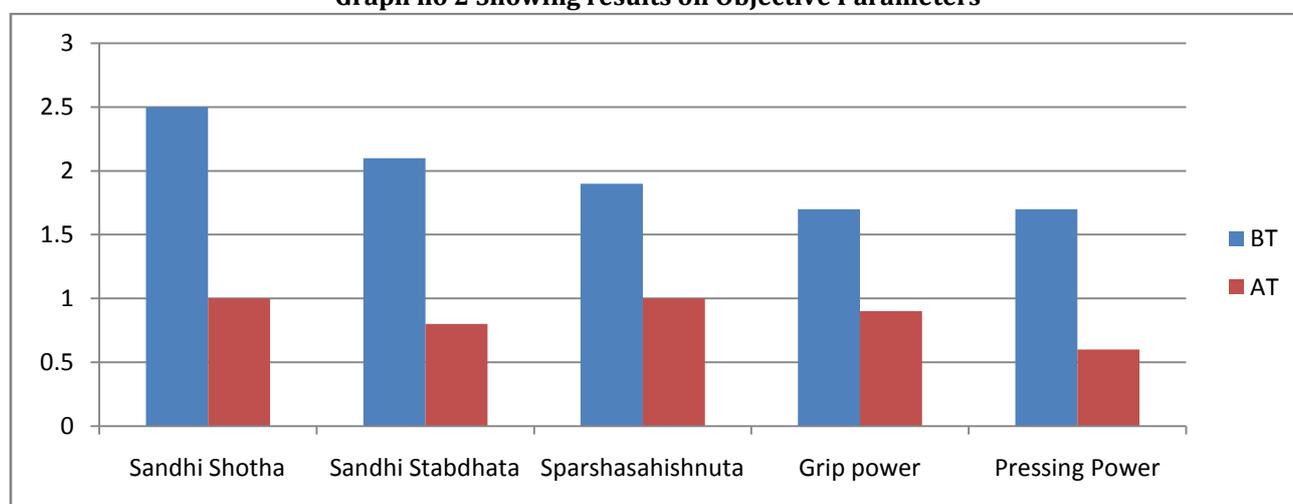
Graph no 1 Showing results on Subjective Parameters

Table 15: Statistical analysis of results on Objective Parameters

Objective Parameter	Mean		Mean Diff	SD	SE	t-value	p-value	Remark
	BT	AT						
Sandhi Shotha	2.15	1.48	0.67	0.47	0.08	9	<0.001	HS
Sandhi Stabdhatta	2.1	0.8	1.3	1.05	0.33	3.877	<0.001	HS
Sparshasahishnuta	1.9	1	0.9	0.31	0.10	8.99	<0.001	HS
Grip power	1.7	0.9	0.8	0.42	0.13	5.99	<0.001	HS
Pressing power	1.7	0.6	1.1	0.31	0.10	10.99	<0.001	HS

Graph no 2 Showing results on Objective Parameters**DISCUSSION**

In this study, the effect of *Sarvanga Udvartana* followed by *Virechana Karma* in *Amavata* was observed carefully in the improvement of signs & symptoms.

The number of diagnosed RA patients visiting the hospital increases during *Varsha* or *Pravrutth Rtu* mainly because of aggravation of sign and symptoms due to influence of climate on the disease. No other disease in *Ayurveda* has an equal involvement of *Agni, Ama, Tridosha* in its *Samprapti* other than *Amavata*. Due to various *Nidana's*, *Agnimandhya* occurs not only at the level of *Jatharagni* but also the *Dhatwagni's*. Hence, *Doshaliptata* primarily occurs in *Rasavaha Srotas* there in *Tiryak Vaha Sroto Avarodha* and *Abhishyanditam* in *Srotas's* results in *Shotha, Shoola* etc. *Ati Picchilatwa* results in *Sandhi Stabdhatta*.

Sarvanga Udvartana was adopted as *Rookshana Chikitsa* prior to *Shodhana* as references state that whenever there is *Mamsala, Medhura, Bhuri Shleshma, Vishamagni, Rooksha* in any form should be adopted before *Snehapana* to avoid any untoward *Snehavyapath* which may occur otherwise, but bound to occur due to these factors. As *Agnimandhya* requires careful attention in *Amavata*, *Bahya Rooksha (Sarvanga Udvartana)* helped promote *Twachasta Agni Deepanam* by stimulating *Vata* and *Pitta* situated in *Twacha*, thereby *Twachastagni Mandhaya* in *Twak Gata Sira* is enhanced. *Sira Mukha Vivardhana* promoted *Tiryak Vaha Sira Avarodha* and *Abhishyandh* in *Srotas's* by *Kapha-Meda-Ama Vilayanam /Shoshana* which reduced *Shotha* (swelling) and *Shoola* (pain) and due to patent *Srotas's*, *Sandhi Stabdhatta* was improved. In the present study 7 patients achieved *Samyak Rookshana Lakshanas* in 7 days and remaining 3 in 5 days.

