

An Economic Analysis of Indian Emigrants in Saudi Arabia during COVID-19 Pandemic

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Abstract

The current pandemic of Covid-19 has not only changed the life style of billions of persons in the world but also severely disturbed their livelihood. Travel ban and business restrictions has frozen the movement of people, changed the occupational status and consumption pattern of people in almost every country. India is leading country to supply labour (around 18 million) in the world and top remittances receiving country globally from 2008 to 2020-21 and Saudi Arabia is third largest remittances source country in the world. The oil boom of 1970s in the Gulf countries increased the demand for unskilled and semiskilled labour. Majority of the skilled or semi-skilled labour were supplied to the Gulf countries from southern state of India like Kerala or Tamil Nadu and unskilled or semi-skilled labour had been supplied from northern states of India like Uttar Pradesh and Bihar. The migrants or the refugees in any society agonized the most during any pandemic, hence it is essential to analyze the economic impact of Indian emigrants in Saudi Arabia during the Coronavirus disease. This study is quantitative in nature and based on both primary and secondary data. The sample of 100 unskilled or semi-skilled labour were collected through a structured questionnaire. 60 samples of migrants from Uttar Pradesh and 40 samples of migrants from Bihar were collected through multi-stage sampling technique in the month of March-April 2021. The study has confirmed that remittances and earnings of the migrants had been negatively affected during COVID-19. The loss of earnings and spread of Coronavirus in their native place had a severe mental impact on the migrants. Chi square test result confirms that there is a significant difference of feeling nervous, depress and lonely across the different states of origin of the migrants.

1. Introduction

India is the second most populated country in the world, largest number of Indians (around 18 Million) living abroad and top remittance (USD 83 billion) receiving country in 2020. Saudi Arabia is the third largest destination country for the migrants in the world and hosting largest number of migrants (2.5 million) from India in 2020. In 2020 total remittance to India had just fell by 0.2% as compared to 2019 and with 17% drop in remittances from United Arab Emirates only [1]. Labour migration to the Saudi Arabia had started from Kerala after the oil boom of 1970s. The expansion of development project in the kingdom after the oil boom created huge demand for unskilled and skilled labour. Most of the skilled labour has been imported from the developed countries and semi-skilled or unskilled labour has been supplied from developing countries like India [2]. Expansion of education in Kerala resulted in supplying of skilled or semi-skilled labour to Gulf countries, however limited expansion of education, lack of employment opportunities, less industrialized state, agriculture occupational state Uttar Pradesh and Bihar supplies labour for the menial work in the gulf countries. The current pandemic of COVID-19 has not only changed

the life style of billions of persons in the world but also severely disturbed their livelihood. Travel ban and business restrictions has frozen the movement of people, changed the occupational status and consumption pattern of people in almost every country. The kingdom had identified its first Coronavirus case on 2nd march 2020, a person returning from Iran via Bahrain [3]. The first Coronavirus death was identified on 23rd march 2020, a 51 year old Afghani resident died in Medina [4]. The total number of corona cases spread to 5.45 lakh people and total death reaches to 8,585 till 6 September, 2021[5]. The mass vaccination drive had started on 17 December 2020 using the Pfizer-BioNTech vaccine in Saudi Arabia and completely vaccinated 44.6% of its population till 6 September 2021 [6] [7]. The government of the Saudi Arabia imposes multiple restrictions to prevent the transmission of Coronavirus such as halting Hajj and Umrah, ban of international flights, temporary shutting of mosques, night curfew, proper lockdown etc. The migrants or the refugees in any society agonize the most during any pandemic. In this context the paper attempts to analyze the economic impact of Indian emigrants in Saudi Arabia during the Coronavirus disease.

2. Review of Literature

Several studies had been carried out to analyze the impact of Coronavirus on Indian migrant workers. One sample study was carried out to identify the impact of COVID-19 on migrants from rural Bihar. The study reveals the fact that the second wave of Coronavirus majorly affected the migrant's family in Bihar because the first wave of Coronavirus was concentrated to the urban areas and rural agriculture activities has not been much affected. One fifth of the sample respondents went to the destination for work but still waiting to resume the work and 94% of the migrant family has been adversely affected due to spread of Coronavirus [8]. Another sample study was conducted in the case of the returnee migrant workers of Kerala from Gulf countries. The sample data reveals the fact that 45% of the migrants return to Kerala due to disruption of employment status during Coronavirus pandemic. 10% reported the reason of return being low wages, 5% because of expiry of contract, 15% due to nationalization, 5% due to poor working conditions and 10% due the bad behavior of the employer [9]. Another interesting study was carried out to analyze the economic impact on migrant's workers and remittances in the case of Bangladesh. The study reported that the remittances to Bangladesh rose by 54% in July 2020 compare to December 2019, despite 67% fall in employment. The rose in remittances was result of increase in formal transactions of remittances. The economy was severely affected due to business restrictions and lockdowns, hence employment opportunities for repatriated Bangladeshi migrants remain low in the country [10]. Another study was conducted to understand the main reason of returnee of international migrants in Bangladesh. The study confirms that majority of the migrants (54%) return back to the country due to shutdown of work during pandemic, however 15% of the respondents return back due to visa renewal issue and 15% due to contract renewal issue. The study also confirm that majority of the respondent (69%) maintained their consumption expenditure through savings and 15.5% borrow money to fulfill their basic needs during lockdown period [11]. One study about the socio-economic impact of COVID-19 in the case of Kenya based on sample data taken from three counties of Kilifi, Kisumu and Nairobi. The study analyzes the level of disruption even after the

