Int. J. Pharm. Investigation, 2023; 13(1):187-200.
www.jpionline.org

Original Article

A Cross-sectional Survey to Understand the Public Attitude towards Attributes of COVID-19 Vaccine in the Chhattisgarh State of India

Pradip Chaurasia[1,2], Shrikant R Inchulkar[3], Gyanenedra Singh Baghel[4], Mukund Lal Naik[5], Lowkesh Chandravanshi[4], Satyavati Rathiya[4], Muhammed Thareekh Bin Bashir[6], Rashmi Sahu[4], Manish Minj[4], Nagendra Singh Chauhan[7], Awanish Kumar[8,*], Prashant Kumar Gupta[4,9,*]

[1]Department of Samhita-Sidhant, Shri NPA Govt Ayurveda College, Raipur, Chhattisgarh, INDIA.
[2]School of Studies in Statistics, Pandit Ravi Shankar Shukla University, Raipur, Chhattisgarh, INDIA.
[3]Department of Agad Tantra, Shri NPA Govt Ayurveda College, Raipur, Chhattisgarh, INDIA.
[4]Department of Kaumarbhritya, Shri NPA Govt Ayurveda College, Raipur, Chhattisgarh, INDIA.
[5]Ex-Department of Life Sciences, National Center for Natural Resources, Pandit Ravi Shankar Shukla University, Chhattisgarh, INDIA.
[6]S.V. Homeopathic Medical College, Trivandrum, Kerala, INDIA.
[7]Drug Testing Laboratory Avam Anusandhan Kendra, Raipur, Chhattisgarh, INDIA.
[8]Department of Biotechnology, National Institute of Technology, Raipur, Chhattisgarh, INDIA.
[9]Department of Kaumarbhritya, All India Institute of Ayurveda, New Delhi, INDIA.

ABSTRACT

Background and Objectives: This survey is conducted to understand the attitude of the population towards vaccination for COVID-19. Perception regarding COVID -19 vaccination such as efficacy, duration of protection, etc can affect the affinity of the population for readiness, enthusiasm, and willingness. **Materials and Methods:** A qualitative cross-sectional questionnaire-based survey was conducted during December 2020 and January 2021 at Chhattisgarh province of India. A bilingual questionnaire consisted of questions on belief, willingness, and attitude to receive future COVID-19 vaccination was developed. The non-probability purposive sample of 1717 respondent (1026 responded online while 691 responses offline) were chosen in this study. **Results:** 60% and 40% of respondents were male and female respectively. 51.4% of respondents belonged to 31-40yrs of age. 46.1 % of respondents believe that COVID-19 vaccine can prevent COVID-19 illness. In 82% of respondents, willingness was observed for COVID-19 vaccination, and willingness was highly dependent on literacy and qualification. Data support a good belief and willingness of the people from Chhattisgarh province towards the COVID-19 vaccination. **Conclusion:** The current study annuls the illusion and future hesitancy towards vaccination drive. The government must consider vaccine attributes like cost, the nation of vaccine origin, vaccine booth distances and attitude of the population like education status, occupation, socio-economic status, previous vaccination experience should also be undertaken for the largest single vaccine drive.

Keywords: COVID-19, Vaccine, Public Survey, Indian Subcontinent, Acceptance/Hesitancy.

Correspondence:
[1]Dr. Prashant Kumar Gupta
Department of Kaumarbhritya, All India Institute of Ayurveda, New Delhi, INDIA.
Email: prashantgupta27@gmail.com
[2]Dr. Awanish Kumar
Department of Biotechnology, National Institute of Technology, Raipur-492010, Chhattisgarh, INDIA.
Email id: drawanishkr@gmail.com

Received: 28-Sep-2022 ;
Revised: 28-Oct-2022 ;
Accepted: 24-Nov-2022.

INTRODUCTION

India is battling hard with the current COVID-19 (Corona Virus Disease) pandemic. Social distancing, masks, and frequent hand wash are keys to preventing infection. A vaccine was perceived as confining tool of such an agreed spread.[1] During Oct-fab of 2020-2021, multiple vaccine candidates were in different phases of their trials at different corners of the world, India emerged self-reliant in both its development and production.[2] The government of India planned the COVID-19 vaccination campaign in January 2021 starting stepwise to health care workers, frontline workers, co-morbidities population, aged above 45 year population and followed by rest population. Due to paucity of data regarding willingness, belief and acceptance of COVID-19 vaccination among population of Chhattisgarh and to understand the reasons behind vaccine hesitancy we have conducted this survey. No such study has conducted in the state of Chhattisgarh till date to evaluate the intention of people towards COVID-19 vaccination. Diverse Indian strata of the population may perceive the vaccine drive differently. Hence a survey was conducted among Indian citizens especially the Chhattisgarh

DOI: 10.5530/223097130002

population during Dec-Jan 2020-2021 for readiness, enthusiasm, and willingness for COVID -19 vaccination aiming underline the variables (distance, cost, Adverse Events Following Immunization (AEFI), etc) affecting the future vaccine drive.

The acceptability of the public towards COVID-19 vaccines was unknown when we had done this survey. Vaccination drive started with a mixed pace in different provinces of India, and Chhatisgarh was no exception. But after the devastating 2nd wave of COVID-19 in India, people undertook COVID-19 vaccine as the most effective preventive intervention.[3] Therefore, acceptance of people toward vaccine may have increased and currently, India has crossed the 122 Cr total vaccination dose while only 43.9 Cr population was double vaccinated as on November 30th 2021.[3] Current study is aimed to understand the public attitude and willingness toward the nationwide COVID-19 vaccine drive. These findings revealed lake of awareness and hesitation of people for vaccination against current COVID-19 pandemic. This study could help public health authorities about what types of endorsements, incentives, or messages are necessary to achieve broader community participation for fully vaccination against COVID-19.

MATERIALS AND METHODS

Study frame and setting

Out Patient Department (OPD) of Shri NPA Govt Ayurveda College, Raipur, Chhattisgarh, India and two kilometers circular periphery around this hospital was chosen for offline survey, and Pan Chhattisgarh province of India for online survey.

Sample size and data collection method

A cross-sectional questionnaire-based survey was conducted among Indian citizens specially Chhattisgarh belonging to various strata of society through online and offline mode. The non-probability purposive sample of 1717 respondent (1026 responded online while 691 responses offline) were asked on a random selection basis. All respondents were in the geographical area of Chhattisgarh province of India.

Questionnaire detail and validation

Questionnaire begins with demographic variables followed by inquiries for worries and beliefs of COVID-19. Fifteen (15) framed questions were dichotomous (English and Hindi) and multiple choice based (Supplementary File 1). Questionnaire was designed after in-depth discussion among peers, health professionals, public health experts and public. Face validity testing of the questions with regard to research aim was performed using Cronbach alpha reliability estimate and was beyond 0.70 for all the questions asked in pilot study respondents.

For online survey questionnaire was developed through google form and circulated through email and what's app. While for offline survey print out of the same questionnaire had been used. Question no. 1-3 was related to fear and infection of COVID-19, 4-5 addressed the previous experience regarding vaccination, 6-15 were aimed to assess the hesitancy, belief, and willingness of the people towards COVID-19 vaccination. Question no. 1-7 was mandatory, those who have opted for "no vaccination at all" for question no. 7 would not be able to answer the rest.

