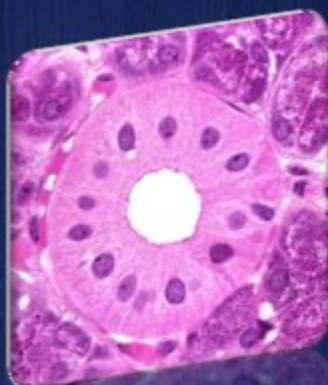
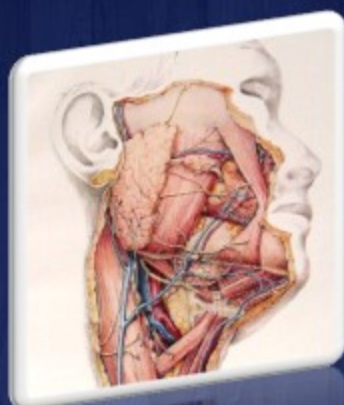


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Original Article

STUDENTS PERCEPTION TOWARDS ONLINE TEACHING OF HUMAN ANATOMY: A COMPREHENSIVE SURVEY

Deepika Poonia¹, Monika Jaiswal¹, Harpreet Singh², Sabah Yaseen³, Sabita Mishra⁴

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ABSTRACT

Introduction: The world-wide pandemic followed by forced lockdown had greatly impacted medical education. On virtual platforms it was daunting specially for the first-year medical students to conceptualize the concepts in human anatomy. The authors structured a teaching model including online lectures, demonstrations, clinical problem solving and weekly feedback sessions to execute online teaching in anatomy. The present study was a feedback survey performed to assess student's perception towards online teaching in anatomy.

Materials and methods: A validated questionnaire was given to 250 medical students using Google Form. The student's response was then recorded and graphically plotted.

Results: The results of this questionnaire-based feedback survey showed that the teaching model including lectures, demonstrations and regular feedback for constant improvement in teacher's performance was a success as majority voted this model to be useful. However online teaching mode cannot replace cadaveric dissection method of learning.

Conclusions: The theoretical knowledge in anatomy can be imparted using well planned teaching model and competent teachers. However online dissection and demonstration cannot replace the cadaveric dissection which the benchmark in learning anatomy.

Keywords: Online teaching, Covid19, pandemic, lockdown, cadaveric dissection, student's feedback

INTRODUCTION

The competency based medical education has reformed the old medical curriculum by defining the competencies to be attained by the end of

teaching-learning sessions. Various methodologies were also suggested to attain those competencies. In comparison to the old curriculum, the new curriculum has shifted

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focus from only knowledge gain towards acquisition of skills [1]. However due to onset of corona pandemic, mode of teaching shifted from offline teaching to exclusive online teaching. Online mode of teaching posed a great challenge for the teachers to achieve pre-defined goals in competency based medical education. In addition to the competencies, the next challenge for medical teachers was to cover all the three domains of learning- Cognitive, Psychomotor and Affective. Students can attain knowledge domain through e-learning however psychomotor and affective domains lagged.

Feedback is a pivotal component of teaching and learning process. It provides data pertaining to observer's reactions about a performance. This formation obtained from this data may be used for improvement. [2] Thus, during exclusive online teaching, student's feedback about the online lectures and demonstrations became imperative to enhance teaching-learning in medical education [3] The literature search has shown articles comparing online versus offline teaching in non-medical and medical students. [4] However reports about medical students experience of exclusive online lectures and practical is yet sparse.

The authors designed a structured feedback survey to assess the level of satisfaction attained amongst the first-year medical students immediately at the end of professional year. The aim of this survey was to collect data about students learning experience, communication with the teacher and their peer and usefulness of online classes. The open-ended questions were asked to know the

technical issues faced by the students during the internet-based learning. In contrast to the previous surveys, we have focused on highlighting the first-year medical undergraduate student's satisfaction about exclusive online teaching during pandemic. Moreover, in this article we have focused only upon the feedback about teacher's role and technical issues, no comments are made on student's outcome after online teaching.

MATERIALS AND METHODS

The participants included in this survey were the students in first year of medical college who attended anatomy online lectures and demonstrations. The large group teaching was done as online lectures using platform like GoToWebinar. After the lectures, small group teaching was conducted using platform like Google Meet. During small group teaching, live demonstration of hard and soft parts was done. To emphasis on the aspect of clinical anatomy problem solving questions were rolled out and students were asked to solve as the part of their self-directed learning. During small group teaching sessions these questions were then discussed.

Online learning was daunting for the students hence to monitor the impact of virtual classes on regular basis, indirect feedbacks were collected by sharing questionnaire using Google Forms. The scores obtained by the students were treated as feedback about the teachers to improve their lectures and decide the need to repeat the topic as revision during next teaching lecture. At the end of the session an online survey was conducted to take the feedback about the overall experience of online teaching.

INCLUSION CRITERIA: First year medical undergraduate students with the mean age 19 years who attended the online lectures and demonstrations were included in the study.

CONFOUNDING FACTORS: The study samples selected were not uniform. As students attended the online lectures from different demographic profiles of the country. Technology was the major confounding factor as good internet coverage and appropriate gazettes were not privilege of all the students. These unavoidable factors could not be surpassed and hence our results may deviate.

SURVEY PROCEDURE: A cross sectional observation study was conducted in Department of Anatomy. A set of 11 questions was developed. The questions were framed in accordance with the feedback model described by Hattie & Timperley. The questionnaire addressed First and Second level described by Hattie et al [5]. The questionnaire focused on the following- 1) By the end of teaching-learning session were the competencies defined in new curriculum attained? 2) Was the direction and pace to attain the competencies, correct? 3) What can be undertaken for better results in future? Students were instructed to give their unbiased comments.

TOOL: The validated questionnaire (Table 1) was shared with the students using Google form. The time limit of 4hours was set for the students to fill the form. Immediately after 4 hours the portal was closed from accepting response.

PARTICIPANTS/SAMPLE: 250 first year medical students out of which 32.8% were female and 67.2% were male. Student's identity were kept anonymous.

RESULTS

Out of 250 first year medical students 231 participated in the survey. Out of which 32.46% (75/231) were female and 67.53% (156/231) were male Figure 1.

Goals attained by the end of session:

90.9% students voted that during e-lectures and e-demonstrations [LD] teachers were able to cover all the learning competencies. However, percentage of agreements lowered when asked about the content of lectures. Despite the addition of figures, charts and videos to the lectures supposed to be helpful to gain the concept only 81.3% found the overall content of LD adequate to completely understand the topics. In accordance with the student's perception, Problem Based Learning (PBL) shared after the lectures complemented the e-learning program. Overall, 90.4% of the attendees found these PBL useful and assisted in online mode of learning.

Direction and pace of teaching sessions to attain the goal:

The difference between the percentage of students narrowed when asked to share their experience about the pace maintained during e-lectures to cover the topic. Out of all, only 79.1% were satisfied with the pace of the lectures. But 22.6% found the lectures to be faster to finish the topic in time limit. 79.6% liked

Q. No	Questions:	Options:
1	Were the objectives of the lectures and demonstrations achieved by the end of session?	Yes/No
2	Was the content adequate for the understanding of the topic?	Yes/No
3	Was the time duration of lecture and demonstrations adequate?	Yes/No
4	Was the content supported by appropriate figures, diagrams and videos?	Yes/No
5	Were you happy with the pace of lectures?	Yes/No
6	Did the live demonstrations aid in better understanding of the lectures?	Yes/No
7	Were the supporting clinical case scenario and SDL adequate for understanding the topic?	Yes/No
8	Did you face difficulty due to network connectivity issues?	Yes/No
9	Did you attend the lectures on phone?	Yes/No
10	Did you attend lectures on laptop/ desktop?	Yes/No
11	Any remarks	

Table 1: Shows the questions used for online survey

the idea of weekly feedback meetings with their small group teachers. Topic wise assessment using rhetoric questions which were shared regularly through google forms was a success. As 97.8% students found this method as useful for learning process.

What can be undertaken for better results in future?

The dichotomous questions were included to know about the technical issues encountered by the learners. When asked about the online

live demonstrations, 80% favored live classes as informative. Upon enquiring about the technical issues, it was noted that, larger glitch in the online mode had been availability of good internet connectivity. 77.4% complained of having poor network connectivity. Majority of them i.e., 85.7% attended the lectures on screens of mobile phones which necessitate prolonged eye strain. Also, the processor of few mobile phones does not support smooth play of anatomy videos.

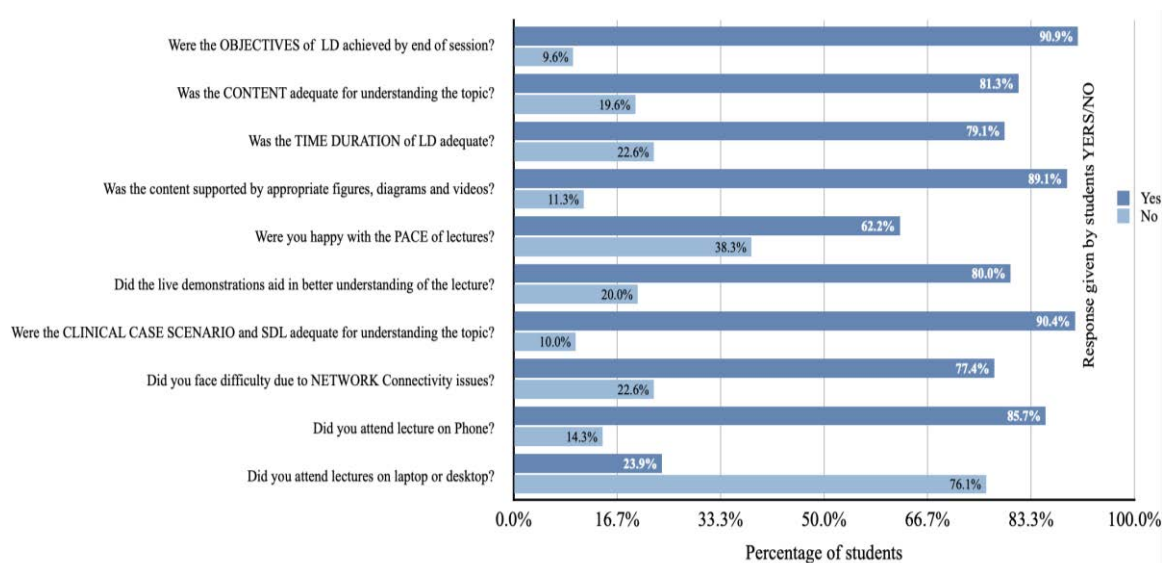


Figure 1: Graphical representation to compare student's response about online teaching methods in Anatomy.

Student's comments through open ended questions

According to the students, online teaching facilitated development of temporary memory. The online demonstrations cannot replace the 3-dimensional view of human viscera and bones which can be gained during offline lectures in dissection hall. Another hurdle on the way of online learning was, the internet glitch which hindered the learning process. Poor connectivity on the side of presenter resulted in prolongation of lectures and interruption in audio and video. Most found the lectures were faster than classroom lectures and students appreciated if the frequent repetitions of the lines and summary of the lecture in the end be provided. For smooth programming and conduct of online lecture, communication between the two teams is pivotal. At times, delay in the onset of lectures created dilemma among students as, when the

lecture will start or may be cancelled resulting in wastage of minutes.