one year of Coronavirus spread. In the sample data 42% respondents reported the school disruption, 46% reported mental health problems, 30% of them reported domestic tensions or domestic violence's, 36% reported communal violence's and 44% reported food disruptions [12]. Any pandemic influence most of the undocumented migrants in any society. A study on undocumented migrants in Switzerland was undertaken, and result was shown on the basis of 117 samples. The study reveals the fact that migrants faced huge difficulties in accessing the basic necessity during pandemic. Poor mental health and avoidance of health service during the pandemic was exercised by the migrants. Consequently disruption of working hours and reduction of income created a situation for undocumented migrants of unavailability of food. 25% of the respondents reported hunger during the pandemic. Nearly half of the sample migrants did not avail any external assistance during pandemic due to difference in legal status [13]. An important study was conducted to measure the economic impact of Coronavirus on Saudi society. The study was based on sample data of 1624 collected in the month of June 2020. The study confirms that 44.6% of the respondents reported loss of his job or his primary income due to pandemic, however 52.8% were worried about losing his job. 51.6% of the respondents were not able to manage his expenses, however 52.6% of the respondents were using his savings to manage the expenses [14]. There several studies conducted to measures the impact of coronavirus, however very less effort had been made to measure the impact on migrant workers. The present study will focus to analyze the economic impact of coronavirus on unskilled or semi-skilled Indian male migrants working in Saudi Arabia.

3. Methodology

The present study attempts to analyze the economic impact on Indian male migrants in Saudi Arabia during COVID-19 pandemic. The study is quantitative in nature and based on both primary and secondary data. Primary data is collected through a well-structured questionnaire. The link of the Google Form questionnaire had shared through different social networking sites such as Facebook, Instagram and Telegram etc. Multistage sampling techniques were used to collect the sample data. The study incorporates the Indian migrants only,

belonging to Uttar Pradesh and Bihar (Indian states), working in Saudi Arabia as unskilled or semiskilled labour. A sample of 150 migrants were collected, working in Saudi Arabia and belong to Uttar Pradesh and Bihar in the month of march-April 2021. We had not included the responses of skilled labour and incomplete responses into the study, therefore, analysis of the paper is based on 100 samples only. The 60 sample responses belongs to migrants from Uttar Pradesh and 40 sample responses from Bihar were included in to the study. The survey comprises into three sections. Section-1 includes the question of the demographic profile of the migrants, such as age, religion, education, profession etc. Section-2 of the study included the questions related to the employment status of the migrants, such as working experiences, earnings, remittances, family size etc. Section-3 of the study incorporated the question related to the impact of COVID-19 on migrants such as change in remittances, working hours and well-being of the migrants. The collected data was scrutinized using SPSS (Statistical package for social sciences) version 26. Statistical techniques such as descriptive statistics, paired sample t-test, chi square test were used to analyze the sample data.

4. Result and Discussion

4.1. Demographic profile of the respondent samples

Table 1 illustrates the demographic profile of the migrants from eastern region of India especially from Uttar Pradesh and Bihar. Majority of the sample migrants

Table 1. Demographic Profile of the respondent samples

Age	Uttar Pradesh	Bihar	Total	Percentage	Cumulative %
Below 40	32	32	64	64%	64%
Above 40	28	8	36	36%	100%
Total	60	40	100	100%	

Religion	Uttar Pradesh	Bihar	Total	Percentage	Cumulative %
Muslim	54	39	93	93%	93%
Hindu	6	1	7	7%	100%
Total	60	40	100	100%	

Education	Uttar Pradesh	Bihar	Total	Percentage	Cumulative %
Illiterate	3	6	9	9%	9%
10th	17	4	21	21%	30%
12th	25	9	34	34%	64%
Graduation	13	17	30	30%	94%
Post-Graduation	2	4	6	6%	100%
Total	60	40	100	100%	

Source: Calculated by Authors from sample survey

(64%) were below the age of 40 years and rest of the migrants were above the age of 40 but less than 60. Bihar were found to be sending more young age (80% below the age of 40) migrants than Uttar Pradesh (53% below the age of 40). The mean age of the migrants from Uttar Pradesh was 41 years, however mean age of migrants from Bihar was 33 years. The Indian migrants always prefer to migrate in search of work in Saudi Arabia in Gulf region because of its religious sentiment of Islam, therefore majority of the migrants (93%) were Muslims. The educational qualifications now a days in the Gulf region for work is very important and the employer of Saudi Arabia prefer to hire only educated persons. The sample data reveals that only 9% of the migrants were found to be not educated, however 15% from Bihar and 5% from Uttar Pradesh were found to be not educated. Majority of the migrants (34%) were holding senior secondary schooling certificate only, 21% were high school passed, 30% were graduate and only 6% were post-graduates. The migrants from Bihar were found to be higher educated than the migrants of Uttar Pradesh. More than half (52.5%) of the migrants from Bihar were found to be Graduate or above level of education, however only 25% of the migrants from Uttar Pradesh hold this level of education. Majority of the migrants (70%) from Uttar Pradesh holds only school education, however only 32.5% migrants from Bihar hold this education. Bihar state were found to be sending more young population and highly educated than the migrants from Uttar Pradesh.