Ethical approval

Current study was approved from Institutional Ethical committee of wide letter no. 203/2020 dated 08/12/2020, and the study's pre analysis plan was registered with Clinical Trial Registry-India (CTRI) wide CTRI no. CTRI/2020/12/029884 dated 17/12/2020 (Supplementary file 2). Survey was conducted online and offline (nearby vicinity and patients attended the OPD of Institute) between 17 December to 31 December. Prior written consent was obtained from all respondents before registering to survey. The respondents were informed about the use and anonymization of the data and that survey responses guarantee the anonymity of each participant. No gift or monetarily compensations were offered for survey participation.

Statistical analysis

Current study used frequency distributions, multiple stacked bar diagrams, odds ratio, 95% confidence interval (CI), Z-test, one-way ANOVA, and chi square test for contingency tables. A p-value <0.05 was considered significant.

RESULTS

A direct survey questionnaire response rate was 85.62% (691 of 807 respondents, 116 denial) while online response rate was 40.71% (1026 of 2520 respondents and 76% reminder to initial links). Present data reflects distribution of male:female (60:40); maximum of 51.4 % aged between 31-40 years; 96% respondents were literate and 63.4% were urban participants. Detailed demographic characteristics of respondents were given in Table 1. Age of tested COVID-19 respondents was 35.23±13.28 (mean and S.D.) and non-tested respondents were aged 31.78±12.69 depicting significant difference (Z= 5.3372, p<0.001). Fear was significantly differ with age with (2,1714) degree of freedom (F= 3.585, p< 0.028). Figure 1 is suggestive of fear for COVID-19 illness increases with age and belief in COVID-19 vaccine increases with decreasing age. Age and co-morbidity (205, 11.9%) found statistically highly significant (chi square = 328.79, p < 0.0001). Respondents >45 year had more co-morbidities than age<45 years. Hypertension and diabetes were more common co-morbidity than cardiac, renal, or respiratory disorders. A detailed univariate data is shown in Figure 2 and Supplementary Figure 1.

468 (27.3 %) respondents had no fear of COVID-19 while 1085 (63.2 %) had mild to moderate fear and 164 (9.6%) felt severe

fear. Maximum 30.2 % of male responded "no fear" to COVID-19 illness. Literacy, education level, and falling sick with COVID-19 were independent to COVID-19 illness fear. Co-morbid and non-co-morbid respondents had approximate same fear (73.2 % Vs 72.7 %). Both male and female were equally tested for COVID-19, urban respondents were more screened for COVID-19 than semi urban or rural. (p<0.001) (71% Vs 13.4 Vs 15.1 %). Positives per test ratio was (84/643, 13.1%). Rapid antigen test was the highest individual test performed followed by Real-time reverse transcription polymerase chain reaction (RT-PCR) (49.8 % and 18.2 %) respectively. Health care professional (22.9 %) were more tested than any other professional. Low socio-economic status (no income/income <10000) respondents were less screened. Co-morbidity respondents screening was higher than non-co-morbid respondents (odds ratio=2.127, 95% CI (1.585-2.854), p value < 0.0001). Severe fear had high tendency for COVID testing than mild to moderate or no fear (44.5% Vs 34.8% Vs 41.0%). Contrastingly, 38.0% of respondents who had anyone found COVID-19 sick in family had not gone through COVID-19 screening. Association between Past vaccination experience and getting screened for COVID-19 is highly significant [p<0.001, odds ratio=1.715, 95% CI (1.398-2.104)].

1018 respondents had previous experience of vaccination (PVER) for any vaccine preventable disease. Out of them, 79.8 % had good, 19.4 % average and 0.8 % had poor experience. Poor experience was associated with poor services or post vaccine illness (Figure 3). Experience of previous vaccination was highly associated with vaccination willingness (p<0.001). 68.5% (668) PVER were not aware about adverse events following immunization (AEFI; p<0.001, odds ratio=1.089 and 95%CI (0.875-1.356). 86.1% PVER will vaccinate depending on one or other factor. In general, PVER had more willing for COVID-19 vaccine than nPVER (no previous experience of vaccination) rather 37.8% of poor-PVER will vaccinate on doctor's recommendation. It seems that previous poor vaccination experience is not linked to denial for future COVID-19 vaccine (Supplementary Table). 791 (46.1 %) respondent's belief that COVID-19 vaccine can prevent COVID-19 illness, while 830 respondents belief as "may be" and 96 (5.6 %) responded "no" belief on COVID-19 vaccine illness prevention capacity.

Qualification (p=0.441) and occupation (p= 0.496) were insignificant with belief but only 43.2% doctorate had belief in contrast to 50.7% illiterates had belief. Among researchers, 9.1% respondents have no belief in COVID-19 vaccine prevention capacity. Businessman (51.6%) and professional (50.4 %) (Engineers, Charted accountants, teachers and professional other than health care) respondents had belief in COVID-19 vaccine (Supplementary Table 2 of Supplementary file 4). Respondents had "mild to moderate fear" showed more belief than "no" or "severe fear" (47.25 Vs 43.8% Vs 45.1%). Respondents fallen sick (self) of COVID-19 had more belief in vaccine (50.6 %) than "no' belief (2.5 %) and the association between individual or family member fallen sick with belief in COVID-19 vaccine was highly significant (p< 0.001).Belief and willingness for COVID-19 vaccine were independent to each other (p= 0.925). Details of belief in COVID-19 vaccine and willingness were given in Figure 4. Among 791 Vaccine believing respondents (VBR), 59 (7.5%) respondents will not vaccinate and details for their denial were given in Figure 5. Maximum VBR wishes for "free of cost" (47.5% out of 791), Interestingly 51 VnBR (Vaccine non-believing respondents) can go for vaccination if getting free of cost. Majority AEFI aware respondents had "yes" or "may be" belief for COVID-19 vaccine. None of the poor-PVER had "no" belief. Hence AEFI awareness did not impact on belief over vaccine. 414 respondents will vaccinate "as soon as vaccine arrives in market". While 42 (2.4 %) respondents will vaccinate up on recommendations of peer group. 938 (54.6 %) respondents will take up the doctor's call for vaccination (Figure 2). Majority of VnWR (Vaccine non willing respondents) were from urban area (53.3% out 122) and association between residence area and vaccine willingness was highly significant.

Willingness was highly dependent on literacy (p=0.001) and qualification (p<0.0001). 37.8% doctorate respondents will vaccinate themselves "once vaccine comes in market" and 29.7 % doctorates were depended on doctor's recommendation. 27.5 % illiterates and 18.2% researchers "will not vaccinate" which was highest than any other group. Respondents occupation and willingness was significantly associated variables (p<0.001) (Supplementary Table 3 of Supplementary file 4). 63.1% of the VnWR had either no income or <10,000, suggesting earning is a limiting factor for willingness for COVID-19 vaccine. 48.1% of high-income respondents (>1,00,000 rupees/month) will vaccinate "once vaccine comes in market". Free vaccine drive can help to achieve desired vaccination targets. Description of VnWR with socio-economic status is given in Figure 6. 82 % of the respondents were sure about to take vaccine depending on one or another factor. 10.9 % respondents were not sure about taking vaccine, while 122 (7.1%) respondents will not vaccinate at all. Out of no vaccine candidates, 38 (31.1 %) had denied causing "new vaccine, rushed vaccine, not enough evidence", while 82 (62.2 %) had "safety concern" about the COVID 19 vaccine.