DISCUSSION

Feedback is a simple and powerful tool in competency based medical education [5,6]. It helps to foster the quality of lectures from the prospect of material as well as its presentation. COVID-19 pandemic followed by country wide lockdown had enforced online mode of teaching and learning in medical curriculum. Feedback about these online learning in higher education from professional colleges is available in literature [7]. But data pertaining to the feedback obtained from the medical students regarding their experience of online teaching is sparse. [8]

The discipline of anatomy is the keystone in medical curriculum. And comprehensive knowledge of human anatomy is fundamental to raise future clinicians, specifically in surgical fields [7]. During lockdown, the major challenge in teaching anatomy online was cadaveric

dissection. The cadaveric dissection which is an integral part of teaching and learning anatomy was shown using recordings. But,

apart from learning human anatomy, cadaveric dissection nurtures psychomotor and attitude domain in medical students. Cadaveric dissection practically prepares students to encounter death, make them ready for clinical practice and imbibe motor skills [9].

The experience in dissection hall helps medical students to develop teamwork competency and empathy [10]. Through online learning we have ensured development of cognitive domain in first year medical students. But psychomotor and attitude domains are yet to foster in students to reach the criteria of Indian medical graduate. Apart from the teacher's perception it is important to understand student's perception of online learning. So, the aim of this article is to emphasis upon the feedback gained from the first-year medical students about their perception of online classes during pandemic.

Previously available data on feedback pertaining to student's preference of online versus face-to-face teaching had shown a significant difference between the two modes of teaching. On the basis of similar feedback, online teaching environment was found to be less effective in maintaining motivation in the classroom, student's engagement in the given task and cognitive enhancement. But at the same time no significant difference in the final outcome was observed between the group of students who were enrolled in online learning from the other group with face-to-face teaching [11].

Data shows that concurrent use of online and offline mode of teaching has shown to be associated with better student outcome [12]. In

547th meeting, the Expert Committee set by University Grant Commission brought forward the provision of "blended mode of teaching", in which higher education institute were allowed to teach 60% syllabus offline and 40% syllabus online [13].

CONCLUSION

Understanding human anatomy by online mode of teaching-learning method was challenging. Use of e-learning resources in the form of online lectures, demonstrations, clinical case scenario for problem-based learning followed by regular feedback from the students had laid the pavement towards success. However, cadaveric dissection which is a benchmark in learning anatomy cannot be understood using online teaching aids.

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Original Article

MORPHOMETRIC EVALUATION OF SUPERIOR ARTICULAR FACET AND INFERIOR ARTICULAR FACET IN HUMAN ATLAS VERTEBRAE

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ABSTRACT

Introduction: Trauma and degenerative changes are observed frequently in the cervical column. The first two cervical vertebrae constitute crucial sites for cervico-spinal instability. Accurate surgical intervention in this region requires detailed quantitative analysis of the Atlas and Axis vertebrae. Aim and objectives: To provide baseline data pertaining to morphometric details of SAF & IAF of Atlas vertebra in Indian population. To compare the right and left sided morphometric values. To explore any morphological variations of SAF & IAF of Atlas vertebra.

Materials and methods: 50 human dry Atlas vertebrae were examined in the present study. The study was conducted in the Department of Anatomy, Vardhman Mahavir Medical College and Safdarjung Hospital, New Delhi.

Results: Mean length of the SAF of Atlas vertebrae on right side was found to be 21.35 mm and 20.27 mm on left side. Mean width of right SAF was 11.48 mm and 11.12 mm on the left side. A statistical significant difference of 0.047 was observed in mean length of SAF of right and left sides of the Atlas vertebrae. Mean length of the IAF of Atlas vertebrae on right side was 15.80 mm and 16.03 mm on left side. Mean width of right IAF side was 15.1 mm whereas 15.05 mm on the left side.

Conclusions: Familiarity with the morphological variations and morphometric details of the first two cervical vertebrae is of paramount significance for Radiologists, Orthopedic surgeons and Neurosurgeons. Precise information pertaining to morphometric details of the first two cervical vertebrae enhances the accuracy of screw fixation and prevents inadvertent injuries to neurovascular structures

Keywords: Superior Articular Facet (SAF), Inferior Articular Facet (IAF)

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INTRODUCTION

Introduction: The Atlas vertebrae may be involved in fractures, dislocation, arthritis, tumours and developmental anomalies. Trans-articular and transpedicular screw fixations have been widely used to correct the instability of the atlantoaxial complex or occipitocervical junction caused by numerous traumatic and non-traumatic conditions.

In spite of the benefits conferred by screw fixation in the cervical column, controversy exists regarding its potential risks. Therefore, a thorough anatomical study of this region in terms of morphometry and biomechanics is mandatory before attempting to treat pathologies of this region.

MATERIALS AND METHODS

The study was conducted in the Department of Anatomy, Vardhman Mahavir Medical College and Safdarjung Hospital, New Delhi. The present study was performed on 50 dry adult human Atlas and Axis vertebrae with a view to elucidate the morphometric details. Bones showing gross deformity or any degenerative changes were excluded from the study. The osteometric evaluation of these two vertebrae was taken by using Digital Vernier Calliper (sensitive to 0.1mm). Statistical analysis of the recorded data was done using SPSS software.

All the Atlas and Axis vertebrae were carefully studied and were discussed in the light of previous literature. The current study also attempted to explore any difference of data between the osseous components of two sides (left and right). It is hoped that the observations of the present study will contribute as an

anatomical reference for researchers and clinicians. The observations were noted using the following parameters:

1. SUPERIOR ARTICULAR FACET OF ATLAS VERTEBRA -

(a) Length: Maximum antero-posterior diameter of SAF (Fig. 1).

(b) Width: Maximum transverse diameter of SAF (Fig. 1).

2. INFERIOR ARTICULAR FACET OF ATLAS VERTEBRA -

(a) Length - Maximum antero-posterior diameter of IAF (Fig. 2).

(b) Width - Maximum transverse diameter of IAF (Fig. 2).

STATISTICAL EVALUATION The data obtained from the present study were entered in MS Excel and statistical analysis carried out using SPSS version 21. The morphometric values of the two sides were analysed using 't' test and 'p' value < 0.05 were considered statistically significant. Mean value, standard deviation and range were taken into consideration while performing statistical analysis.

RESULTS

The study was centred at evaluating the morphometric details and exploring the morphological variations of SAF & IAF of Atlas vertebra.

Superior articular facet- It was present bilaterally in all the dry Atlas vertebrae. Most of the vertebrae showed oval shaped facet, few of the facets had constriction only on one side

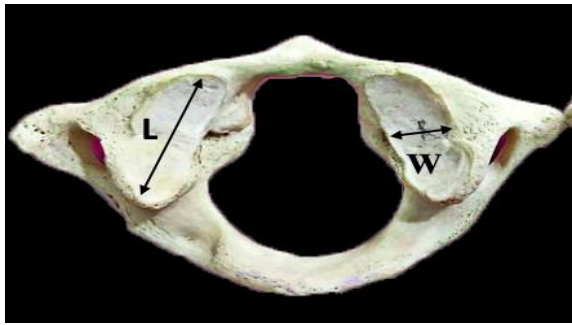


Figure 1: Length and width of SAF of Atlas vertebra

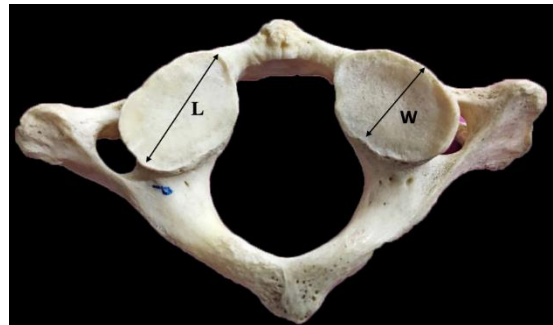


Figure 2: Length and width of IAF of Atlas vertebra

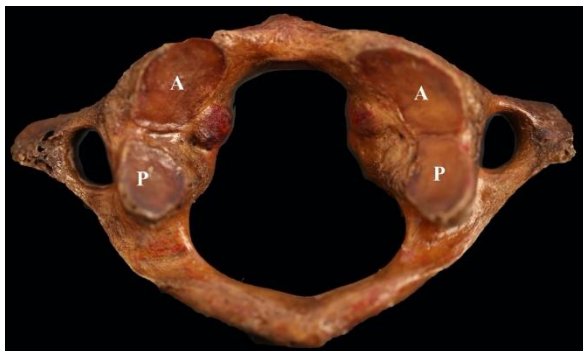


Figure 3: Division of SAF of Atlas vertebra into anterior (A) and posterior (P) sections.



Figure 4: Osseous projection emanating from the posterior end of SAF of Atlas vertebra (Marked by arrow).



Figure 5: osseous projection emanating from the posterior end of SAF, overriding the groove for vertebral artery on the posterior arch (Marked by arrow).



Figure 6: Oval shaped facet on left side and kidney shaped facet on right side of the atlas vertebra.

Morphometry of Superior and Inferior Articular Facets of Atlas

which was considered as kidney shaped facet (Fig. 6). Only two vertebrae showed bilateral constrictions, completely divided into anterior and posterior sections by a groove in the centre of the facet (Fig. 3). In one specimen, a small conical projection was detected bilaterally emanating from the posterior end of SAF (Fig. 4). No Atlas showed flat superior articular facets.

Morphometric Evaluation - Mean length of the SAF of Atlas vertebrae on right side was found to be 21.35 mm and 20.27 mm on left side. Range of the maximum length of SAF was 16-36mm on right and 14-24.8 mm on left side respectively with p value of 0.0473. Upon comparison of the mean length of SAF of right and left sides of the Atlas vertebrae a statistically significant difference of 0.047 was observed. Mean width of right SAF was 11.48 mm and 11.12 mm on the left side. Range of the maximum width of SAF was 7.3-38 mm on right side and 6.7-24.5 mm on the left side respectively with p value of 0.61. No significant difference was found in mean width of two sides. The morphometric observations on SAF are depicted in Table 1.

Inferior articular facet -The shape of all observed IAF varied from flat, slightly concave, circular and slightly drop shaped facing medially and slightly backwards. **Morphometric Evaluation -** Mean length of the IAF of Atlas vertebrae on right side was 15.80 mm and 16.03 mm on left side. Range of the maximum length of IAF was 8.7-19.4mm on right and 10.9-21.4 mm on left side respectively with p value of 0.55. Mean width of right IAF side was 15.1 mm whereas 15.05 mm on the left side.

Range of the maximum width of IAF was 9-19.2 mm on right side and 9-18.65 mm on the left side respectively with p value of 0.69. No significant statistical difference was found between the two sides with respect to the mean length and width of IAF. The morphometric observations on IAF are depicted in Table 2.