4.2. Working condition of the migrants

4.2.1. Occupational structure of the migrants

Migration from developing countries like India is more of result of push factor or the problems faced in the country of origin. Uttar Pradesh and Bihar (Indian states) are characterized by the widespread poverty, huge unemployment, lack of industrialization, infrastructure deficiency and agriculture based economy which force people to migrate. Table 2 describe the profession or *Table 2. Profession of the migrants*

Profession	UP	Bihar	Total	Percentage	Cumulative %
Driver	16	1	17	17%	17%
Tailor	11	...	11	11%	28%
Labour	11	2	13	13%	41%
Salesman	7	...	7	7%	48%
Technician	11	20	31	31%	79%
Foreman	8	8	8%	87%
Others	4	9	13	13%	100%
Total	60	40	100	100%	

Source: Calculated by Authors from sample survey

4.2.2. Working Experience of the migrants

Table 3 illustrates the working experience of the migrants from Bihar and Uttar Pradesh. Majority of the migrants (40%) were working in Saudi Arabia for the last 2 to 4 years, 28% were working for the 4 to 6 year and rest 32% were working for above 6 years. The working experience of the migrants from Bihar were found to be more than the migrants from Uttar Pradesh. Majority of

occupation of the migrants from these states to the kingdom of Saudi Arabia. The sample collected data consists of 17% driver, 11% tailor, 13% casual labors, 7% working as salesman, 31% technicians, 8% foreman and 13% belong to other occupations. Majority of the technicians and foreman (70%) were from Bihar, however, only 18% of the technicians were from Uttar Pradesh. This surveyed data shows that around half of the migrants were semi-skilled and half of them unskilled.

the migrants (47.5%) from Bihar were working in Saudi Arabia for more than 6 years, however only 21.6% of the migrants from Uttar Pradesh were working for more than a period of 6 years. More than half (53.3%) of the migrants from Uttar Pradesh were just working in Saudi Arabia in between 2 to 4 years only, however, only 20% of the migrants from Bihar were working in between 2 to 4 years.

Table 3. Migrant's working experience

Working Experience	UP	Bihar	Total	Percentage	Cumulative %
2 To 4	32	8	40	40%	40%
4 To 6	15	13	28	28%	68%
Above 6	13	19	32	32%	100%
Total	60	40	100	100%	

Source: Calculated by Authors from sample survey

4.2.3. Earning & Remittances

According to the latest report published by the World Bank titled as "Migration and Development Brief", India continue to be the largest recipient country in the world since 2008 and Saudi Arabia is the third largest

remittance source country in the world after USA and UAE [1]. Table 4 describes the monthly salary of the Indian migrants in Saudi Arabia and their remittances to India. Majority of the migrants (52%) were earning less than SAR 2500 in a month and 48% were earning above

SAR 2500. Migration towards the gulf countries were motivated to feed the family in India, hence remittances to India play an important role for livelihood of the people. The surveyed data reveals that 47% of the migrants were remitting below SAR 1000 (Saudi Riyal) and 53% of the migrants were sending above SAR 1000 in a month to their families. Comparative data of Uttar Pradesh and Bihar reveals the fact that, 58% of the

Table 4. Migrant's Earnings and Remittances

Monthly Salary	UP	Bihar	Total	Percentage	Cumulative %
Below 2500 (SAR)	35	17	52	52%	52%
Above 2500 (SAR)	25	23	48	58%	100%
Total	60	40	100	100%	
Remittances	UP	Bihar	Total	Percentage	Cumulative %
Below 1000 (SAR)	42	5	47	47%	47%
Above 1000 (SAR)	18	35	53	53%	100%
Total	60	40	100	100%	

Source: Calculated by Authors from sample survey

4.2.4. Source of earnings and family structure of the migrants

According to the census data 2011, the average size of the family in India was 4.45 member per household, however average size of the Muslim household was 5.15 member per household [15]. The surveyed data in Table 5 reveals that 38% of the migrants holds 2 to 4 members in the family, however 62% of the migrants hold more than 4 person in the family. The comparative data shows that 90% of the migrants from Bihar hold more than 4 members in the family, however only 43% of the migrants from Uttar Pradesh hold more

Table 5. Migrant's source of income and family structure

Dependents	UP	Bihar	Total	Percentage	Cumulative %
2 to 4	34	4	38	38%	38%
Above 4	26	36	62	62%	100%
Total	60	40	100	100%	
Other source of income	UP	Bihar	Total	Percentage	Cumulative %
Yes	11	9	20	20%	20%
No	49	31	80	80%	100%
Total	60	40	100	100%	

Source: Calculated by Authors from sample survey

4.3. COVID-19 and its impact on migrants

The spread of novel Coronavirus was began from the Wuhan city of china in December 2019. The high

migrants from Uttar Pradesh and 42.5% of the migrants from Bihar were earning below SAR 2500. Remittances data reflects that only 30% of the migrants from Uttar Pradesh and 87.5% of the migrants from Bihar were sending above SAR 1000 to their families in India. Hence, migrants from Bihar is earning more and remitting more than the migrants of Uttar Pradesh.