Maximum 806 (50.5%) VWR asked for "free of cost vaccine" while 144 (9.0%) vaccinate at any cost. 292 (18.3%) and 353 (22.1%) can afford the vaccine at <1000 INR and <100 INR respectively. Vaccine cost affordability was highly associated with residence, education, and qualification. 77 % any cost VWR were from urban area, (10% of total urban respondents) while 50.5% of total rural respondents asked for "free of cost" vaccination. Vaccine affordability was directly proportional to the income of respondents. Details of the socio-economic status and vaccine affordability are given in Figure 7. Maximum VWR (482, 30.2%) can travel 1-3 Km for COVID-19 vaccination. 269 (16.9%) wishes

Table 1: Detailed demographic characteristics of respondents.

Age	Frequency (percentage)
Up to 15 years	42(2.4%)
16-30 years	867(50.5%)
31-45 Years	518(30.2%)
46-60 years	227(13.2%)
61-75 Years	593.4%)
76-90 Years	4(0.2%)
Sex	
Male	1030(60.4%)
Female	687(40.0%)
Residence Area	
Urban	1088(63.4%)
Semi Urban	261(15.2%)
Rural	368(21.4%)
Education	
Literate	1648(96.0%)
Illiterate	69(4.0%)
Qualification	
Illiterate	69(4.0%)
Up to 12	558(32.5%)
Graduate	681(39.7%)
Post Graduate	335(19.5%)
Doctorate	74(4.3%)
Occupation	
Health Care Professional	295(17.2%)
Researcher	33(1.9%)
Engineer/ CA/Teacher/Any other professional	250(14.6%)
Bussiness	128(7.5%)
Student	489(28.5%)
Other	522(30.4%)
Socioeconomic Status	
<10,000 INR	323(18.8%)
10,000 to 50,000 INR	487(28.4%)
50,000 to 1,00,000 INR	227(13.2%)
>1,00,000 INR	81(4.7%)
No Income	599(34.9%)

vaccine at doorstep although more respondents (379 (23.8%)) can travel any distance for COVID-19 vaccination. Travel for vaccine was highly associated with residence, education, and qualification (p<0.001). 21.5% rural respondent wants vaccine at doorstep (Average-15.7 %). Comparative details are given in Figure 8.

491 (30.8%) VWR knew AEFI while 1104(69.2%) out of 1595 were not aware of AEFI at all.74.3% of rural VWR and 67.9% urban VWR were not aware of AEFI. Awareness about AEFI was dependent on Education status (p= 0.021, OR = 2.388, 95%CI 1.113-5.124), literates were more aware of AEFI than illiterate (31.3 % Vs 16.0 %). Awareness of AEFI was highly significantly associated with qualification of VWR (p < 0.001). AEFI was independent with previous vaccination experience (p= 0.445), PVER were equally unaware of AEFI than nPVER. There was a strong inclination for indigenous vaccine over western or eastern countries originated vaccine and maximum 1103 (69.2 %) VWR opting for Indian origin followed by 391 (24.5 %) VWR for "any of the above" (Figure 2). Lowest preference was observed for eastern countries (17, 1%). Doctorate qualified VWR had more belief in western origin vaccine than other qualifications (18.5% Vs 5.3%). 1305 (81.8 %) VWR will vaccinate whole family once vaccine launched in market and followed by 184 (11.5 %) will only vaccinate self.In a multi-answer response to motto behind receiving future COVID-19 vaccine, 428 (26.8%) VWR will accept the vaccine "to protect self and family" while second highest single response was "vaccine is important to prevent disease". 30(1.9%) VWR had opted "to protect others" while 36(2.3%) had gone with "benefits of vaccination outweighs risk". Insurance coverage was weighted by only 9 VWR. 97.35% of 49.1% VWR opted multiple responses prioritizing "self and family protection".

DISCUSSION

Survey is a pragmatic approach to understand/access the attitude and response of public towards an outbreak especially when face-to-face research is restricted due to lockdowns and other infection control measures. Researcher should aim for approx. 60% response rate in his research.[4] Overall Survey response rate of 33%, In-person survey (57%) and online survey (29%) response rate is considered good.[5] Direct survey response rate of 85.62% and online response rate of 40.71% of our study is much favourable. Interest of respondents towards pandemic related survey, persuasive skills of surveyor, faith and/or interested questionnaire may have contributed. Negative social coverage may dip initial vaccination, but hesitancy may cover through active awareness and IEC (Information, Education and Communication). Huge variation in the geography, environment, community, population in India causing variable R_0 (Basic reproduction number). If value of R_0>1, depicts the exponential rise of infection and broad vaccination coverage is required to eliminate the disease.[6] Slip in efficacy of vaccine requires more population to be immunized.[7] Considering data obtained in our survey, willingness and belief towards vaccination is very high. 82% respondents are sure about going for vaccination while 46.1% participant beliefs that vaccine can prevent the COVID-19 illness. These Figures are satisfactorily above the required vaccine threshold and if turned into reality, desired herd immunity may

attain. Therefore, data is diminutive to so called vaccine hesitancy. AEFI knowledge and practice of mothers' of child age group 12 to 23 months found 90% mothers have knowledge about AEFI.[8] 50-55% respondents had good knowledge regarding AEFI and mothers' of child <5 years age had better knowledge about AEFI as compared to health care workers.[9] while only 17.8% have good reporting practices.[10] Major determinants about AEFI (knowledge and response required) were directly proportional to employment and educational status of the mother.[9] In our survey, lesser participants were aware about AEFI (28.6%) compared to above data owing to inclusion of all age respondents. A study by Bansal and Mahajan 2017 observed that, parents knowing AEFIs had positive attitude towards vaccination because they knew symptoms are transient and manageable. They were also informed about when to take the prompt action.[11] It is our belief that public discussions about COVID19 vaccination, such as adverse effects following immunization and their management, can effectively increase the vaccine acceptance; intervention studies to assess this approach are warranted. Information with respect to vaccination drive, benefit-risk ratio, AEFIs, and misconceptions/ taboos deciphering should percolate to the targeted population. Multiple surveys on COVID 19 vaccine stated range of 69% - 79% vaccine willingness.[12] while denial also ranges in 7.2-10 %.[13,14] An online survey in Turkey and United Kingdom reported that 31% and 14% participants respectively were not confirm about going for COVID-19 vaccination while 3% respondents directly denied in both countries.[15] Ward *et al.*, 2020 concluded that French individuals (7.9% certainly and 16.1% probably) would reject the vaccination citing reasons such as safety concerns, lack of trust.[16] In our study vaccine hesitancy among population is visible (7.1%) but less than other nations. High willingness (82 %) is a good sign for future mass vaccination drive. Reiter *et al.*, 2020 observed that only 35% respondents were ready to buy vaccine at any cost or could spent more than 50USD. Economic status can be considered as one of the major barriers in the way of COVID-19 vaccination drive.[14] An Indonesian study reported that 14.9% respondents would like to vaccinate only if provided free of cost while 6.6% stated that they are not willing to be vaccinated even if provided without any cost. 78.2% participants agreed for paid vaccination with mean and median willingness to pay (WTP) of 57.20 USD and 30.94 USD.[17] Our survey showed that maximum 806 (50.5%) VWR seeks free vaccine while 144 (9.0%) can have vaccine at any cost. Majority of the VnWR are low socioeconomic (<10,000) or no income respondents, suggests that income is a factor for vaccine willing and non-willing. High cost of the vaccine seems unfavourable for future vaccine drive.Positive per test ratio in India and Chhattisgarh on date (01/02/2021) was 5.4% (1,07,77,284/19,84,73,178) and 7.5% (3,06,019/40,76,431) while our survey revealed positive per test ratio of 13.1% (84/643).[18,19] Other survey depicted 46.8% complete and 24.7% somewhat agreed respondents to take vaccine once it will available. 6.1% were slightly and 8.1% were completely disagreed to be vaccinated. 14% were completely agreed to have vaccine only if employer ask to do so.[12,20] Although question draft was different in our survey, respondents showed less promptness then above percentage (46.8% Vs 24.1%), employers recommendations had low importance (14% Vs 0.8%). We observed majority (54.6%) of population rely on their health care provider recommendations. In multianswer response to "motto behind receiving vaccine" 47.8% respondents opted more than one response including "to protect self and family" while second commonest response was "vaccine is important to prevent the disease". Insurance coverage was opted by only 9VWR, 14 VWR had gone with all available options. Similar to our findings, Lancet and other stated that 29-42% (majority) willing to be vaccinated to protect themselves and others 16% agreed because they believe science, and 4% thinks benefits of vaccination outweighs risk.[21,22] We found that vaccine willingness of majority of population is to protect themselves and family. In developing country like India insurance is not a major determinant while scenario is different in USA where 17.1% population said they will undergo vaccination only if it is under insurance coverage.[23] This is a convenience sample, generalizability of the results is limitation. Attempts were taken to neutralize the information and geographical bias.