DISCUSSION

The first cervical vertebra, Atlas has different anatomical features as compared to other cervical vertebrae. Atlas vertebra is an important part of bony anatomy of cranio-vertebral junction. The C-1 vertebra has an anterior and a posterior arch, two lateral masses and two wide transverse processes. It consists of a pair of superior articular facets superiorly for occipital condyles and a pair of inferior articulating facets for the second cervical vertebra. Anatomically, the Atlas is embedded in the neck muscles and is therefore protected from injury. The unique structure and anatomical location of the atlas forms a safety mechanism.[1]

Motagi et al [2] noticed that the frequency of irregular shape was 39%, oval shape was 33%, figure of eight was 18% and kidney shape was 10%. According to Motagi et al there were no symmetrical facets in the study and this is in accordance with the present study. Motagi et al also observed that the constrictions in SAF are present in 64% and absent in 36%. According to Motagi et al the frequency of complete separation was 35%, incomplete separation was 23% and separation was absent in 42%. According to Lalit M et al [3] the frequency of oval shape was 28.33%, kidney shape was

Parameters	Mean ± SD (mm)		p value
	Range = Min - Max (mm)		
	Right	Left	
Length	21.35 ±	20.271 ±	0.047*
	3.047	2.289	
	16 - 36	14 - 24.8	
Width	11.48 ± 4.21	11.12 ± 2.66	0.61
	7.3 - 38	6.7 - 24.5	

Table 1: Morphometric observations on superior articular facet in Dry Atlases

Parameters	Mean ± SD (mm)		p value
	Range = Min-Max (mm)		
	Right	Left	
Length	15.80 ± 1.99	16.03 ± 1.92	0.55
	8.7 - 19.4	10.9 - 21.4	
Width	15.1 ± 1.75	15.05 ± 1.67	0.69
	9 - 19.2	9 - 18.65	

Table 2: Morphometric observations on inferior articular facet of Dry Atlases

Author	Right APD Mean (mm)	Left APD Mean (mm)	Right TD Mean (mm)	Left TD Mean (mm)
Sengul et al ⁶	19.9±3.4	18.6±3.2	9.6±1.9	9.8±1.5
Gosavi et al ²⁶	21.24±2.39	21.02±2.52	10.36±1.72	10.47±1.61
Gupta C et al ¹⁰	21.5	21.8	11.8	11.5
Kaur et al ³⁰	21.52±2.36	21.51±2.07	11.21±1.47	11.32±1.3
Khanfour et al ³²	13.6±1.8	12.7±2	12±0.6	12.1±0.6
Rekha BS et al ⁹	22.33±2.14	22.26±2.19	8.74±2.04	9.57±2.33
Present study	21.35±3.047	20.27±2.28	11.48 ± 4.21	11.12±2.66

Table 3: Comparison of various studies on Morphometry of SAF of Atlas vertebrae

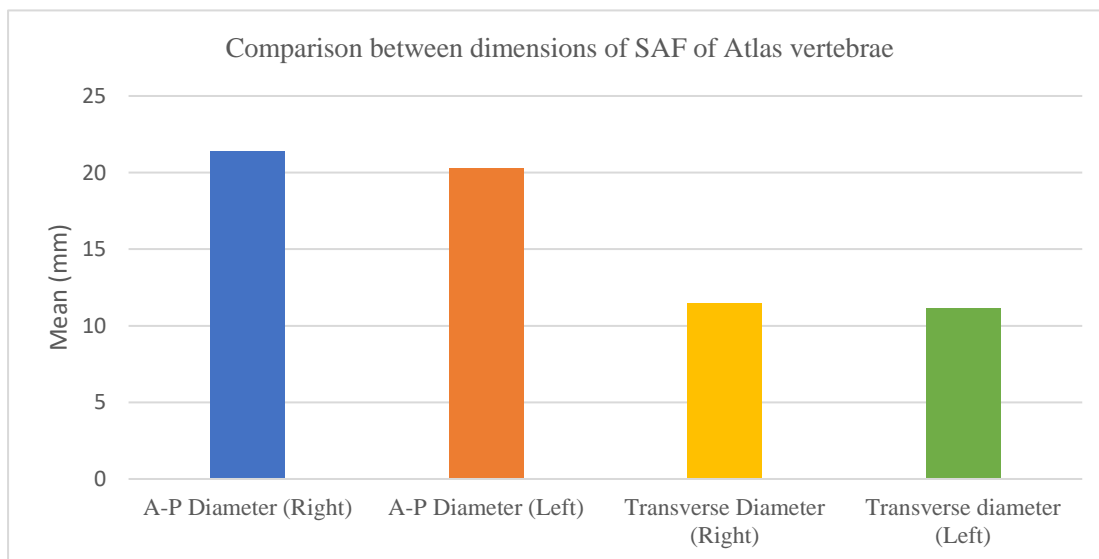


Figure 7: Dimensions of IAF

Author	Right APD Mean (mm)	Left APD Mean (mm)	Right TD Mean (mm)	Left TD Mean (mm)
Sengul et al ⁶	17.1±2.6	17.5±2.4	---	---
Gosavi et al ²⁶	16.57±1.91	16.50±1.67	14.01±1.93	14.42±1.67
Gupta C et al ¹⁰	18	17.9	14.6	15.2
Kaur et al ³⁰	17.54±1.50	17.70±1.60	14.99±1.65	14.94±1.51
Rekha BS et al ⁹	17.9±1.61	17.82±2.35	14.84±1.31	14.48±1.80
Present study	15.80 ± 1.99	16.03 ± 1.92	15.1 ± 1.75	15.05 ± 1.67

Table 4: Comparison of various studies on Morphometry of IAF of Atlas vertebra

20%, dumb bell shape was 35% and the figure of 8 was 16.67%. According to Lalit M et al the separation was absent in 40% and complete separation was present only on the left side with a frequency of 3.3%. In the present study complete separation was observed only in two vertebrae bilaterally, while majority displayed absence of separation of SAF appearing oval shaped. Some of the specimens exhibited unilateral constriction on medial side of the SAF appearing to be kidney shaped. The current analysis found coincidence with two previous researchers Lalit M et al, Motagi et al and Yogesh et al [4] where they also reported an incidence of complete separation of SAF.

In one specimen, a small conical projection was detected bilaterally emanating from the posterior end of SAF (Fig. 4). This osseous projection was seen overriding the groove for vertebral artery on the posterior arch. This finding is in accordance with results by Gupta C et al [5] and Karau, Ogeng'o, Hassanali et al [6] who

reported, that atlas bridges, also called ponticles, are bony outgrowths occurring on the atlas vertebra over the third segment of the vertebral artery, converting its groove into a sulcus, incomplete or complete foramen.

The posterior bridge is found dorsal to the lateral mass on the posterior arch of the atlas and when complete, forms the retro-articular canal also called a Kimmerle's variant or arcuate foramen. Cirpan et al [7], Bilodi et al [8], Khanfour et al [9], Schilling et al [10] and Mehta et al [11] also observed similar kind of findings. Lateral bridges, are less common than the posterior and may also exist as complete foramina, called the supratransverse foramina. [2] Supratransverse foramina was also seen by Taitz et al [12].

The mean value of the antero-posterior diameter of the inferior articular facet of right and left side of the present investigation were within the mean range of the previous studies

of Gosavi et al [13], Gupta C et al [5], Kaur et al [14] and Rekha BS et al [15]. The mean value of the transverse diameter of the right and left side of the inferior articular facet was within the mean range of the previous studies conducted by, Gosavi et al [13], Gupta C et al [5], Kaur et al [14] and Rekha BS et al [15] (Table 4). Figure 7 shows dimensions of IAF in the present study.

CONCLUSION

Familiarity with the morphological variations and morphometric details of the first two cervical vertebrae is of paramount significance for Radiologists, Orthopaedic surgeons and Neurosurgeons. Precise information pertaining to morphometric details of the first two cervical vertebrae enhances the accuracy of screw fixation and prevents inadvertent injuries to neurovascular structures. The observations of the present study displayed a wide range of dimensions with references to various osseous components of the first two cervical vertebrae and some of the osteometric parameters also exhibited statistically significant difference between right and left sides. Further, discrepancies were also noted on comparison of the present values with those of previous researchers. These discrepancies could possibly be attributed to racial and regional differences.

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Original Article

AN OSTEOLOGICAL STUDY OF FUSION OF CERVICAL VERTEBRAE

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ABSTRACT

Introduction: Fusion of Vertebral column are common findings in both radiological studies and in anatomical studies. In present study was focussed only on the fusion of the cervical vertebrae. The present study is to study the fused cervical vertebrae and its clinical aspect.

Materials and methods: The present study was conducted on 200 dry cervical vertebrae of both the sexes in Department of Anatomy, Subharti Medical College, Swami Vivekanand Subharti University, Meerut, Uttar Pradesh. The bones were carefully studied and digitally photographed.

Results: In the present study the incidence of fused cervical vertebrae was 0.5% (01 out of 200). Out of seven cervical vertebrae the fusion were only seen in C2-C3 Vertebrae.

Conclusions: The overall incidence of the fused cervical vertebrae in the present study were only 0.5%. The fusion of cervical vertebrae is commonly associated with Klippel-Feil Syndrome, Crouzon's syndrome and Chorda Dorsalis. The fusion of the cervical vertebrae causes restricted and painful neck movements and can cause sudden death also. The knowledge of such fusion is important for anatomists, neurosurgeons, radiologists, orthopaedic surgeons, neurologists, physiotherapists and even orthodontists. The knowledge of the fusion of cervical vertebrae is important for anaesthetist while doing endotracheal intubation where extension of the neck is done.

Keywords: Cervical vertebrae

INTRODUCTION

Cervical vertebrae are seven in number and divided into typical and atypical cervical vertebrae. The first cervical vertebrae also called as Atlas, second cervical vertebrae as Axis, and Seventh as Vertebrae Prominens

have special features and thus considered as Atypical Cervical Vertebrae, whereas the third, fourth, fifth and sixth cervical vertebrae (C3, C4, C5, C6) are almost identical when compared and are termed as Typical Cervical Vertebrae. The first cervical vertebrae (atlas) form an

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important joint with the occipital bone and with the second cervical vertebrae. Axis vertebrae is different from other cervical vertebrae by the presence of Odontoid process or Dens and project cranially from the superior surface of the body of the vertebrae. The Axis vertebrae also known as epistropheus forms the pivot upon which the first cervical vertebrae (Atlas) which carries the head rotates. The atlas and axis vertebrae support the head on the lower cervical spine providing for considerable mobility in flexion, extension, rotation and lateral bending. The C3 vertebrae is typical with features similar with other typical cervical vertebrae [1]. Congenital anomalies are common in the vertebral column [2].

In the fusion of the cervical vertebrae, the two fused vertebrae appear not only structurally but also functionally as one vertebra [3]. The fusion of the cervical vertebrae may be congenital or acquired [4,5]. The congenital fusion of the second cervical vertebrae or axis vertebrae with the third cervical vertebrae limits the movements between these bones and because of this reason the third cervical vertebrae also called as vertebrae critica by Cave [6].

Sometimes this anomaly may be asymptomatic but sometimes may also appear with serious manifestations like myelopathy or may be associated with syndromes such as Klippel Feil Syndrome [5,7,8], Crouzon's Syndrome [9]. Sometimes may be associated with restricted neck movements [10]. Sometimes may be associated with muscular weakness, atrophy and neurological sensory loss [11]. Severe pain in the neck region and sudden death may occur due to these anomalies [12]. These anomalies have a clinical importance as well and

evaluation must be done by X-ray or Magnetic Resonance Imaging for preventing any further damage during surgery or physiotherapy.

The aims and objectives of the present study is to study the fused cervical vertebrae and its clinical importance.

MATERIALS AND METHODS

Total 200 dried human adult cervical vertebrae were studied in department of anatomy, subharti medical college, Meerut. Out of 200 cervical vertebrae, fusion was reported in only one (C2-C3). Fused C2-C3 Vertebrae was studied in detail and digitally photographed.

RESULTS

Total 200 dried human cervical vertebrae were studied and only one fusion was noticed in second and third cervical vertebrae. So out of 200 cervical vertebrae only one fused cervical vertebra was seen in C2-C3. The incidence of the present study is 0.5%.