than 4 members in the family. The researcher also asked to the migrants about the source of earning other than remittances, 80% of the migrants reported that their family was totally dependent on remittances and has no other sources of income. 22.5% of the migrants from Bihar and 18.3% of the migrants from Uttar Pradesh reported income sources other than remittances. The major source of earning other than remittances were agriculture income, income through rent and income from business. 65% were reported income from agriculture, 20% from business, 5% from rent on land and building and 10% from other sources.

man- to-man transmission of this virus causes spread all over the world. The world health organization declared the spread of corona virus as pandemic. The preventive measure taken by the government by halting the

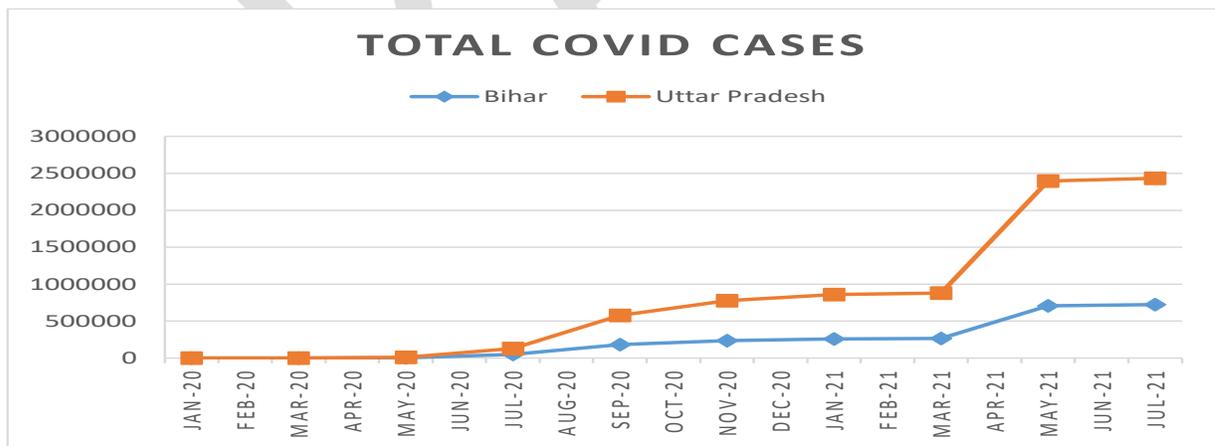
movement of people, restricting the business activities, national and international travel restrictions etc. by majority of the countries in the world. The migrants any country suffer the most during any pandemic, socially, economically and psychologically. The economic impact on the migrants was majorly been affected by the prevailing situation in country of origin and destination country. The impact has been analyzed the following in detail.

4.3.1. Spread of Corona virus in the origin state of the migrants

The first corona positive case in Uttar Pradesh was identified on 5th march 2020, the travel history from Iran was founded from that person and belongs to Ghaziabad, Uttar Pradesh. However, the first death in the state was found on 1st April 2020 [16]. Similarly the first corona positive case from Bihar was found on 13th march 2020, a person returned from Qatar and the first death in Bihar was found on 22nd march 2020 [17] [18]. Diagram-1 shows the comparative data of total corona positive cases in Uttar Pradesh and Bihar. As depicted in the diagram, in the first phase of the spread of corona virus starts from July-2020 to March 2021. In this phase total

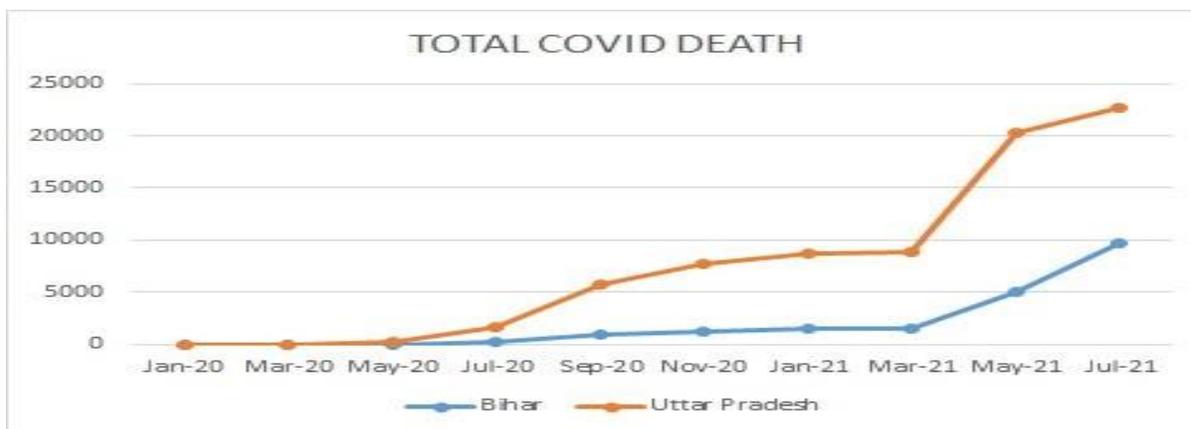
corona positive cases in Uttar Pradesh was higher than the total cases in Bihar, however, growth in total positive cases was slow. The second phase was depicted from March 2021 to July 2021. In this phase the total corona positive case increased drastically. This phase had severely affected the people of Uttar Pradesh, however the effect on Bihar was comparatively better. More than 17 Lakh Corona positive cases in Uttar Pradesh and more than 7 Lakh cases in Bihar has already been reported till July 2021. The comparative data of COVID deaths in both the states is shown in diagram-2. The total Corona death in Uttar Pradesh is higher than Bihar. During the peak of the first phase where highest death were reported from July 2020 to March 2021. Total death in Uttar Pradesh and Bihar was 8800 and 1574 respectively till March 2021. However, total death has drastically increased in the second phase of Coronavirus disease. The total death in Uttar Pradesh and Bihar was reported 22,755 and 9642 respectively till July 2021. During this phase (March 2021 to July 2021) total percentage of increase in the corona death in Bihar was found to be 612% and in Uttar Pradesh total death increases by 258%. Spread of corona virus in the state might influence the mental status of the migrants.