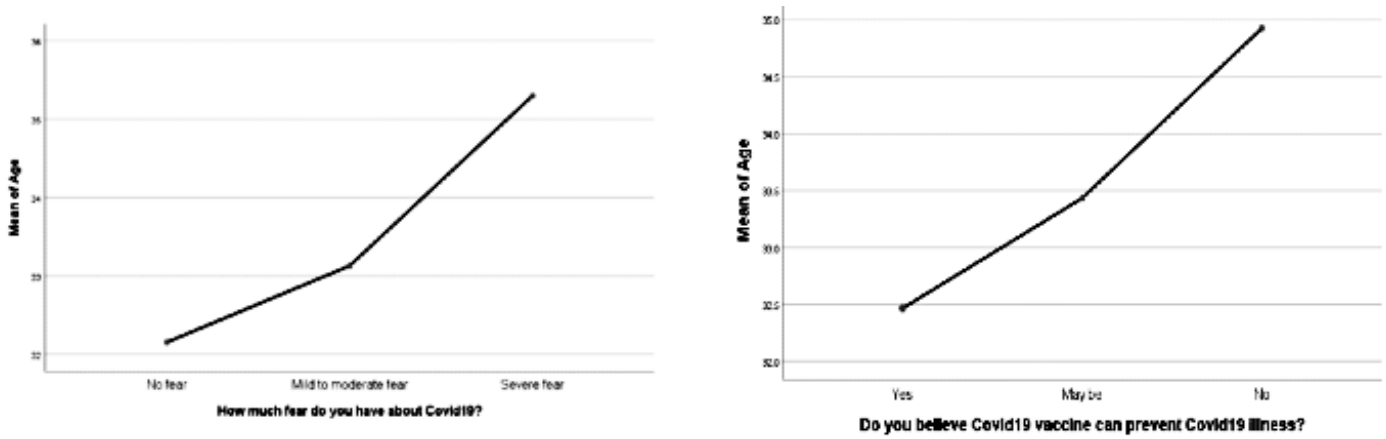

Figure 1: Relation of age of participants with fear and belief.

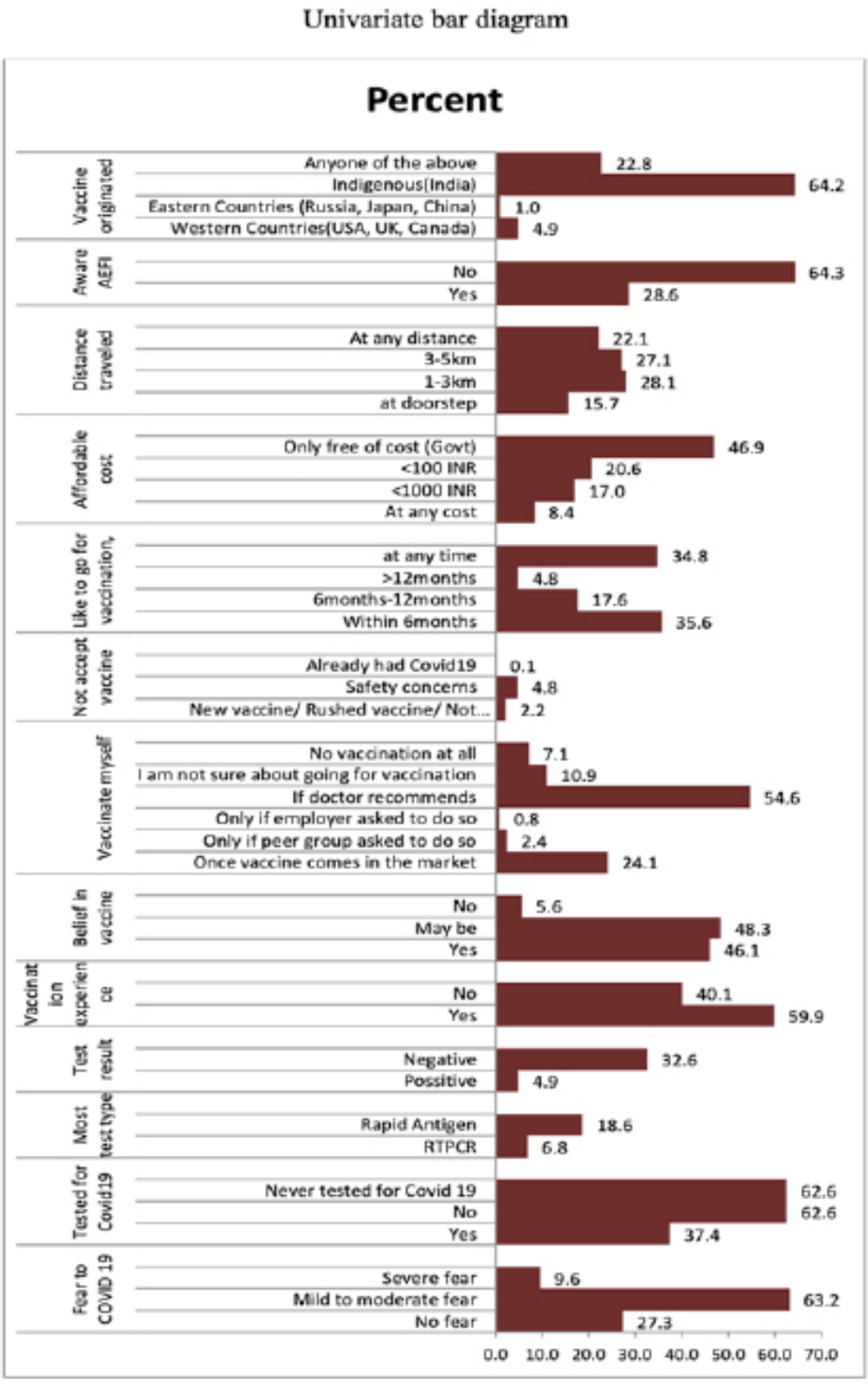

Figure 2: Univariate presentation of data.