The fused cervical vertebra in the present study was completely fused on the under surface of the axis vertebrae and upper surface of that of the third cervical vertebrae. The odontoid process of the axis vertebra was stunted, conical and clearly seen.

The fusion of the bodies of the two vertebrae is complete. The anterior surface of the body of the third cervical vertebra is much prolonged inferiorly like that of a normal axis vertebra.

The transverse processes have not fused and are separated on both the sides. Transverse foramina of the axis and the third cervical vertebra on both the sides are present. The spinous process of both the vertebra are

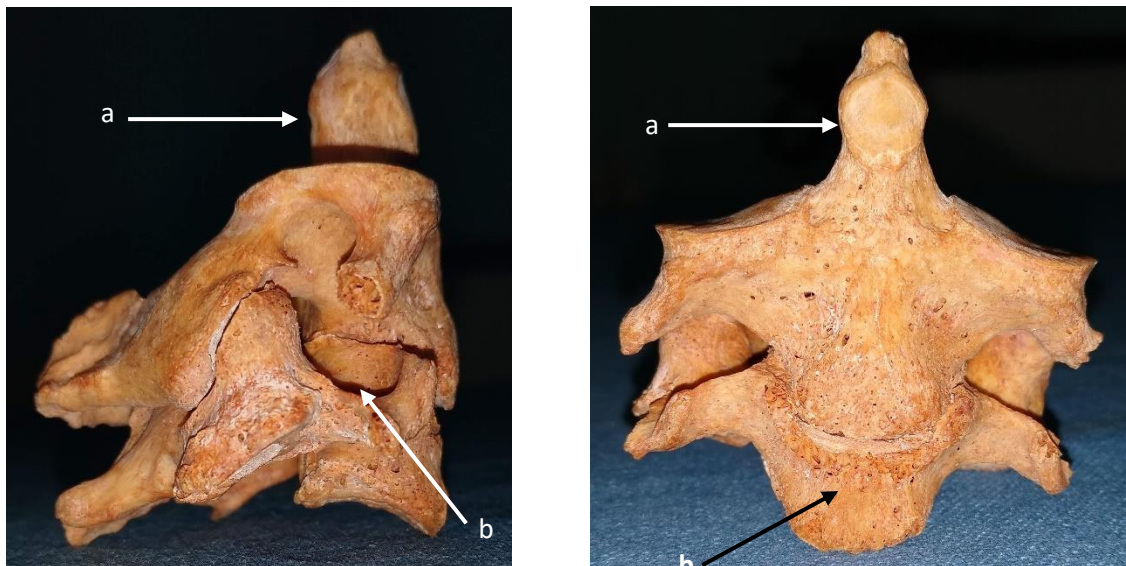


Figure 1: Fused C2 and C3 vertebrae. (a) Odontoid process (b) Site of fusion

present in which the spinous process of axis is bifid and that of the third cervical vertebra is non bifid. The spinous processes are partially fused but the laminae and the adjacent articular processes are completely fused. The right and left foramen transversarium are present in both C2 and C3.

DISCUSSION

Fusion of cervical vertebrae is not a rare finding. Fusion of the cervical vertebrae includes fusion of the facets, neural arch fusion and block vertebrae. Block vertebrae is used to describe the partial or complete fusion either cartilaginous or bony, of either two or more vertebrae [13]. The fusion may be congenital or acquired [14]. Congenital fused cervical vertebrae are one of the primary malformations of the chorda dorsalis [15] which is believed to be due to the defects of the development of the occipital and cervical somite [3,16]. Cause of the fused cervical vertebrae is combination of

environment and genetics which occurs during the third week after conception [17]. Acquired fused cervical vertebrae may be associated with tuberculosis, juvenile rheumatoid arthritis and trauma etc [18].

These abnormalities are also associated with or lead to various clinical signs and symptoms like shortening of spine in the neck region. Trapezius muscle are unduly prominent laterally and give a webbed appearance, neck movement is restricted, scoliosis, kyphosis and torticollis. Various signs of peripheral nerve irritation such as pain, burning sensations and cramps, various signs of peripheral nerve compression like hypoesthesia, anaesthesia, paralysis, weakness, reduced deep reflexes and fibrillations [12]. Patients with craniosyntosis are associated with various skeletal anomalies in the region of cervical spine [9,20,21].

In the present study out of 200 cervical vertebrae fusion of vertebrae was present only

in one specimen (C2-C3). The fused vertebrae were axis and third cervical vertebra. The overall incidence of fused cervical vertebrae in the present study was 0.5%. Same findings were present in previous study conducted by Shand AR on 700 patient's spines in orthopaedic hospital in which the fusion was noticed in C2-C3 Vertebrae and the incidence was 0.5% [22]. Prevalence of fused cervical vertebrae in Lithuanian population was 2.6% [24]. Sharma M, Baidwan S, Jindal AK, Gorea RK studies showed 6.25% of fused cervical vertebrae [23].

CONCLUSION

In the present study the overall incidence of the fusion of cervical vertebrae is 0.5% in which the fusion was present in second and third cervical vertebrae. Fusion of cervical vertebrae is associated with various congenital syndromes like Klippel Feil Syndrome, Crouzon's Syndrome, and Chorda dorsalis. The fusion of vertebrae and associated anomalies give rise to various symptoms and signs like Restricted neck movements, severe neck pain, and sometimes associated with sudden death of the patient. Fusion of cervical vertebrae evaluation must be done by X-ray or MRI for preventing serious damage like osteoarthritis by early diagnosis and treatment. The knowledge of the fusion of cervical vertebrae is important academically for anatomists, clinically and surgically for radiologists, orthopaedic surgeons, neurosurgeons, and orthodontists' surgeons. During endotracheal intubation the anaesthetists must be aware of fusion of cervical vertebrae to prevent any damage during extension of the neck.

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Guest Submission

RIGHT TO PROPERTY, POVERTY AND LAW IN INDIA

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ABSTRACT

It is common phenomenon, all over the country, particularly since independence from the clutches of the colonial power of the British Empire, to witness and experience ever growing unceasing quest for a dynamic and just new social order on this sacred sanctum of the Mother India. There is ever growing unceasing quest for the new social order because of the tremendous fillip given to the revolutionary rising expectations created in the minds of the common people due to the ceaseless efforts, in arousing term to rise from slumber, made by Mahatma Gandhi, Dr. Babasaheb Ambedkar, Jawaharlal Nehru and host of others. The struggle started much before independence in arousing an awareness amongst the masses for their dignity, freedom and independence. Mahatma Gandhi, who lived half-clad, endeavored to symbolize the poverty of the people. Dr. Babasaheb Ambedkar struggled for equitable sharing of political power by all sections of the Indian society and he wanted to establish "State Socialism" and Jawaharlal Nehru believed in establishing a new society on the foundation of the socialism. Human freedoms necessary for dignity of the man are explicitly incorporated in the constitution. One of the human freedoms called the right to property finds place.

Keywords: Rights, Property, Poverty, Law.

INTRODUCTION

In scheme of Part III-Fundamental Rights of the Constitution of India. Arts. 19 (1) (f) and 31 deal with the right to property. The right to property under Art. 19 (1) (f) applies equally to concrete as well as the abstract rights of property¹. This view was reaffirmed by subsequent decisions². The expression property is a term of wide connotation. Property as a legal concept is the sum of a bundle of rights. In the case of tangible

property it would include the right to possession, the right to enjoy and use the right to destroy, the right to retain, the right to enjoy and use, the right to destroy, the right to retain, the right to alienate and so on. Thus property is a bundle of powers. Traditionally property is regarded to have individual functions to perform, whereas lately, the property is described to have social functions to fulfill. It is individually and socially useful. American and

¹ Commissioner, H. R. E. v. L. T. Swamiar, AIR 1954, SC, 282.

² S. M. Transport (Pvt.) Ltd. V. Shankarswamigal Mull, AIR 1963, SC 864. Etc.

Soviet Jurists share a common view of- “the controlling significance of property in the social order”³. In the modern State it is now established fact that property is not an exclusive relation of dominance exercised by one person, physical or corporate, over the thing or even a number of quasi-things but that it is a collective description for complex of powers, functions, expectations, liabilities which may be apportioned between different parties to a legal transaction. The character of collective description of property is equally true in respect of both private property and corporate property. There may be separation between the power to enjoy property and the power to control property due to emergence of the corporate property but the characteristics as a bundle of rights, a bundle of powers and a collective description of powers, liabilities etc. has remained with the property. Thus the right to property denotes completes form of posser to use it within the scope allowed by the law. The right to property guaranteed by the constitution is the realized right. It is not merely recognized and declared but also judicially protected and made enforceable. It cannot be abridged or taken away in view of Art. 13 (2). It imposes injection against the state power to abridge it or to take away it. The state cannot act derogatory to it because any act repugnant to the right to the property can be void ab initio. It may be noted that the right to property is subject to imposition of reasonable restrictions by the state. Our constitution has recognized the right to property as a relative right subject to reasonable restrictions which can be general public or for the protection of the interests of any Scheduled Tribe under Art. 19 (5). Any person

having property can be deprived off his property by authority of law enacted by the competent legislative body within the permissible limits imposed by the constitution. The property can be acquired from the private person by the state for public purpose for which an amount which may be fixed by law or which may be determined in accordance with such principles and given in such manner as may be specified in such law. Tax which is a form of property can be levied and collected by authority of law. Taxation can be a scheme designed in such a manner which can reasonably restrict the right to property. It follows that the right to property is not absolute but relative. It is subject to ‘police power’, power of ‘eminent domain’ and ‘power of taxation’. Some thinkers regarded the right to property as transcendental and sacrosanct. It is regarded innate and inveterate. The right to property as an inalienable, ‘natural’ right of the citizen immune from interference by government or other individuals becomes a central element in the legal philosophy of Locke, who regarded right to life, liberty, property and pursuit of happiness as inalienable and natural rights. Thus, the right to property come to be known as the right included in the very title of birth of a man as human being. The paramount position so attributed to the right to property, however, did not remain unchallenged. With the passing of time, the right to property come under varied and mounting tensions and pressures from the weaker sections of the people in the world. The writings of the liberal thinkers of the world particularly influenced to transcendental position of the right to property. Bentham proves convincingly that: “Property and law are

³ W. Friedmann: Law in a Changing Society, pp. 71.