Diagram 1. Comparison to total COVID-19 cases in Uttar Pradesh and Bihar



Source: Calculated by Authors/ prsindia.org

Diagram 2. Comparison of total COVID death in Uttar Pradesh and Bihar



Source: Calculated by Authors/ prsindia.org

4.3.2. Working hours of the migrants during lockdown

The kingdom of Saudi Arabia implemented lockdown in the wake of Coronavirus on 25th march 2020, in Riyadh, the national capital and two holy cities of Makah and Medina. However the prime minister of India calls for Janta curfew on 22nd march 2020 from 7 AM to 9 PM and later on announces complete lockdown (on 23rd march) in the entire country from mid-night of 24th march 2020 [19]. All the business activities put on hold except the production activity of necessity items, which have

affected the job status of millions of people in the kingdom. Table 6 describes that around 43% of the Indian migrants in Saudi Arabia were not worked during lockdown, however, 53% were working but below 8 hours in a day and only 4% of the migrants were working above 8 hours in a day. The comparative data shows that 66% of the migrants from Uttar Pradesh and 7.5% of the migrants Bihar were found to be not working during lockdown, however 30% from Uttar Pradesh and 87.5% from Bihar worked less than 8 hours in a day. Hence, business restriction and lockdown in Saudi Arabia reduces the working hour of the workers.

Table 6. Migrant's working hour during lockdown

Worked During lockdown	UP	Bihar	Total	Percentage	Cumulative %
Not Worked	40	3	43	43%	43%
Below 8 hours	18	35	53	53%	96%
Above 8 hours	2	2	4	4%	100%
Total	60	40	100	100%	

Source: Calculated by Authors from sample survey

4.3.3. Return of migrants to India during lockdown

The government of Saudi Arabia had started imposing restrictions by suspending all its flights on 15th march 2020 and imposed proper lockdown on 25th march 2020 by identifying its first corona case on 2nd march 2020. The complete lockdown in the country, uncertain medical emergency and suspension of all business activities (Other than necessity) forces migrants in the Saudi Arabia to return back to India. The government of India launched 'Vande Bharat Mission' to bring back

stranded Indian citizens abroad on 6th may, 2020. According to latest data of Ministry of Civil Aviation, Government of India has bring back total 2,307,911 stranded Indian citizens in the country through 15,281 special flights till 10th August 2021. The official sources confirms that majority of the stranded Indian citizens brought back from Gulf countries [20]. Table 7 reports the number of migrants from Uttar Pradesh and Bihar returned back to India during Lockdown. Only 10% of the total sample migrants return back to India, however 90% of migrants did not came back and decided to stay in

Saudi Arabia during lockdown period. The comparative data of both the states shows that 13.3% of migrants from Uttar Pradesh and 5% from Bihar were returned back to the country. Several Indian repatriates in abroad complained about the higher flight charges under 'Vande Bharat Mission' and non-affordable for many of them

[21]. Another reason for the migrants to stay in the Saudi Arabia was to show negative RT-PCR test and paid institutional quarantine while landing in India [22]. The free and better medical arrangements in Saudi Arabia for migrant workers also motivated the migrants not to return to India.

Table 7. Return of Migrants during Lockdown

Return during lockdown	UP	Bihar	Total	Percentage	Cumulative %
Yes	8	2	10	10%	10%
No	52	38	90	90%	100%
Total	60	40	100	100%	

Source: Calculated by Authors from sample survey

4.3.4. Loss of earning and change in remittances

Table 8 illustrates the loss in migrant earnings during lockdown period. 71% of the migrants reported a loss of below SAR 500 in a month during complete shutdown in Saudi Arabia, however, only 29% of the migrants were reported a loss of above SAR 500 per month during lockdown. The comparative data of Uttar Pradesh and Bihar migrant's shows that more loss were bear by the migrants of Uttar Pradesh. 41.6% migrants from Uttar Pradesh and 10% migrants from Bihar reported a loss of above SAR 500 in a month. According to the official report by the government of Saudi Arabia, employer can cut maximum 30% of the salary for a maximum 6 month during the pandemic. A cut in salary of the migrants will definitely affect the remittances by the Indian migrants. The surveyed data on remittances before pandemic and during pandemic reveals that 49%

of the migrant were sending Below SAR 1000 before pandemic and 56% of the migrants were sending this amount during pandemic. It means that more people start remitting less amount to their families. 53% of the sample migrants were remitting above SAR 1000 before pandemic but only 44% of the migrants were remitting this amount during pandemic. According to the latest report published by World Bank, India is continue to be top remittance receiving country in the world, however remittances in 2020 (USD 83 billion) has fallen by 0.2% as compared to 2019 (USD 83.3 billion) and the projected fall in remittances for the year 2021 will be 3.5% due to low growth rate in developed economy and expected drop in migration to the gulf countries and increase in returnee from gulf. It was also reported that 1.2 million of migrants return to Kerala only, however there is no official data on total returnee.