Upavasa in the form of *Laghu Ahara (Panchakola Sadita Peya)* promoted *Jatharagni Mandhaya*. *Panchakola Sadita Peya* is *Ama Pachana, Shoola Prashamana, Dooshita Kapha Nashaka*. Thus Prevents further accumulation of *Ama*. Thereby, gradually controlling symptoms of *Aruchi, Gourava*. Wherein, *Sama Lashanas* turn in *Nirama Avastha*, a pre-requisite to any *Shodhana*. Careful observation was made to keep a check on the *Nirama Avastha* to prevent further *Prakopa* of *Vata*.

Once *Pachana* of *Ama* and *Agni Sandhukshana* was attained, patients were subjected to *Snehapana* with *Shunti Ghrita*. *Shunti* is having *Kapha Vata Shamaka* property due to its *Katu Rasa, Snigdha Guna & Ushna Veerya*. It has *Shotha Prashamana, Jwaragna & Vedana Sthapana* properties. It is also useful in *Agnimandya, Aruchi & Adhmana*.

Shunthi Ghrita is an *Agni Sandookshana Karaka & Vata Shleshma Hara, Ama Pachaka* and the same when adopted in *Arohana Krama (Shodanaga)* brings *Doshas* in *Leena Avastha* into *Utklishta Avastha*. In the present study, 6 patients achieved *Samyak Snigdha Lakshanas* in 4 days and remaining 4 in 5 days. The average dose of *Sneha* per patient was 300ml.

Abhayanga with *Brihat Saindhavadi Taila* followed by *Bashpa Sweda* does the *Dravikarana* of *Utklishta Doshas*. It is considered as a '*Siddha-Prayoktavyam Amavataharam Param*'.

Virechana Karma

Trivrut Lehya was used as it is *Anapayitwa*. It does *Sroto Shodhana* by *Dosha Nirharana, Agni Deepana*. There by alleviating signs & symptoms.

The average number of *Vegas* observed in the present study were 18.

The average quantity of *Dosha Nirharana* observed in the present study was *Madhayama*.

All patients ended with *Kaphanta (Antiki)*.

All the patients achieved *Samyak Virechana Lakshana's*.

CONCLUSION

Amavata is a disease wherein *Sama Dosha's* need to be converted to *Nirama Avastha* for attaining any improvement in signs & symptoms. As Ayurveda States, *Ama* is the root cause of all diseases, it has to be treated by all measures. As *Amavata* is an *Abhishyanda Pradhana Vyadhi*, *Rookshana* should be adopted before *Snehapana* to prevent any *Vyapath's*. Hence, *Rookshana* is an important *Upakrama* which has to be adopted in this condition as a *Poorvakarma* to *Shodhana Karma*.

After going through the results & statistical analysis of the data, it was observed that the role of various *Rooksha* procedures followed by *Virechana Karma* have highly significant effect ($P < 0.001$) on *Amavata*. Further studies are required to evaluate the effect of the treatment in large sample.

REFERENCES

1. Nicki R. colledge, Brian R. Walker, Stuart H. Ralston Davidson's principles and practice of Medicine, 21st edition, illustrated by Robert Britton, 2010 Pg -1096.
2. Bhavaprakasha, Bhava mishra, Amavatadhikara, pp:836, Pg -283.
3. Bhavaprakasha, Bhava mishra, Amavatadhikara, pp:836, Pg -283.
4. Agnivesha, Charaka Samhita - Revised by Charaka and Dridhabala with Ayurveda Deepika Commentary of Chakrapani Datta, Chaukhamba Orientalia Varanasi, pp:738, Pg-634.
5. Agnivesha, Charaka Samhita - Revised by Charaka and Dridhabala with Ayurveda Deepika Commentary of Chakrapani Datta, Chaukhamba Orientalia Varanasi, pp:738, Pg-121.
6. Vriddha Vagbhata, Astanga Samgraha- Sasilekha by Indu, prologue in Sanskrit and English by Prof. Jyothi Mitra. Varanasi: Chaukhamba Sanskrit series Office; 1998. pp:965, Pg - 164.
7. Anthony S, fauci, Dennis L. Kasper, Stephen L Hauser, Dan L. Longo, J. Larry Jameson, Joseph Loscalzo - Harrison's Principles of Internal medicine, 19th Edition Volume II- Pg- 2136.

Cite this article as:

Prerana Rai Singhal, Kiran M Goud, Lolashri S J, Vinay Kumar K N. A Clinical Study to Evaluate the Effect of Sarvanga Udvartana followed by Virechana Karma as Rooksha Poorvaka Shodhana in Amavata w.s.r to Rheumatoid Arthritis. International Journal of Ayurveda and Pharma Research. 2017;5(8):74-79.

Source of support: Nil, Conflict of interest: None Declared

*Address for correspondence

Dr Prerana Rai Singhal

PG Scholar, Department of PG studies in Panchakarma SKAMCH&RC, Bengaluru.

Email: prer.raisinghal@gmail.com

Mob: 9632626214

Disclaimer: IJAPR is solely owned by Mahadev Publications - A non-profit publications, dedicated to publish quality research, while every effort has been taken to verify the accuracy of the content published in our Journal. IJAPR cannot accept any responsibility or liability for the articles content which are published. The views expressed in articles by our contributing authors are not necessarily those of IJAPR editor or editorial board members.