born together and die together. Before laws are made there was no property; take away laws, and property ceases"⁴. Property is a creature of law. When there was no law, there was no property. Property is the outcome of protections provided by law. In the medieval scholastic philosophy of St. Thomas Aquinas, and even centuries later of Suarez, the right to property was not claimed as a "natural" law, but as a matter of social utility and convenience. Thus, property is not "natural" or inalienable but foundation of expectations of human actions regarding its utility for maintenance of human dignity and development of human personality. It is analyzed that the right to property is a bundle of powers, liabilities, expectations and functions. This is true whether it is individual property or corporate property. It is concluded that law is the creator of property as it provides protections to the relations arising out of anything which is property and the person who is the master of property. Property is a source of powers. Property is a key of dominance. Property is a symbol of high status. Property creates groups of rich and poor people. Property divides people not unnatural haves and have-nots' classes. Property is an instrument of exploitation of the weaker sections of the people by the rich sections of the people. The situation outlined above is true in this social restraints on the right to property is as urgent as it has ever been. The need is felt deeply because of appalling poverty of timing millions of the people in India. It is not difficult for even a casual observer to find that thousands of people in different parts of the country are ill-fed, ill-clothed and ill-housed. One of the results of the right to private property

is that poor people are not free from human wants. Their biological needs for existence are not adequately fulfilled. In the case of such people standard of living is incredibly low. It is lower than the bare minimum of subsistence. There are at the same time certain classes of people who are somewhat above the minimum subsistence level and are able to do their work efficiently. In other words these people have enough food, clothing and housing accommodation. Those who are able to enjoy more comforts will have more comforts will have more than necessary to keep them. In an efficient condition. They are, therefore, called the rich class in society. Thus poverty has absolute and relative meanings. When it has absolute meaning, poverty refers such class of people those who live below bare subsistence level or live below the poverty line. Of such class of people biological existence is under a threat of death. Their survival is difficult. Their growth is impossible. They die slowly. Their death is sure due to unsatisfaction of bare needs of life. Their death due to the want of food, clothe and housing is an inevitable decree passed against them by a society based upon man made economic inequality. When it is stated is not exaggeration but the statement of fact. Go to any village, find people living in small huts or without shelter. Go to any slum of big cities, find people living in the most wretched conditions. What sort of living is this? These localities are demonstrations of degrading, disgusting and inhuman life of the poor people. These localities are the laboratories of poverty where-in experiment of improvements of their pathetic conditions must be undertaken by the state without further delay. It is inhumanity

⁴ Jeremy Bentham – The Theory of Legislation, pp. 113.

imposed upon human beings by the protection of right to property of rich people who get title to exploit the poor people. When poverty has relative meaning, it denotes that 'A' is rich than 'B' but poor than 'C'. Here 'A' may have sufficient food, clothes and housing accommodation than 'B'. But 'C' is rich than 'A'. 'A' and 'C' may belong to two different classes. Here 'C' may have more than sufficient required, but 'B' may have just sufficient required for efficiency. There may be other class of people which may be absolute rich. The class of people can be regarded absolutely rich when it has apportioned excessive wealth of nation in the form of means of production like lands and industries, urban housings, shares in corporate property etc. This rich class dominates a society. It is the economic ruling class. This class rules economic life of the poor. Poor are made dependent economically for their livelihood on this economically ruling class. It is their writ which runs in the daily life of the poor masses. Let us understand the causes of poverty in our country so that a proper plan to remove poverty can be thought of for effective implementation within the frame structure of the constitution of India. History reveals that property is a very deep-rooted phenomenon in our country. It is ancient situation. Unfortunately, poverty is glorified and made eternal by religious precepts. It is evident that poverty is sociological, economic, psychological and religious concept. In this country social status, property and authority are the sources of powers. Lower social status in the scheme of the organization of the society makes a man poor. He remains socially outcasted. Denial of the right to property to

some castes people have made them poor. Religious sections in dividing people into higher and lower economic groups have rendered the latter group poor and made the former group rich. Inferiority complex created and inculcated by the persons belonging to the higher strata of the Indian society have perpetually suppressed the minds of the poor people in revolting against their poverty due to psychological impacts. What is worst of poverty in this country is that it considers a rich person as a God and treats a poor person as less than a man. What is worst of poverty in this country is that it regards poverty immutable and as a matter of fact of man due to his so-called past sins. And above all, what is worst of poverty in this country is that poverty is regarded as an official doctrine by Hinduism by providing religious sanctions for enforcing it. Thus it is indoctrination of poverty which has operated as opium in keeping poor as perpetually poor. Prof. C. N. Vakil has enumerated⁵ the following six causes for growing poverty in our country:

1. Not enough work for the vast mass of the agricultural population during the off season.
2. The social system which imposes the burden upon one person of supporting a large family.
3. The Presence of large number of able-bodied beggars misnamed Sadhus.
4. Enervating climate.
5. Resignation of fate and consequent want of determination to fight against poverty.
6. Faulty educational system.

Conceding that the causes of poverty advanced by Prof. C. N. Vakil are real, the problem as to whether they, however, are exhaustive is not solved. On research one finds that these

⁵ Law and Poverty p. 22 – Reproduced from "Harijan" M. K. Gandhi, 8-9-1928.

causes are enumerative, illustrative and not exhaustive. One can find more causes revealed by the Indian social history. They are as under:

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7. Denial of the right to property to Sudras and creating economic groups within the steel frame structure of the caste system.

8. The kind of social system based on graded economic and social inequality prevented occupational mobility.

9. Deliberate suppression of the downtrodden people creating inferiority complex in them. These can be regarded the conditioning factors of poverty. The poor never thought of revolting against poverty as he regarded poverty as predetermined fate of his life due to the past sins. The Causes advanced can be supported by evidence. Sudras Were Termed as 'Das', 'Dasyu' or 'slaves. Dr. P.T. Borale has established that "Das" is a person without property⁶. Manu ordained that the principal duty of the Sudra was the service to Brahmin may seize the goods of his Sudra for as he (Sudra) can have no property; his master may take its possession⁷. Sudra could have dogs, donkeys, earthen pots and such other things of no property significance. Mayne has expressed the view the Sudras formed the bulk of the population of Aryavarta⁸. Sudras who constituted majority of the population in Aryavarta were poor because they were the persons without property, as they were denied the right to have property of their own.

Prof. V. N. Dandekar⁹ has proved by his recent research that the conditions of the bottom 20 per cent of the rural poor have remained more or less stagnant. The condition of the bottom 20

per cent of the urban poor has definitely deteriorated and for another 20 per cent of the urban population it has more or less stagnant. Thus 60 per cent population in our country is living under poverty level. It is disheartening to note that out of 60 per cent poor people 80 per cent the Scheduled Castes, Scheduled Tribes, Nomadic, Denitrified Tribes and other backward classes. In rest of 20 per cent, 15 per cent are Muslims and 5 per cent are from amongst higher castes Hindus. 90 percent Scheduled Castes were living in villages. Their number in villages is on decline due to mobility to the big cities on permanent or semi-permanent migrations. Out of 90 percent Scheduled Castes 40 Percent are landless labourers and rest of them have below subsistence level land holdings. They are lowest in the economic groups in this country. They are poubly sufferers, for they are socially out-castes and economically salves. The detailed study and research done by the committee constitution by the President of the Union of India has established the pathetic social and economic conditions of the Scheduled Castes. The committee's report states that the economic backwardness of Scheduled Castes, no doubt is due to the injustice, exploitation, and oppression they suffered for other castes for centuries in the past. The origin of this can be traced to the origin of caste system in India, Scheduled Caste members had been made use of for the economic uplift and well-being of higher castes in Society. For years they worked under chains as slaves. They were sold like commodities, for hard labour and betterment of others. They worked hard day and night

⁶ Dr. P.T. Borale, Segregation & Desegregation in India, pp. 85.

⁷ Manusmriti, VIII. P. 417.

⁸ Mayne, John. D., Treatise on Hindu Law & Usage (10th Ed. 1938), pp.8.

⁹ V. N. Dandekar: Poverty in India.

faithfully for their masters, who never cared for their welfare. Their wives and children were half naked and semi-starved. This continued for centuries together¹⁰. Advancement of such people is cause of bitterness amongst others. Significantly their advancement in life has been the cause of atrocities committed on them by rich class of caste-Hindus. This is the most unfortunate. This has to be fought on all levels. As against this background the constitution of India has laid down the scheme of social justice for removing poverty and establishing economic equality on the basis of one man one value. The successful framing of the constitution laying down the objective of social justice can be regarded triumph of legalism over realism¹¹. The noteworthy features of the scheme of social justice proposed by the constitution can be briefly underlined:

1. It declares that the objective is to usher in a new social order where there will be justice: Social, economic and political.
2. It declares certain rights as fundamental rights and they are made enforceable in a court of law. They include civil, religious political, social, economic, educational, employment. Cultural and health rights.
3. It specifically directs to, and imposes constitutional obligations on the state to bring about the necessary conditions for creating other rights, particularly, social and economic rights by implementing directive principles.
4. The said fundamental rights and the statutory rights recognized, protected and made enforceable for implementing the directive principles are interwoven into the grand design

of social justice through the justiciable laws of social control.

Much dust has been raised, without raising sufficiently the standard of living of the poor people, by the controversy ranging around whether the fundamental rights should give way to the directive principles of vice versa. In fact the scheme of Part III and Part IV of the constitution reveals that the both deal with civil, political, social, economic, educational, and cultural rights. Both are fundamental in the governance of the country. But the former are the realized and existing rights and, therefore, they are regarded as an injunction against the state, for the state cannot interfere with these rights except within the permissible limits. Whereas the latter enumerate the rights to be realized by the constructive efforts of the state. Right to work, right to leisure, right to education, right to living wages, for instance, are very desirable rights but unless the state creates conditions by positive actions such rights cannot come into existence. Unless the state creates employment opportunities, generates conditions for leisure, establishes education institutions with favorable situations and provide for living wages; these rights will continue to remain on paper of constitution. They will remain merely pious declarations and aspirations. The underlying objective in incorporating the directive principles was tersely declared by Dr. Babasaheb Ambedkar; "While we have established political democracy, it is also the desire that that we should lay down as our ideal economic democracy¹². the framers of the constitution

¹⁰ Report of the Committee on Untouchability, Economic and Educational Development of the Scheduled Castes, Part II, 1968-69, pp. 109.

¹¹ Id.

¹² Constituent Assembly Debates, Vol. VII, pp. 494-95.

were clear in their minds in declaring the objective of social justice in removing poverty and establishing dignity of all citizens on the principles of equality.

Before dealing with the scheme proposed by the constitution for removing economic imbalances between different classes of the poor, it is desirable to survey briefly some important schemes in this field known to the history for the benefit of clarity of views in this respect, so that concrete conclusions in making acceptable suggestions can be worked out. The lord Buddha was the first in the world history to propose the definite scheme for removing inequality in the society. His scheme includes a plan to remove poverty peacefully, by bringing change in the mind of man. It is well known that Buddhism stands for abolition of "Dukka" in the world. "Dukka" is one of the four noble truths propounded by the Lord Buddha. While setting the wheel of His Dhamma in nation for the benefit of the people, he proclaimed to the world that there exists "Dukka." The term "Dukka" has been interpreted in different ways as rebirth, pains, passions or greediness etc. Dr. Babasaheb Ambedkar has established that there are lots of places in the Buddhist literature where the Buddha has used the word "Dukka" in the sense of poverty. There are some places in "Diggha Nikya" wherein the word "Dukka" is used in the sense of poverty. The Lord Buddha stood for abolition of "Dukka" that is private property, which he regarded as cause of poverty. This He proved to the world by introducing strict rules of holding of only seven things by a "Bhikku" of the Sangha. It shows that Buddhism will not stand in the way of any body, who wants to abolish the right to private

property from removing poverty from our country. Moreover, the Buddhism provides the safest and soundest method for removing poverty as Buddhism believes in the peaceful transformation in a society wherein nothing is permanent and everything is on the stage of influx a change.

Marxist analysis clearly regards property as the key to the control of modern industrial society. The capitalists, by virtue of his ownership of the means of production, effectively controls society. He exercises the powers of command which ought to be vested in the community. Hence, Marxist theory demands a transfer of the ownership and the means of production to the community, which, in the initial states exercises its control through a dictatorship of the proletariat and coercive power of the State, until the latter 'wither away.' Modern Soviet philosophy still maintains that, with the transfer of ownership in substantially all means of production to the community, the problem of social justice has been substantially solved in the Soviet Society¹³. A method of abolition of private property by Marxism believes in bloodshed if peaceful changes are not possible. Karl Marx gave a call to the workers of the world to unite as they have nothing to lose but everything to gain.