Table 8. Migrant's earning loss and change in remittances

Loss of Earnings	UP	Bihar	Total	Percentage	Cumulative %
Below 500	35	36	71	71%	71%
Above 500	25	4	29	29%	100%
Total	60	40	100	100%	

	Remittances (Before Pandemic)			Remittances (During Pandemic)		
	UP	Bihar	Total	UP	Bihar	Total
Below 1000 (SAR)	42	5	47	49	7	56
Above 1000 (SAR)	18	35	53	11	33	44
Total	60	40	100	60	40	100

Source: Calculated by Authors from sample survey

4.3.5.

4.3.6. Paired Sample t- Test

Paired sample t-test is used to compare the means of two sample measurement taken from the same object at different point of time. To test the hypothesis of difference in remittance before and during COVID-19 pandemic, t-test was applied. The null hypothesis was 'there is no significant difference in remittances before and during pandemic' and alternative hypothesis was there is a significant differences. To test the hypothesis that remittances before pandemic (Mean = 1.53, Std. Deviation = 0.502) and during pandemic (Mean = 1.44, Std. Deviation = 0.499) means were equal, a paired sample t-test was applied. The correlation between remittances before and during pandemic was found to be 0.754 and $p < 0.001$, which was statistically significant and suggesting the paired sample t-test is appropriate to test the hypothesis. The result of t-test is shown in table 9. The mean and standard deviation were found to be 0.09 and 0.351 respectively, t-statistics is 2.565 with 99 degree of freedom and p-value < 0.05 . Therefore the alternative hypothesis is accepted as there is significant difference in the remittances before and during pandemic.

Table 9. Paired Sample t-Test

Paired sample t-Test					
Mean	Std. Deviation	Std. Error Mean	t	df	p-Value
0.090	0.351	0.035	2.565	99	0.012

Source: Calculated by Authors from sample survey

4.4.

4.5. Causes of loss in earnings and fall in remittances

The Saudi Arabian government has suspended all the international flights in the wake of corona virus disease from 15th march 2020 to 17th may 2021. Saudi aviation sector will bear a loss of USD 7.2 billion in 2020 estimated by the air transport association, due to the suspension of international flights. Saudi aviation sector provide employment to 287 thousand people, which probably affect the income of the workers in this sector. Government of Saudi Arabia restricted the business activities to prevent the spread of Coronavirus. Restriction in mobility of people reduces the working hours of the migrant workers. According an official report, Government of Saudi Arabia allowed companies to cut salary by 40% in proportion to working hours for a maximum period of six months and also allowed employer can terminate the contract after six month. Several workers in construction sector, industries and hospitality sector faces the salary cut during lockdown. According to a survey conducted by IIMAD (The International Institute of Migration and Development), majority of the repatriated workers belong to Kerala and Tamil Nadu from Gulf countries were industrial workers,

construction workers and hospitality sector workers. However, the survey also reveals the fact that 30.7% of the returnee to these state were from Saudi Arabia who had lost their job due to Coronavirus pandemic. Loss in remittances and loss in earnings can be the result of low working hours or loss of job during the pandemic [23]. The coronavirus had dual shock for the Gulf countries like Saudi Arabia. Spread of coronavirus restricted the business activities in one side and fall in oil prices due to fall in international demand for petroleum products in other side. Apart from oil shock, suspension of Hajj and Umrah in the year 2020 also influenced the business of millions of people and revenue of the Government of Saudi Arabia [24].