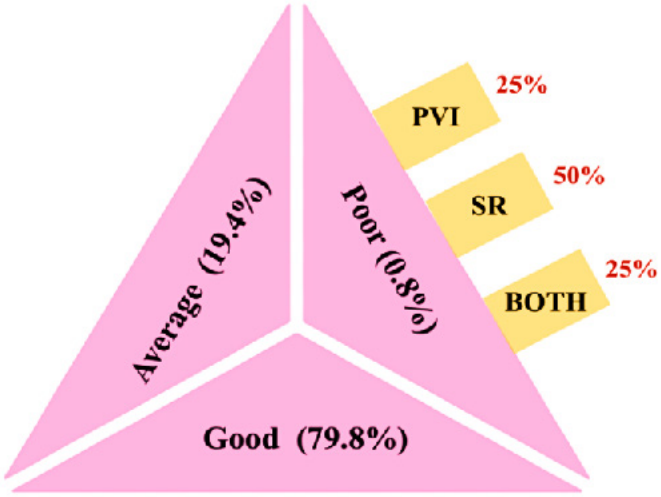

Figure 3: Previous vaccination experience respondents having good, average, and poor experience. Causes of poor experience as Post Vaccine Illness (PVI), Service related (SR) and Both the cause.

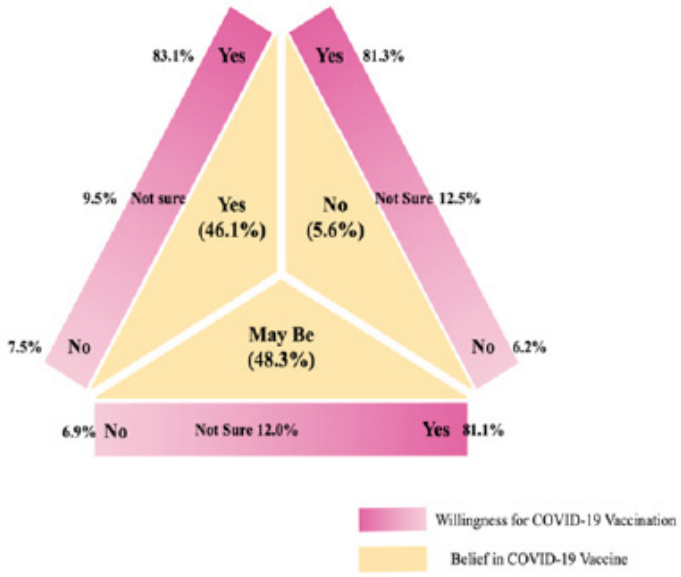

Figure 4: Details of Belief in COVID-19 Vaccine and their correlation with willingness for future COVID-19 Vaccination.

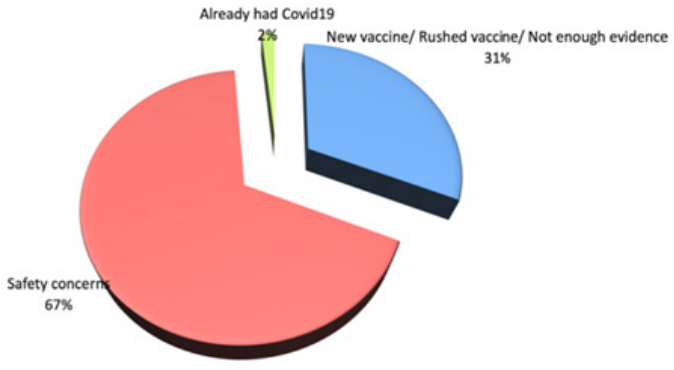

Figure 5: Details of denial for future COVID-19 Vaccination.

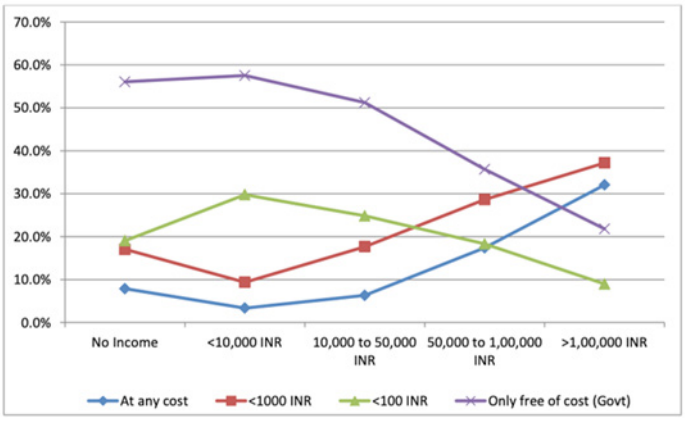

Figure 6: Non-willing respondent's socio-economic status and their willingness for vaccination (non-willingness decreases with increase in socio-economic status).

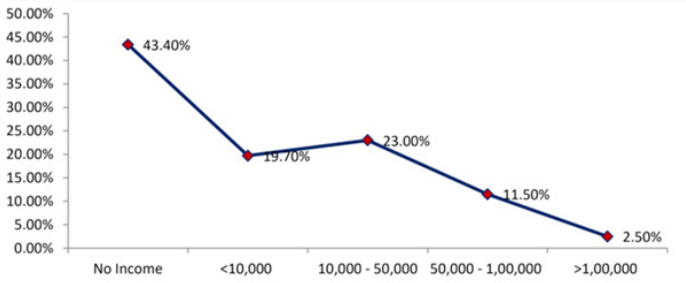

Figure 7: Percentage of respondents willing for vaccination at different cost Vs their socio-economic status.

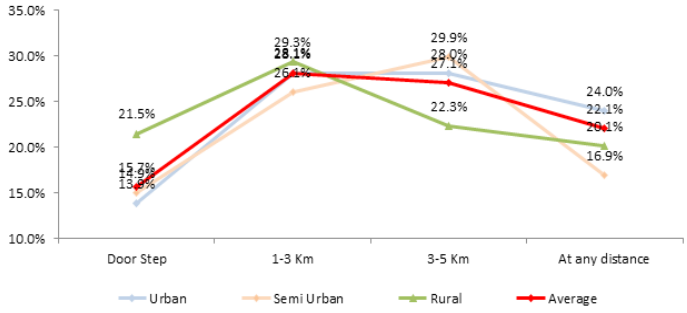

Figure 8: Distance travel for administering future COVID-19 vaccine and residence area of respondents (compared with average respondents travel capacity).