A scheme suggested by Dr. Babasaheb Ambedkar is based upon the objective of the successful working of political democracy. He succinctly points out that political democracy rests on four premises which may be set out in the following terms:

1. The individual is an end himself.

¹³ Pashkov: Transactions of the third World Sociological Congress (Amsterdam 1956.)

2. That the individual has certain inalienable rights which must be guaranteed by the Constitution.

3. That the individual shall not be required to relinquish any of the constitutional rights as a condition precedent to the receipt of a privilege.

4. That the state shall not delegate powers to private persons to govern others¹⁴.

He asked us to inquire from any unemployed person whether fundamental rights are of any value to him and pointed out that any unemployed person if given a choice between a job and freedom of speech, he, unemployed person, out of fear of starvation, would make a choice of job and not of freedom of speech. He concluded that the unemployed are thus compelled to relinquish their fundamental rights for the sake of securing the privilege to work and to subsist. It can be agreed that where the state refrains from intervention what remains is liberty. To whom and for whom this liberty? Obviously this liberty is to those we have property to increase rent, to charge more prices, to hoard more goods for more profit, to exploit workers. In other words what is called liberty from the control of the State is another name for the dictatorship of the private owner of property.

Dr. Babasaheb Ambedkar suggested that the State should plan the economic life of the people on lines which would lead to highest enterprise and also provide for the equitable distribution of wealth. The state ownership in agriculture with a collectivized method of cultivation and a modified form of state socialism in the field of industry were the main objectives of his economic plan. He was a believer in state socialism. "State socialism" is

essential to the rapid industrialization of India. Private enterprise cannot do it; and if it did, it would produce these inequalities of wealth which private capitalism has produced in Europe which should serve as a warning to Indians; Consolidation of holdings and tenancy legislation are worse than useless. They cannot bring about prosperity in agriculture. Neither consolidation, nor tenancy legislation can be of any help to the 60 millions of untouchables who are just landless labourers. Only collective terms can help them¹⁵.

Observing that basic industries should be owned by the state, he said: "Insurance shall be a monopoly of the state. Agriculture shall be a state industry. Land will belong to the state and shall be let out to villages without distinction of caste or creed in such a manner that there will be no landlord, no tenant and no landless labourers¹⁶. Now the scheme to eradicate poverty envisaged by the constitution of India may be briefly analyzed.

1. The new social order should be one where there will be gainful employment to everyone, economic equality for all, social justice without discrimination, prosperity by more and more production and individual freedoms within permissible limits.

2. The constitutional obligations are imposed on the state to create with constructive and positive acts the necessary conditions by economic and social developments and equitable distribution of means of production.

3. The legal controls imposed by the legislative and executive acts on the right to property should be within the permissible limits. The issue of permissible limit is kept elastic so that judiciary should adjust them to meet the

¹⁴ Dr. B.R. Ambedkar: State and Minorities, pp. 32

¹⁵ Id

¹⁶ Id.

requirements depending upon the aspirations and demands of the people on the basis of time, circumstance and needs.

The directive principles laid down by the constitution require the state to strive to promote the welfare of the people by securing and protecting as effectively as it may a social order in which justice social, economic and political shall inform all the institutions of the national life and wants the state to direct its policy towards securing an adequate means of livelihood; that the ownership and control of the material resources of the community are so distributed as best to subserve the common good; that the operation of economic system does not result in the concentration of wealth and means of production to the common detriment; that there is equal pay for equal work; that the wealth and strength of all not abused and nobody is forced to enter avocation unsuited to their age or strength; that children are given opportunity to develop in healthy manner and are protected against exploitation. Another directive imposes obligation on the State to promote with special care the educational and economic interests of the weaker sections of the people and in particular of the Scheduled Castes and the Scheduled Tribes, and shall protect them from social injustice and all forms of exploitations. Besides the latter directive, the constitution by certain provisions for the Scheduled Caste and the Scheduled Tribes incorporated in Part III abolished "Untouchability" and forbidden its practice in any form and has made the enforcement of any disability arising out of "Untouchability" an offence punishable in accordance with law guaranteed the making of

special laws by the state for their advancement; provided for the reservation of appointments in the services. It also by special provisions envisaged in Part XVI guaranteed political and other safeguards including the appointment of a special Officer for the Scheduled Castes and Scheduled Tribes by the President who shall cause the reports received from the special Officer to be laid before each House of Parliament. It is gratifying to note that the framers of the constitution have taken special care in incorporating additional provisions for the advancement and the welfare of the weaker sections of the people with a view to bring about structural changes in the social, economic and political life of the country.

Social justice is objective of the Indian constitution. The Preamble has declared it in the sonorous terms. The Part III and Part IV of the constitution have worked it out in details in its all aspects. Social justice is a bundle of rights. "It is the balancing wheel between haves and have-not¹⁷". Social justice is said in one sense that it is carved of other rights; in another sense it is regarded a preserver of other rights. Social justice means justice to all and not to a favored class. Social justice may demand preferential treatment to the weaker sections to correct the imbalances existing in the society. Social justice may also demand favored treatment to the backward regions to correct the regional imbalance. While justice is administered equal treatment may result into injustice. Equal treatment, therefore, is not similar to justice. Justice may, therefore, require unequal treatment to unequal people. In short, social justice helps to bring about a just society in removing imbalances in social, educational,

¹⁷ K. Subba Rao: Social Justice and Law, P. 3.

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economic and political life of the people. Social justice may be defined as the right of the weak, aged, destitute, women, children and other underprivileged persons to the protection of the State against the ruthless competition in life with the socially higher, economically rich, politically in authority and educationally advanced. Social justice is against the man-made inequalities enforced in the name of religion. Relying upon the scheme of social justice envisaged in the constitution aiming at more production and equitable distributions and protecting the weaker sections and trying purposefully for their betterment, the State has pursued the three objects during the last twenty-seven years:

1. Economic development through Five Years plans.
2. Equitable distributions through laws of social control.
3. Protection to the Scheduled Castes against atrocities committed on them through untouchability Offences Act, now called Civil Rights Protection Act and special financial allocation in the plan budgets for their economic advancement and social upliftment.

The scheme of the new social order laid down by the constitution inspired the Government of India to set up a planning commission by Resolution of March 15, 1950 so as to promote welfare of the people. A plan has to be an effective vehicle for economic development, social changes, educational expansion and occupational mobility, both vertical and horizontal. The Five Year Plans so far designed and implemented have confirmed that plan cannot be a purely economic category.

The First Five year Plan was particularly directed towards the achievement of the directive principles embodied in Art. 39. In

general it covered the whole range of the directive principles laid down by Part. IV. The Second Five Year Plan sought to carry the process further to accelerate the rate of growth and initiative, a strategy which would assist in bringing about structural changes in the economy as to be necessary if the long term objectives of the development were to be achieved. The Third Five Year Plan raised the sights and set the achievement a "good life" for every citizen as the ultimate goal of socialist society that the country had already accepted. The Fourth Five Year Plan sought to consolidate and carry forward the achievement of the three preceding plans, make up short falls as far as practicable and prepare the ground for the self-reliant economy so as to promote rapid progress

towards greater employment and social justice. While the Fifth Five-year Plan was under process, the Congress Party in Power at the Centre was defeated and with the change in Government of the Janata Party, approach to the planning is under-going changes and now rolling plan is being prepared in the Yuvagana Bhavan in Dehli with more emphasize on agriculture and employment opportunities.

While Five Year Plans were implemented, legislative measures were enacted to equitably distribute the major instrument of production, namely, lands in villages. Land reforms by legal controls can be said to be a special feature of the state's effort to establish egalitarian society. The main objects of the land reforms were to declare lands to tenants, to abolish intermediaries, to fix a fair rent payable to landlords, to place ceiling on land holdings, to release the land of the land of the Scheduled Castes and Scheduled Tribes and economically

backward persons form debt contracts, to acquire land for public purpose such as for construction of roads, dams, industries under the public sector, housing colonies etc., for payment of compensation. Besides land reforms, the state through social legislations provided for reservation of seats for admissions in educational institutions and for appointment in services under the state and maintenance scholarships for prosecuting post-matriculation to the Scheduled Castes and Scheduled Tribes etc. The State also took steps in enacting welfare legislations and security legislations for the industrial workers. It also made efforts in providing guarantees of employment to unemployed people. In addition to the legislative measures, law brought urban property under legal controls. Laws in respect of corporate property have been enacted in order to bring it within legal restraints. Companies have been subjected to certain conditions in the nature of their responsibilities under law. The contracts in respect of mineral resources or mineral oil have been brought within the overriding provisions of the constitution. The constructive and positive steps taken by the states have created a base of heavy and basic industries. Engineering, electrical and chemical goods are produced on large scale. Agricultural production has considerably gone up. Constructional activities have increased. Favorable economic atmosphere is created in the country. Some people have certainly been benefited under the Five Year Plans.

High hopes were raised in the weaker sections of the people, particularly in the Scheduled Castes and Scheduled Tribes with the dawn of independence and constitutional scheme providing for removing poverty and raising social status. The promise of a socialist pattern

of society had tremendous impact on people. Their expectations were further increased. Unfortunately, high hopes were shattered due to non-implementation of the constitutional guarantees by both Centre and state governments. A gap between promise and performance remained wide. The poor became more-poorer. The rich became more-richer. The percentage of the people living under the poverty line increased. General economic situation in the country improved but economic condition of the poverty stricken people deteriorated further. Doubting a manner in which Five-year Plans were designed and implemented, Report of the Commissioner for Scheduled Castes and Scheduled Tribes concluded.

There is no doubt that during the last two and a half decades, efforts have been made for the social upliftment and educational and economic development of these communities. A number of useful schemes to achieve that end have also been introduced through various Five Year Plans which have benefited these people to some extent. In the field of general development, however, the country has made tremendous progress in various spheres and in some of them we have achieved spectacular results of which one can feel proud of. No doubt due to all these efforts there has been a general prosperity in the country but only a few have been benefited by it. These benefits have not percolated to the desired extent to the weaker sections. When we look at the balance-sheet of our socio-economic achievements, particularly relating to the upliftment of the Scheduled Caste a Scheduled Castes and Scheduled Tribes, it is observed that the benefits of the socio-economic progress have not fully reached these communities and that there is lot

of ground to be still covered¹⁸. The weaker sections could not receive their due share in national wealth produced under the planned growth. They are kept, where they were. This is very pathetic picture. They were kept on law level because of domination of economically rich class and socially high caste people over the implementation of Five-Year Plans, general attitude of opposition from the masses belonging to the high castes and lack of political determination on the part of the governments, both at the Centre and the states. This situation must change.

Practically all the legislative measures enacted for bringing about the desired changes in the country came under attack before courts of law from a small and rich section of people to protect their vested interests on the grounds of equality before law and right to property guaranteed under Arts. 19, 19 and 31 on the contention that fundamental rights guaranteed by Part III of the constitution cannot be abridged or taken away by law enacted by the state as envisaged by Art. 13 (2). Non justifiability of the directive principles and justifiability of the fundamental rights were the main points of contest before the courts.

The non-justiciable nature of the directive principles has led some people even to believe that they are an outlet for romantic illusions on the part of the draftsmen^{19,20} this indeed is a fallacious and untenable view. Assessing the true significance of the directive principles Prof. Alan Gledhill observed.