4.6. Emotional wellbeing of the migrants during pandemic

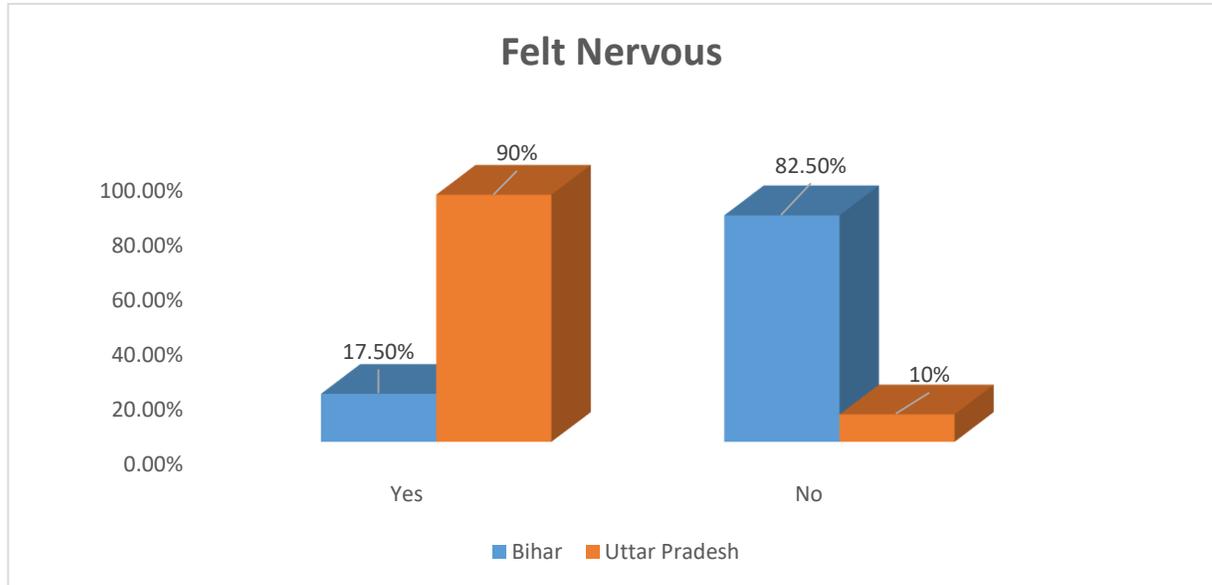
4.6.1. Feeling nervous during pandemic

The researchers asked the questions related to the wellbeing of the migrants, whether migrants were feeling nervous during pandemic or not. The majority of the respondents (61%) confirmed of feeling nervous due to uncertainty arising due to pandemic, however 39% of the

respondent did not felt nervous during the pandemic. The comparative data of feeling nervous between the migrants of Uttar Pradesh and Bihar are depicted in diagram-3. 90% of the migrants from Uttar Pradesh reported of feeling nervous however only 17.5% of the migrants from Bihar reported of feeling nervous. The surveyed result confirms that migrants belonging to Uttar Pradesh were more influenced than the migrants of Bihar. The

Diagram 3. Comparison of feeling nervous by the migrants of Uttar Pradesh and Bihar

nervousness of the migrants may differ because of the differences in the spread of Coronavirus and Corona death in their respective home of origin. The data of the spread of corona virus and death due to Coronavirus was very high in Uttar Pradesh during the second wave in India, therefore feeling nervousness among the migrants of Uttar Pradesh were high.



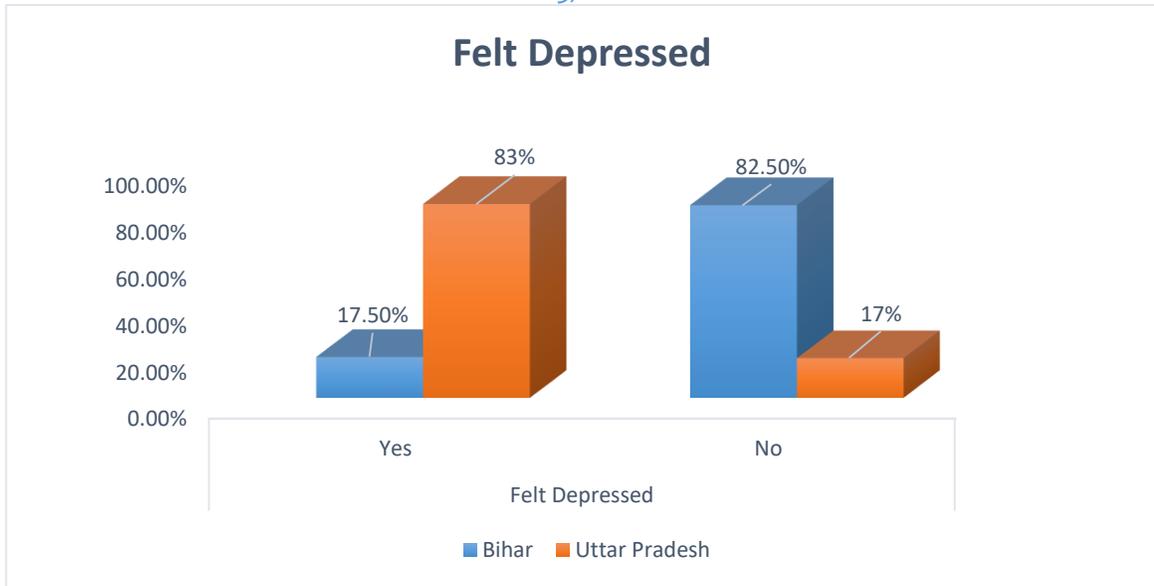
Source: Calculated by Authors from sample survey

4.6.2. Feeling depressed during pandemic

The researchers also try to understand about the prevalence of depression among the migrants. Depression can be defined as a state of unhappiness, loss, anger, or not hoping good to be happened. The spread of Coronavirus has influenced the business life of the people. The surveyed data confirms that 57% of the migrants were depressed, however, 43% of the migrants were responded that they were in depression. The comparative data of feeling depressed is shown in Diagram-4, which confirms that 83% of the migrants

belong to Uttar Pradesh and 17.5% of the migrants belong to Bihar were feeling depressed. However 82.5% of the migrants belong to Bihar were shown and their confidence and reported of not feeling depressed. The level of depression can also be understand through their job loss or loss in earnings, 66% of the migrants belong to Uttar Pradesh reported of not working during lockdown period, however, only 7.5% of the migrants were reported of not working during lockdown period. Therefore depression among the migrants belong to Uttar Pradesh were more than the migrants of Bihar.