CONCLUSION

Our study annuls the illusion future hesitancy towards vaccination drive. This study provides good knowledge to understand the public attitude towards attributes of COVID-19 vaccine among participants. Results indicated that awareness campaign for COVID-19 vaccination among the low socio-economic, ill, and low literate population is warranted. Current study suggested an age, address, education, and occupation are not the major influencer for willingness or belief for COVID19 vaccine. Vaccine cost, distance travel for vaccination, nation of origin of vaccine and doctor's call for vaccination are major factor for willingness

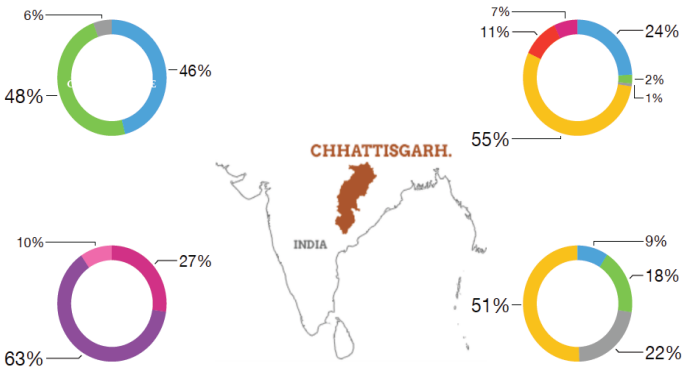

Figure 9: Showing multiple aspects of survey like belief ,willingness and affordability of vaccine and covid19 fear.

towards vaccine. Near 50% belief and 82% willingness for COVID-19 vaccine is welcoming. Such good faith and further awareness (IEC, social, and print communication) can mitigate diminutive vaccine hesitancy and vaccine non-willingness. Vaccine hesitancy and acceptance for COVID-19 could be more susceptible to continued outbreaks in near future, even if vaccines are available in India. Public discussions/compaign about COVID-19 vaccination related adverse events and their management can effectively increase vaccine acceptance. Targeting those in the population who are currently hesitant seems most promising to increase the no. of vaccinated individuals in the population. To address vaccine hesitancy properly, it is required to convince the people further with strong evidence and clear communication on the safety and effectiveness of the COVID-19 vaccine. (Figure 9)

ACKNOWLEDGEMENT

Authors are grateful to the parent institute involved in this study for providing the facility and space for this work.

CONFLICT OF INTEREST

The Authors declare that they have no conflict of interest.

Authors Contribution

PC- Did the statistical analysis and draft writing; **SRI, GSB, NLN, LC, SR, MTBB, RS, MM**-participated in manuscript preparation; AK, NSC, PKG-performed designing, analysis, and finalized manuscript.

REFERENCES

1. World Health Organization. Coronavirus disease (COVID-19). Situation report. In: World Health Organization [internet]. Vol. 130; 2020 May [cited May 30, 2020]. Available from: https://www.who.int/docs/default-source/coronaviruse/situation-reports/20200529-covid-19-sitrep-130.pdf?sfvrsn=bf7e7f0c_4.
2. [cited Nov 15 2021]Available from: https://www.pib.gov.in/PressReleasePage.aspx?PRID=1677148.
3. [cited Nov 30 2021]Available from: https://dashboard.cowin.gov.in/.
4. Jack. E. Fincham, PhD response rates and responsiveness for surveys, standards and the journal. Am J Pharm Educ;72(2):43:2008Apr 15.
5. Krishnan TN, Poulose S. Response rate in industrial surveys conducted in India: trends and implications. IIMB Manag Rev. 2016;28(2):88-97, ISSN 0970-3896. doi: 10.1016/j.iimb.2016.05.001.
6. MILLER E. Global burden of disease: part C. Potential and existing impact of vaccines on disease epidemiology. In: Bloom BR, Paul-Henri L, editors. The vaccine book. Academic Press, ISBN 9780121072582; 2003. p. 37-50. doi: 10.1016/B978-012107258-2/50005-6.
7. Anderson RM, Vegvari C, Truscott J, Benjamin S. Collyer Challenges in creating herd immunity to SARS-CoV-2 infection by mass vaccination, The Lancet. Novemeber. 2020;396:21. doi: 10.1016/S0140-6736(20)32318-7.
8. Shampa, Mog, Chanda, Datta, Srabani and Prof, Asso and Resident, Senior. Datta, Anjan and Baidya, Subrata and Das. Natl J Community Med. 2017. Assessment of Mother's Knowledge and Practices Regarding Adverse Events Following Immunization of Their Children in a Rural Area of Tripura;8:159-63.
9. Afolaranmi TO, Hassan ZI, Sodipo OY, Gwomson D, Ugwu OJ, Ofakunrin A.O.D., *et al.* Knowledge of adverse events following immunization, its prevalence and actions of mothers of children aged 0-23 months in a tertiary health institution in Jos, North Central Nigeria. J Med Trop. 2020;22(1):57-64). doi: 10.4103/jomt.jomt_45_19, PMID 34109138.
10. Mohammed LA, Aliyu AA, Maiha BB, Isa A. Knowledge, perception and reporting attitude of adverse effects following immunization among primary healthcare workers in sabon gari local government area Zaria, Kaduna state, Nigeria. Niger J Basic Clin Sci. 2018;15(1):81-6. doi: 10.4103/njbcs.njbcs_18_17.
11. Bansal S.. Adverse events following immunization with pentavalent vaccine in a tertiary care hospital. Int J Contemp Pediatr. 2018;5(1):82-4. doi: 10.18203/2349-3291.ijcp20175139.
12. Kreps S, Prasad S, Brownstein JS, Hswen Y., Garibaldi B.T., Zhang B., *et al.* Factors associated with US adults' likelihood of accepting COVID-19 vaccination. JAMA Netw Open. 2020;3(10):e2025594. doi: 10.1001/jamanetworkopen.2020.25594, PMID 33079199.
13. Neumann-Böhme S, Varghese NE, Sabat I, Barros P.P., Brouwer W., van Exel J. *et al.* Once we have it, will we use it? A European survey on willingness to be vaccinated against COVID-19. Eur J Health Econ. 2020;21(7):977-82. doi: 10.1007/s10198-020-01208-6, PMID 32591957.
14. Reiter PL, Pennell ML, Katz ML. Acceptability of a COVID-19 vaccine among adults in the United States: how many people would get vaccinated? Vaccine. 2020;38(42):6500-7, ISSN 0264-410X. doi: 10.1016/j.vaccine.2020.08.043, PMID 32863069.
15. Salali GD, Uysal MS. COVID-19 vaccine hesitancy is associated with beliefs on the origin of the novel coronavirus in the UK and Turkey. Psychol Med. 2020:1-3. doi: 10.1017/S0033291720004067, PMID 33070804.
16. Ward J.K., Alleaume C., Peretti-Watel P., COCONEL Group The French public's attitudes to a future COVID-19 vaccine: the politicization of a public health issue. Soc Sci Med. 2020;265:113414, ISSN 0277-9536. doi: 10.1016/j.socscimed.2020.113414, PMID 33038683.
17. Reiter PL, Pennell ML, Katz ML. Acceptability of a COVID-19 vaccine among adults in the United States: how many people would get vaccinated? Vaccine. 2020;38(42):6500-7, ISSN 0264-410X. doi: 10.1016/j.vaccine.2020.08.043, PMID 32863069.
18. Harapan H, Wagner AL, Yufika A, Winardi Wira, Anwar Samsul, Gan AK *et al.* Willingness-to-pay for a COVID-19 vaccine and its associated determinants in Indonesia. Hum Vaccin Immunother. 2020;16(12):3074-80. doi: 10.1080/21645515.2020.1819741, PMID 32991230.
19. [cited 2/2/2021]Available from: https://www.business-standard.com/article/current-affairs/chhattisgarh-coronavirus-update-377-new-cases-reported-526-recover-121012301114_1.html.
20. [cited 2/2/2021]Available from: https://en.wikipedia.org/wiki/COVID-19_pandemic_in_Chhattisgarh#February_2021. Wikipedia.
21. Lazarus JV, Ratzan SC, Palayew A, Gostin L.O., Larson H.J., Rabin K. *et al.* A global survey of potential acceptance of a COVID-19 vaccine. Nat Med. 2021;27(2):225-8. doi: 10.1038/s41591-020-1124-9, PMID 33082575.
22. Kreps S, Prasad S, Brownstein JS, Hswen Y., Garibaldi B.T., Zhang B., *et al.* Factors associated with US adults' likelihood of accepting COVID-19 vaccination. JAMA Netw Open. 2020;3(10):e2025594. doi: 10.1001/jamanetworkopen.2020.25594, PMID 33079199.
23. Dodd P.J., Yuen C.M., Jayasooriya S.M., van der Zalm M.M., Seddon J.A.. Quantifying the global number of tuberculosis survivors: a modelling study. Lancet Infect Dis. 2021;21(7):984-92. doi: 10.1016/S1473-3099(20)30919-1. PMID 33640076.
24. Bell S, Clarke R, Mounier-Jack S, Walker JL, Paterson P. Parents' and guardians' views on the acceptability of a future COVID-19 vaccine: A multi-methods study in England. Vaccine. 2020;38(49):7789-98,ISSN 0264-410X. doi: 10.1016/j.vaccine.2020.10.027, PMID 33109389.
25. Price S. 79% of Americans considering getting coronavirus vaccine—with some strings attached. ValuePenguin. August 10 2020.