"Even though these principles are not directly enforceable in a Court, they are bound to effect

decisions of courts on constitutional questions, just as the provisions of Magna Carta have affected the decisions of English judges and Preamble to the declaration of Independence has affected the decisions of American Judge. Many fundamental rights are subject to reasonable restrictions in the interest of general public. In interpreting these rights, the courts will be obliged to lay down canons for determining what is reasonable and if it offends these directive principles²⁰. The right to property is subject to reasonable restrictions. It means even though it is justiciable but it can be reasonably restricted. Implementation of directive principles for betterment of common people can be said as a reasonable restriction on the right to property. Dr. Babasaheb Ambedkar had remarked that the Directive Principles were like Instruments of Instructions to the Executive and the Legislative furnishing them necessary guidance as to the manner in which power would be exercised.

In spite of the imperative significance of the Directive Principles the judiciary held that directive principles as not being enforceable should run subsidiary to the Chapter on Fundamental Rights²¹. This decision had provoked criticism and in order to circumvent the ruling amendment to Art. 15 by adding Clause 4 was made. The purpose of the amendment was to bring in the Arts. 15, 29 and 46. Art. 46 deal with directive given to the state to promote the welfare to the weaker sections of the people.

In *Mohd Hnif Querishi v. State of Bihar*, the Supreme Court held that the Directive

¹⁸ Report of the Commissioner for Scheduled Castes and Scheduled Tribes, 1973-74, (Twenty-Second Report), pp. 1-2.

¹⁹ D. N. Sen: *From Raj to Swaraj*, p. 79.

²⁰ Gledhill Alan: *Republic of India*, p. 162.

²¹ *State of Madras v. Champakan Dorairajan*, AIR 1951 SC 226.

Principles have to conform to and run as subsidiary to the Chapter on the Fundamental Rights. Nevertheless, the court has to apply the principles of harmonious construction & should attempt to give effect to both as much as possible²². Subsequently the attitude of the judiciary was changed and directive principles were held complementary and supplementary to the fundamental rights²³. The directive principles can provide the test for determining reasonability of restriction on the right to property. The Supreme Court took into consideration Art. 39 in upholding its view that the abolition of Zamindari by the state was for a public purpose²⁴. Art. 43 was resorted for sustaining the validity of the Minimum wages Act, 1948²⁵. With times, there has been greater recognition of the directive principles and their status-vis-a-vis the fundamental rights. Insertion of Art. 31 (c) into the constitution²⁶ by Parliament of our country was a bold step in this direction. The Twenty Fifth Amendment laid down that law giving effect to the policy of the state towards securing the principles shall not be deemed void on the ground of Arts. 13, 14, 19 and 31. The recent Forty Second Amendment has broadened the scope of the norm laid down by the Twenty Fifth Amendment and has accorded priority to all the Directive Principles over Arts. 13, 14, 19 and 31. In *Kesavanand Bharti v. State of Kerala*²⁷ Mathew, J. held that "The fundamental rights themselves have no fixed content, most of them are empty vessels into which each generation must pour

its content in the light of the experience. Restrictions, abridgement, curtailment and even abrogation of these rights in circumstances not visualized by the constitution makers might become necessary, their claim to supremacy or priority is liable to be over borne at particular stages in the history of the nation by the moral claims embodied in Part IV. If the Fundamental Rights are regarded as "The very foundations and "corner stone" of the democratic way of life ushered in this country by the constitution²⁸.²⁹ then the directive principles may be looked upon as laying down the path of the country's progress towards the allied objects and aims stated in the Preamble, with Fundamental Rights as the limit of the Path like the banks of a flowing river which could be mended or amended by displacements, replacements or curtailments or enlargements of any part according to the needs of those who had to use the path. The limits of the path are not static or stationary but dynamic and enlarging depending upon the need of fulfillment of the Directive Principles in attending the goal of justice, social, economic and political.

Mainly, the mandate in Art. 37 which declares that the provisions contained in Part IV shall not be enforceable by any court, but the principles there in laid down are nevertheless fundamental in the governance of the country and it shall be the duty of the State to apply these principles in making laws was addressed to the Parliament and the State legislatures, but

²² AIR, 1959 SC 731.

²³ *C. B. Boarding & Lodging v. State of Mysore*, AIR 1969 SC 84.

²⁴ *State of Bihar v. Kameshwar Singh*, AIR 1958, SC 352.

²⁵ *Bijay Cotton Mills v. State of Ajmer*, AIR 1955, SC 33

²⁶ Ins. By the Constitution (Twenty-fifth Amendment) Act, 1971, S. 3 (w. e. f. 20-4- 1972).

²⁷ AIR 1973, SC 225.

²⁸ Per Gajendragadhar CJ in *Sajjan Singh v. State of Rajasthan*, AIR 1956 SC 845.

even court of justice while doing the job of interpretation of law should apply the mandate as the phrase "it shall be the duty of the state to apply these principle in making laws" includes court of law within the ambit. It has been held by the Supreme Court in *Balwant Raj v. Union of India*²⁹ that the phrase "making of laws" is wide enough to include their interpretation and therefore the courts must interpret laws in the light of the directive principles. It may be appreciated that the Directive Principles laying the scheme for removing poverty cannot be ignored by the State as the right to property may be fundamental to the property owners but the Directive Principles are certainly fundamental to the poor masses. This view can be justified on the ground that while we have established political democracy, it was also the desire that we should lay down as our ideal economic democracy.

The right to property is regarded as entrenched provision against economic equality. The injunction of the right to property against the state is treated operative on the ground of interpretation given to the term "compensation" to the unamended Art. 31 (2) and the subsequent interpretation given to the expression until recently. This contention appears by and large real when we-examine the decisions handed down by the Supreme Court of our country in this regards. The Court held that "compensation" means a full and fair payment equivalent at the market value of the property acquired by the state for public purpose³⁰. In order to circumvent the effect of this decision Clause 2 of Art. 31 was amended and it was provided that the legislature shall not

be called into question in a court of law. However, the decision of Mrs. Bela Banerjee's case was reiterated in *State of Madras v. Namasivya Mudiliar*³¹. By the Twenty Fifth Amendment the Very word "Compensation" has been substituted by the word "amount" in order to avoid the implication that the full-market-value of the property is payable by the State to a person whose property is acquired for public purpose. It is notable that even after this amendment of 1971 the court can interfere if the "amount" is illusory or unrelated to the nature of the property taken, which results in no payment³². It may be noted here that the application of the Art. 31 (2) is altogether excluded in the cases coming under Arts. 31 (A) & 31 (d), so that in these cases, the court shall have no power to interfere even though no "compensation" at all has been provided. It is well known that the interpretation given by the Supreme Court to the relevant provisions of the constitution involved in *Golaknath Case* and other cases dealing with right to property and other fundamental rights vis-à-vis the amending power of the Parliament under Art. 368 provoked criticism even to the extent of demanding committed judiciary. Of course, this was not a tensible demand as it undermined the independence of judiciary.

It is suggested that in determine the payment of "amount" for acquiring private property for public purpose, a rule be laid down in classifying the property owners into two groups, namely, rich and poor. The demarcating line with regard to the determination of the two groups of persons relating to the total holdings of their individual property can be determined

²⁹ AIR 1968 All 14.

³⁰ *State of West Bengal v. Mrs. Bela Banerjee*, AIR 1954 SC 170.

³¹ AIR 1955 SC 190.

³² *Keshavananda Bharati v. State of Kerala* AIR 1973 SC 1461.

on a rational devised on the basic of maximum property required for an unit of five persons in a family for fair and official living in the Indian context. It is submitted that an "amount" be paid only to those persons belonging to the poor group, when their property is acquired by the State for public purpose and no "amount" be paid to the persons belonging to the rich group. The scheme suggested may be justified on the ground of classification without offending the concept of equality before law as even Art. 14 allows classification for the purpose of legislation in respect of privileges conferred or obligations imposed. Justice demands unequal treatment to unequal persons. Denial of "amount" to the rich persons would certainly be justified from the point of view of public interest and economic justice in order to redress imbalances. It is submitted on the basis of the analysis gone by that any scheme for removing poverty must satisfy the following conditions which can be justified on value principles,

1. That it shall ensure smooth functioning of political democracy avoiding Dictatorship.
2. That no economically powerful person shall be allowed under any condition to impose arbitrary restraints on economically poor persons and dictatorship of private owners of property shall be avoided.
3. That the fundamental right to property shall be deleted from Part III of the constitution and the right to property shall be placed in other suitable part of the constitution as it is in the case of freedom of trade, commerce and intercourse within the territory of India incorporated in Part XIII of the constitution.
4. That the right to work shall be regarded as a fundamental right and be included in Part III of the constitution.

5. That agriculture shall be state industry and all agro-industries shall be nationalized.
6. That insurance shall be a monopoly of the state.
7. That all heavy and basic industries shall be owned and controlled by the state.
8. That consumers co-operative societies shall be organized on a national scale for the purpose of equitable distribution of goods.
9. That small scale and cottage industries shall be managed by co-operative societies.
10. That revolutionary structural transformation in the society shall be promoted.
11. That top priority equal to that of defense shall be accorded to the economic development and social upliftment of the Scheduled Castes and Scheduled Tribes for the next twenty-five years and provision made to that effect in the constitution shall be unalterable or unamendable for the period of the said years.
12. That the citizens who have embraced Buddhism on or after January 26, 1950 shall be entitled to the facilities granted by the constitution to the Scheduled Castes.
13. That education at all stages shall be free irrespective of income, and
14. That "Reasonable Restrictions on Caste Marriages Act" shall be enacted by the parliament for promoting fraternity.

Unless a very comprehensive view is taken of the entire developmental problem, any effort made will be a half-hearted and incomplete. The scheme suggested has to operate from the base of political democracy because it is the political democracy alone which guarantees to the workers the right to join trade unions and the right to collective bargaining. It guarantees the freedom of speech and expression which includes the freedom of press without free

censorship. Thus it ensures participation and involvement of citizens in discussion and further it ensures the consent of the people on which democracy is founded. The guarantee to the right to work will alone solved a monstrous problem of unemployment. This can be done by recognizing the right to work as a fundamental right; consequent to this the right to property will have to be removed from Part III of the constitution. The entire land, basic and heavy industries will have to be nationalized with a view to provide employment to the unemployed people and to increase desired rate of growth so as to achieve higher physical targets. Unfortunately, the problem of poverty in our country is not, as seen earlier, merely economical. It is the complex problem with social, psychological, economical, educational and religious sides. It is, therefore, massive and determined all sided steps have got to be made. In view of this, it is submitted that the comprehensive social legislation must be enacted and ceaseless efforts on war footing through all medias be made to educate public opinion on modern values incorporated in the constitution. Pitfalls in the old social order in the way of removing poverty be told to the people. A scheme of general and moral education will have to be expanded and scrupulously implemented.

Given the freedom of choice for consumption, freedom of initiative, freedom to attend the highest possible individual development depending upon natural faculties and capabilities of each individual, and freedom to earn and ration such property which is necessary for unhampered development of individuality, the scheme submitted can be justified on value principles of liberty, equality and justice which have been declared through

the resounding expressions in the Preamble of our constitution.