Diagram 4. Comparison of feeling depressed by the migrants of Uttar Pradesh and Bihar



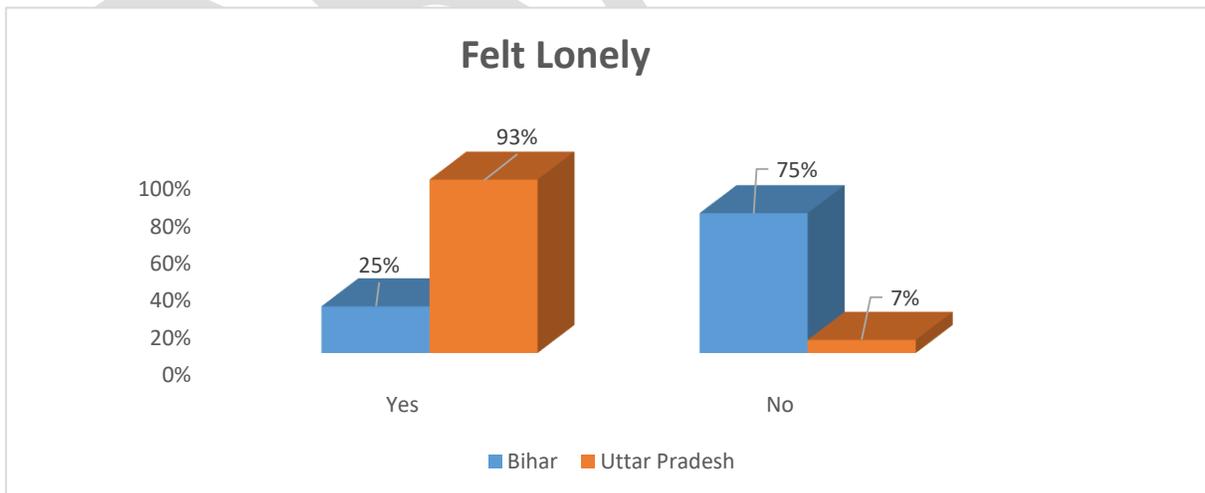
Source: Calculated by Authors from sample survey

4.6.3. Feeling lonely during pandemic

The spread of Coronavirus had restricted the mobility of the people. The working Indian migrants in the Saudi Arabia during pandemic felt lonelier than before because of no work or reduced number of working hours and lack of the mobility of the people during lockdown period. The sample data confirms that 66% of the migrants felt lonely, however 34% do not feel lonely. Feeling lonely can also

be understand that 43% of the migrants were not working during lockdown period. The comparative data of the migrants belong to Uttar Pradesh and Bihar is shown in diagram-5, which confirms that 25% of the migrants from Bihar and 93% of the migrants from Uttar Pradesh reported of feeling lonely during lockdown period. More migrants from Uttar Pradesh reported of feeling lonely than the migrants from Bihar.

Diagram 5. Comparison of feeling lonely by the migrants of Uttar Pradesh and Bihar



Source: Calculated by Authors from sample survey

4.5.4 Chi-Square Test of emotional well-being within different state of origin

Chi-Square test was applied to find out the association between felt depressed, nervous and lonely across the two different states (Uttar Pradesh and Bihar) of origin, the migrants belong to. The null hypothesis was

‘there is no significant difference in feeling depress, nervous and lonely across both the origin of states’. However, the alternative hypothesis was ‘there was a significant difference between feeling nervous, depress and lonely across both the origin of state the migrants belong to’. The relationship between these variables (Felt nervous, depress and lonely) was found to be statistically

significant. Chi square test result is shown in table-10, as chi square value was found to be 53.02 for felt nervous, 42.43 for felt depressed and 49.94 for felt lonely and p-Value is less than 0.05 (5% level of significance). Therefore, we reject the null hypothesis as there is significant difference of feeling nervous, depress and lonely across the different origin of state of the migrants.

Table 10. Chi square test of emotional well-being within different state of origin

Statement	Chi-Square Value	p-Value
Felt nervous	53.02	0.000
Felt depressed	42.43	0.000
Felt lonely	49.94	0.000

Source: Calculated by Authors from sample survey

5. Conclusion

Migration of unskilled and semi-skilled labour from Uttar Pradesh and Bihar were started after the oil boom of 1970s. The current study observes that majority of the migrants (52%) from these states are earning below 2500 SAR (Saudi Riyal) in a month and remittances were also found to be low, 47% of the migrants reported per month remittances even less than 1000 SAR in a month. However the comparative data of both the states confirms that the migrants from Bihar remitting more money than the migrants from Uttar Pradesh. The study also confirms that majority of the migrants (80%) do not have other source of income except earning from Saudi Arabia. Coronavirus pandemic had deeper economic impact on the migrants, 43% of the respondent confirm that they did not worked during the lockdown period of the pandemic, however, 53% worked less than 8 hours in a day. Most of the migrants remit less amount during the lockdown period than before the lockdown period. The result of

paired sample t-test confirms that there is significant difference in remittances before and during pandemic. The study also reveals the fact that the migrants from Uttar Pradesh were felt to be more depressed, nervous and lonely than the migrants of Bihar, because the spread of coronavirus and death due to Coronavirus were high in Uttar Pradesh in comparison to Bihar. Chi square test result confirms that there is a significant difference of feeling nervous, depress and lonely across the different states of origin of the migrants.

6. Limitations of the study

The current study has some limitations. First the study is based on small sample size of 100 respondent only and responses of skilled labour do not included in the study. The result of the study is only based upon few test and descriptive statistics. The study don't incorporated the female responses or economic impact on female migrants. The current study do not assess the impact of coronavirus on migrant's family, wife or children.

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