Cite this article: Chaurasia P, Inchulkar SR, Baghel GS, Naik ML, Chandravanshi L, Rathiya S, *et al.* A Cross-sectional Survey to Understand the Public Attitude towards Attributes of COVID-19 Vaccine in the Chhattisgarh State of India. Int. J. Pharm. Investigation. 2023;13(1):187-200.

Supplementary Figure 3: Information related to Age, Sex, Residence Area, Education, Occupation, Socioeconomic Status, etc of the participants are appended below under various section.

Age

Frequency			Percent	Valid Percent	Cumulative Percent
Valid	Up to 15 years	42	2.4	2.4	2.4
	16-30 years	867	50.5	50.5	52.9
	31-45 Years	518	30.2	30.2	83.1
	46-60 years	227	13.2	13.2	96.3
	61-75 Years	59	3.4	3.4	99.8
	76-90 Years	4	.2	.2	100.0
	Total	1717	100.0	100.0	

Sex

Frequency			Percent	Valid Percent	Cumulative Percent
Valid	Male	1030	60.0	60.0	60.0
	Female	687	40.0	40.0	100.0
	Total	1717	100.0	100.0	

Residence Area

Frequency			Percent	Valid Percent	Cumulative Percent
Valid	Urban	1088	63.4	63.4	63.4
	Semi Urban	261	15.2	15.2	78.6
	Rural	368	21.4	21.4	100.0
	Total	1717	100.0	100.0	

Education

Frequency			Percent	Valid Percent	Cumulative Percent
Valid	Literate	1648	96.0	96.0	96.0
	Illiterate	69	4.0	4.0	100.0
	Total	1717	100.0	100.0	

Qualification

Frequency			Percent	Valid Percent	Cumulative Percent
Valid	Illiterate	69	4.0	4.0	4.0
	Up to 12	558	32.5	32.5	36.5
	Graduate	681	39.7	39.7	76.2
	Post Graduate	335	19.5	19.5	95.7
	Doctorate	74	4.3	4.3	100.0
	Total	1717	100.0	100.0	

Occupation

Frequency			Percent	Valid Percent	Cumulative Percent
Valid	Health Care Proffessional	295	17.2	17.2	17.2
	Researcher	33	1.9	1.9	19.1
	Engineer/ CA/Teacher/Any other professional	250	14.6	14.6	33.7
	Bussiness	128	7.5	7.5	41.1
	Student	489	28.5	28.5	69.6
	Other	522	30.4	30.4	100.0
	Total	1717	100.0	100.0	

Socioeconomic StatusFrequencyPercent

<10,000 INR	**323**	**18.8**
10,000 to 50,000 INR	487	28.4
50,000 to 1,00,000 INR	227	13.2
>1,00,000 INR	81	4.7
No Income	599	34.9
Total	1717	100.0

Are you suffering from any chronic illness (Diabetes, Hypertension, Cardiac disorders, Renal disorders, Respiratory disorders)?

Total	1717	100.0	100.0	

if yes please specify

Frequency			Percent	Valid Percent	Cumulative Percent
Valid	No illness	1512	88.1	88.1	88.1
	Diabetes	46	2.7	2.7	90.7
	Hypertension	72	4.2	4.2	94.9
	Cardiac Disorders	1	.1	.1	95.0
	Renal Disorders	5	.3	.3	95.3
	Respiratory Disorders	11	.6	.6	95.9
	Any other	28	1.6	1.6	97.6
	Option 1&2	27	1.6	1.6	99.1
	Option 2&6	2	.1	.1	99.2
	Option 1&4	1	.1	.1	99.3
	Option 1,2&5	2	.1	.1	99.4
	Option 1&3	2	.1	.1	99.5
	Option 5&6	1	.1	.1	99.6
	Option 1,2&3	3	.2	.2	99.8
	Option 1&6	2	.1	.1	99.9
	Option 1,5&6	2	.1	.1	100.0
	Total	1717	100.0	100.0	

How much fear do you have about Covid19?

Frequency			Percent	Valid Percent	Cumulative Percent
Valid	No fear	468	27.3	27.3	27.3
	Mild to moderate fear	1085	63.2	63.2	90.4
	Severe fear	164	9.6	9.6	100.0
	Total	1717	100.0	100.0	

Have you or anyone in your family has fallen sick for Covid19 illness

Total	1717	100.0	100.0	

If_yes

Frequency			Percent	Valid Percent	Cumulative Percent
Valid	No Covid 19 illness	1494	87.0	87.0	87.0
	Individual	81	4.7	4.7	91.7
	Family Member	142	8.3	8.3	100.0
	Total	1717	100.0	100.0	

Have you ever tested for Covid19

Frequency			Percent	Valid Percent	Cumulative Percent
Valid	Yes	643	37.4	37.4	37.4
	No	1074	62.6	62.6	100.0
	Total	1717	100.0	100.0	

If Yes then type of Test

Frequency			Percent	Valid Percent	Cumulative Percent
Valid	Never tested for Covid 19	1074	62.6	62.6	62.6
	RTPCR	117	6.8	6.8	69.4
	Rapid Antigen	320	18.6	18.6	88.0
	TRUENAT	10	.6	.6	88.6
	Other	9	.5	.5	89.1
	Option 1&2 Both	169	9.8	9.8	99.0
	Option 1,2&3	16	.9	.9	99.9
	Option 1&4	2	.1	.1	100.0
	Total	1717	100.0	100.0	

Result of the Test Of

Frequency			Percent	Valid Percent	Cumulative Percent
Valid	0	1074	62.6	62.6	62.6
	Possitive	84	4.9	4.9	67.4
	Negative	559	32.6	32.6	100.0
	Total	1717	100.0	100.0	

Do you have experience of vaccination for yourself or anyone in the family for vaccine preventable disease?If yes then, how was your experience?

Frequency			Percent	Valid Percent	Cumulative Percent
Valid	0	689	40.1	40.1	40.1
	Good	820	47.8	47.8	87.9
	Averge	200	11.6	11.6	99.5
	Poor	8	.5	.5	100.0
	Total	1717	100.0	100.0	

If poor than please specify

Frequency			Percent	Valid Percent	Cumulative Percent
Valid	0	1709	99.5	99.5	99.5
	Service related	4	.2	.2	99.8
	Due to post vaccine illness	2	.1	.1	99.9
	Both	2	.1	.1	100.0
	Total	1717	100.0	100.0	

Do you believe Covid19 vaccine can prevent Covid19 illness?