The value of liberty, namely, that will and not force, is the basic of authority and the value of justice or the idea that right and not might is the real basis of political society can be justified on the highest value, namely the dignity of man. Kant expressed the hypothetical view that if there should be anything of absolute value on earth it could be the dignity of the individual. The dignity is the essence of every human. Being. How can the dignity of a man be maintained without he having been free from wants and fears? It is on the moral basis of making every person autonomous and securing to every person dignity, poverty which necessarily compromises autonomy and dignity has to be eliminated and legal controls have to be placed on the right to property. As political authority can be justified on the consent of the governed, the curtailment of right to property of private individual can be justified for the maintenance of autonomy and dignity of the man. Intervention by the State with the right to property must be taken as the steps in the direction of enlarging the scope of moral autonomy of every poor person.

Liberty is construed not merely a minimum of civil and political rights but securities created by legal restraints that the economically weak will not be at the mercy of the economically strong. The term liberty has no one meaning. It is the expression of wide import. It has different shades of meaning. It is personal, social, economic, educational, public, national and so on. Liberty is, in fact, equality in action. But equality in action does not mean that all men perform identical functions but it means that all men are equally protected against the abuse of power. The poor has to be protected against the

abuse of power by rich. Power is effective instrument of suppression and oppression unless it is controlled by law or accompanied by compassion and love. Unfortunately in the Indian Society compassion and love are not found in universal operation. These are the virtues limited to the each caste. The Indian society is divided into several castes. As a matter of attitude one caste person does feel wrong morally to exploit a person belonging to other caste. Hence there is the necessity of the legal protection to the weaker sections of the people against the stronger sections of the people.

The necessity of protecting the weaker sections of the people becomes more evident when one understands that the power, in the Indian society, is derived not only from property, but also from authority and social status. Law, therefore, has to control the power in all these three respects, namely, property, authority and social status. Blackstone has observed that the liberty in order to possess it effectively must be the controlled liberty. The truth of the matter is expressed by Prof. Pollard in his "The evolution of parliament: "There is only one solution of the problem of the liberty, and it lies in equality, the liberty of the poor depends upon the restraints of the rich. When economic system citizens into groups, its effect is that freedom itself is similarly graded. In such conditions, liberty becomes the privilege of a class, nor the possession of nation. Equality demands the removal of gradations of citizens into groups. Liberty is thwarted by the pressure of an economic system which vests in the minority of the property owners the control of lands and industries without access to which the majority cannot live, and thus enables the former to impose its will on the latter, without physical

compulsion, but by economic duress. Such society can rightly be described held-free and half-slave. Politically free and economically under the dictatorship of the property owners.

Since political arrangements may be such as to check excess power, conversely economic arrangements may permit excessive economic powers to private owners of property. Such a society is politically free but economically not free. Such is the situation in Indian today. This contradiction has to be removed. The contradiction has not yet been removed with the zeal and determination required by the enormous nature of the problem because the political machinery vested with the power of imposing legal controls is manned by rich class and higher castes people. It is their vested interests which makes them to perpetuate their dominance. Power feeds on power. Let the people in dominant position realize that the contradiction will have to be removed by sacrificing their interests for the good of all.

Relying upon the concept of distributive justice one may rightly conclude that although distribution according to need gives a different result from distribution according to merit, yet both are not only sanctioned by egalitarian standers of justice but also supported because justice is included in every segment of equality. Justice demands that the poor should not be asked to wait till the nation becomes prosperous; but while the economic progress is made, equitable distribution of material wealth of nation is done. Thus the process of progress and distribution should go hand in hand. Distributive justice serves to secure a balance or equilibrium among the numbers of society. The principle justification for democracy can be the rule of equality of opportunity. When equality of opportunity results into inequality,

special facilities in the form of compensatory discrimination are justified. The test of equity of opportunity is the equality of results. When results are unequal, then preferential treatment to the weaker sections of the people is justified. It is because, what society wants is the best and not only the fittest, for the fittest may be the wicked and the best may be the weakest. Here comes the moral ground for intervention by the state of the weakest.

Equality is both, subjective and objective. It is subjective in the sense that it must exist in the framework of mind of every one and it is objective in the sense that it must exist in the material harmony in the whole society. The subjective element of equality is the highest value because equality is reasoned from the heart on the basis of which the objective equality can be achieved. It demands refinement of minds. It needs compassion. It requires absence of rigid attitudes. When the higher values fail, revolutionary changes in a society take place through violence. The scheme of legal controls suggested in this paper believes in peaceful revolutionary structural transformation in the society. Dr. Babasaheb Ambedkar in his speech delivered on the 17th September 1943 to the All-India Trade Union Workers Study Camp held at Delhi said "Social and economic democracy are the tissue and the fibre of a political democracy. The tougher the tissue and the fibre, the greater the strength of the body. Democracy is another name for equality.

It is true that a man is not a bundle of appetites demanding satisfaction, but he is a bundle of conscious energies seeking to be exerted. Aristotle said to man does not live by bread

alone, but it must be understood that man cannot live without bread also. A life of culture can be made possible where there is sufficient leisure for a man to devote himself to a life of culture and leisure is quite impossible unless some means are found to live honorable life free from economic duress of others. Most people cannot exert their conscious energies because they have no means in the form of employment to do that. Most people are eager to sell the use of their energy and skill in the market for they have nothing to sell to earn their livelihood. Legal control as outlined earlier on the untrampled use of the right to property have necessarily got to be placed to enable such people to sell their labour, skilled or unskilled, in the market at the rate of living wages. It must be undisputable that for the vast majority of the people, the most essential economic interest is the right to use one's labour, and to be protected in the exercise of this capacity. It leads us to the obvious conclusion that the mere social restraints on the right to property will not solve the problem of poverty unless right to work is included in the scheme of fundamental rights. Every person has the right to life. Several subsidiary rights flow from this basic right to life. The most fundamental of the subsidiary rights is to labour on this earth to earn bread. Hunger is natural instinct. Man endeavors to satisfy it, but how a man who is denied the right to work by the society can satisfy the hunger? Man's right to life necessarily give him the right to work. In *Sukkhdev Singh & others v. Bhagatram sardar Singh*³³ Mathew, J. held that the right to hold a job should be treated as property and made a fundamental right. It is submitted that the right to work should also be regarded as a

³³ Civil Appeals Nos. 2137/72 etc.

fundamental right. Because labour is a commodity. It is perishable commodity. Sometime it is the only commodity for sell by a poor man and, therefore, this commodity must find the protected market. Every person has a share on this earth, which belongs not to few but to all. Property is power and the administration of private property should no more lead to the arbitrary use of power over other human beings³⁴.

In practically all developing states, one of the paramount problems is revolutionary structural transformation principally through legislative, administrative and judicial processes of traditional and static, social and legal institutions to the needs and demands of societies aiming at economic development and social justice. The stated and cherished aims of the developing states are often incompatible with the existing structures of social organizations. It is in these types of societies that the role of law becomes most evident and important³⁵. In a system where law is only policy and not rules, an exclusive concern with it is automatically ruled out. Law cannot afford to ignore the socio-economic problems confronted by a society. A lawyer has constructive role to play. A lawyer in collaboration with sociologists and economists can make immeasurable contribution to the development of new norms required for changes, peaceful changes in a society. This has got to be sufficiently realized. Lego-Socio-Economic analysis to the poverty problems will help in shaping desired changes and achieving the fore-ordained goals. Such type of analysis reveal that legal institutions of

traditional kind are not meeting challenges of ordering: both economic and social systems to the proclaimed objectives. It is from this point of view management technique becomes useful in productivity and distribution. The economic activity of the State, therefore, entails the institutionalization of legal controls. This can be regarded a practical pre-requisite of an industrial economy and modernization itself. This technique will require to rely upon law as an effective and efficacious instrument through which developmental goals are transformed into political realities. Maximizing the effectiveness of legal controls with minimum friction will be useful for maximizing growth with equitable distribution. Actions on the part of state of such nature can be regarded as signs of the state's capacity to exert its power for the poor. In the modern state regulatory law is a typical form of state economy. It may be possible that regulatory law, in view of vested interests, can itself generate tensions, and conflict can become more tense if legal profession is hostile to new economic regulatory controls. This kind of situation demands the interdisciplinary studies of economics, sociology and law. A Sherman Christensen³⁶ emphatically points out the fact that legal profession can make immeasurable contribution to the justice.

Modern conditions have got to be met with modern values. For instance the old concept of justice in the economic field consisted chiefly in securing to each individual his right to property and right to contract. The new concept of justice must consider as to how to secure for each individual the right to work, the right to livelihood

³⁴ Sidney Hook, *Ethics of Employment*.

³⁵ By the Author : Dhama, *Morality and Law*, Dr. Ambedkar College of Law Magazine,

1970-71, Vol. I, p. 16.

³⁶ A Judge Looks at his Profession, 1958, *American Bar Association Journal*, p. 117.

and the rights to food, shelter, clothes, education, medicine, leisure, holidays with pay and so on. It is human life and its fulfillment in the highest sense that constitutes the content of law. Mr. Justice Brandies puts it tersely that: "Above all rights, rises a duty to the community"³⁷. Without the heart of humanity law is but an empty shell, it must stand for the best in life³⁸. It is in this context one has to understand the position that judicial interpretation of mechanical rules is not to adhere to strictly to precedent producing injustice. Here comes the role of judges in the judicial processes of interpretation of law. This idea was well brought by G. F. Arnold³⁹ when he said that he did not want a judge without feeling but one who will enter into individual circumstances and consider them instead of merely trusting to general rules, he did not want a judge who will; "put on a special attitude when he goes on the bench and cast off all humanity and ordinary ideas of life." Effectiveness of legal controls will be lost or minimized if progressive construction is not given to the legislative measures aiming at the new social order by judges in a developing state. The government's actions must be just and governmental institutions, such as law courts, must ensure the preservation of justice in the modern state.

CONCLUSION

The French and German thinkers and from Bakunin onwards the Russian thinkers sought the origin of the idea of justice in area of economics. The Lord Buddha expressed his views for removing 'Dukka' or poverty by

abolishing private property. The idea of justice is derived from the fact of economics. Writings of Prof. Galbraith support the economic view of justice as he believes in the regulatory laws and progressive taxations. From this angle of the economic justice, it seems that both American philosophy of regulatory laws and Russian system of Communism are reaching to the melting point. Conceding the freedom of choice in consumption, freedom of occupation, freedom of initiative, law has to determine the shape of economic development and distribution of means of production equitably. When the state is charged with vast economic functions one has, of course, to remember the danger of bureaucratization of economic life. This danger has to be avoided by the devices like co-operative methods, individual initiative, vigilance of the elected representatives and particularly by the eternal vigilance by the people themselves. Collectivization of agriculture, nationalization of industry, equitable distribution of wealth and so on demand strong political will and the capacity for hard decisions. Gunnar Myrdal in his treatise "Asian Drama" has proved, after studying several developing countries, that softness in administration has itself led to further underdevelopment. A Socialist, therefore, emphatically points out that the socialist policy is not for the timid to implement⁴⁰. The Wheel of law needs to be turned in favour of the weaker sections of the people. The customary role of law, to quote Goldsmith, "the law grinds the poor and rich law, must change". The law should not grind the poor nor the rich be allowed to rule. But law must be used as the effective

³⁷ Dupleix Printing Co. V. Deering 254 US 443.

³⁸ Cox. The Public Conscience.

³⁹ G. F. Arnold: Psychology Applied to Legal Evidence.

⁴⁰ Oscar Lange: On the Economic Theory of Socialism, 1938.

instrument for bringing about revolutionary
socio-economic transformation in the Indian
society.