Frequency			Percent	Valid Percent	Cumulative Percent
Valid	Yes	791	46.1	46.1	46.1
	May be	830	48.3	48.3	94.4
	No	96	5.6	5.6	100.0
	Total	1717	100.0	100.0	

I will vaccinate myself for Covid19

Frequency			Percent	Valid Percent	Cumulative Percent
Valid	Once vaccine comes in the market	414	24.1	24.1	24.1
	Only if peer group asked to do so	42	2.4	2.4	26.6
	Only if employer asked to do so	14	.8	.8	27.4
	If doctor recommends	938	54.6	54.6	82.0
	I am not sure about going for vaccination	187	10.9	10.9	92.9
	No vaccination at all	122	7.1	7.1	100.0
	Total	1717	100.0	100.0	

I will not accept the vaccine because

Frequency			Percent	Valid Percent	Cumulative Percent
Valid	Not Applicable	1595	92.9	92.9	92.9
	New vaccine/ Rushed vaccine/ Not enoughevidence	38	2.2	2.2	95.1
	Safety concerns	82	4.8	4.8	99.9
	Already had Covid19	2	.1	.1	100.0
	Total	1717	100.0	100.0	

Would you like to go for vaccination, if the vaccine is available

Frequency			Percent	Valid Percent	Cumulative Percent
Valid	Not Applicable	122	7.1	7.1	7.1
	Within 6months	612	35.6	35.6	42.7
	6months-12months	302	17.6	17.6	60.3
	>12months	83	4.8	4.8	65.2
	at any time	598	34.8	34.8	100.0
	Total	1717	100.0	100.0	

How much cost you can afford for the vaccination of Covid19

Frequency			Percent	Valid Percent	Cumulative Percent
Valid	Not Applicable	122	7.1	7.1	7.1
	At any cost	144	8.4	8.4	15.5
	<1000 INR	292	17.0	17.0	32.5
	<100 INR	353	20.6	20.6	53.1
	Only free of cost (Govt)	806	46.9	46.9	100.0
	Total	1717	100.0	100.0	

How much distance you can travel for Covid19 vaccination

Frequency			Percent	Valid Percent	Cumulative Percent
Valid	Not Applicable	122	7.1	7.1	7.1
	at doorstep	269	15.7	15.7	22.8
	1-3km	482	28.1	28.1	50.8
	3-5km	465	27.1	27.1	77.9
	At any distance	379	22.1	22.1	100.0
	Total	1717	100.0	100.0	

Are you aware of the adverse events following immunization(AEFI)?

Frequency			Percent	Valid Percent	Cumulative Percent
Valid	Not Applivable	122	7.1	7.1	7.1
	Yes	491	28.6	28.6	35.7
	No	1104	64.3	64.3	100.0
	Total	1717	100.0	100.0	

I would prefer the vaccine originated from

Frequency			Percent	Valid Percent	Cumulative Percent
Valid	Not applicable	122	7.1	7.1	7.1
	Western Countries(USA, UK, Canada)	84	4.9	4.9	12.0
	Eastern Countries (Russia, Japan, China)	17	1.0	1.0	13.0
	Indigenous(India)	**1103**	**64.2**	**64.2**	**77.2**
	Anyone of the above	391	22.8	22.8	100.0
	Total	1717	100.0	100.0	

If the vaccines launched in the market first I would like to vaccinate

Frequency			Percent	Valid Percent	Cumulative Percent
Valid	Not Applicable	122	7.1	7.1	7.1
	Only myself	184	10.7	10.7	17.8
	Only elders	89	5.2	5.2	23.0
	Only kids	17	1.0	1.0	24.0
	Whole family	1305	76.0	76.0	100.0
	Total	1717	100.0	100.0	

You will accept the vaccine because (you can choose more than one option)

Frequency			Percent	Valid Percent	Cumulative Percent
Valid		122	7.1	7.1	7.1
	To protect yourself and family	428	24.9	24.9	32.0
	1;2	217	12.6	12.6	44.7
	1;2;3	11	.6	.6	45.3
	1;2;3;4	1	.1	.1	45.4
	1;2;3;4;5	4	.2	.2	45.6
	1;2;3;4;5;6	14	.8	.8	46.4
	1;2;3;5	8	.5	.5	46.9
	1;2;3;5;6	2	.1	.1	47.0
	1;2;3;6	3	.2	.2	47.2
	1;2;4	3	.2	.2	47.4
	1;2;4;5	9	.5	.5	47.9
	1;2;4;5;6	6	.3	.3	48.2
	1;2;5	169	9.8	9.8	58.1
	1;2;5;6	73	4.3	4.3	62.3
	1;2;6	64	3.7	3.7	66.0
	1;3	14	.8	.8	66.9
	1;3;5	9	.5	.5	67.4
	1;3;5;6	2	.1	.1	67.5
	1;3;6	3	.2	.2	67.7

	1;4	**2**	**.1**	**.1**	**67.8**
	1;4;5;6	2	.1	.1	67.9
	1;4;6	2	.1	.1	68.0
	1;5	65	3.8	3.8	71.8
	1;5;6	23	1.3	1.3	73.2
	1;6	56	3.3	3.3	76.4
	To protect others	30	1.7	1.7	78.2
	2;3	2	.1	.1	78.3
	2;3;4	1	.1	.1	78.3
	2;3;6	1	.1	.1	78.4
	2;5	3	.2	.2	78.6
	2;5;6	1	.1	.1	78.6
	2;6	1	.1	.1	78.7
	Only if I am in risk group	31	1.8	1.8	80.5
	3;4	1	.1	.1	80.5
	3;6	1	.1	.1	80.6
	Only if it is under insurance coverage	5	.3	.3	80.9
	4;5	1	.1	.1	81.0
	4;6	1	.1	.1	81.0
	I think vaccines are important to prevent disease	282	16.4	16.4	97.4
	5;6	8	.5	.5	97.9
	Benifits of vaccination outweighs risk	36	2.1	2.1	100.0
	Total	1717	100.0	100.0	

Supplementary Table 1: Do you have experience of vaccination for yourself or anyone in the family for vaccine preventable disease? * I will vaccinate myself for Covid19 Cross tabulation.

			I will vaccinate myself for Covid19	**Total**					
			Once vaccine comes in the market	Only if peer group asked to do so	Only if employer asked to do so	If doctor recommends	I am not sure about going for vaccination	No vaccination at all	
Do you have experience of vaccination for yourself or anyone in the family for vaccine preventable disease?	Yes	Count	275	26	9	567	98	53	1028
		% within Do you have experience of vaccination for yourself or anyone in the family for vaccine preventable disease?	26.8%	2.5%	0.9%	55.2%	9.5%	5.2%	100.0%
		% within I will vaccinate myself for Covid19	66.4%	61.9%	64.3%	60.4%	52.4%	43.4%	59.9%

Supplementary Figure 1:

Survey Study For Accessing The Willingness, Enthusiasm And Readiness Of Population For COVID-19 Vaccine

Department of Kaumarbhritya, Government Ayurved College, Raipur, Chhattisgarh, India
(IEC approval no.-203/2020/01/RP/2020)

नाम.....
आयु .....
लिंग : पुरुष / महिला.....

प्रतिवादी के साथ संबंध:
स्वयं /माता-पिता/पालक
पता.....
.....

निवास का क्षेत्र:
शहरी /अर्ध शहरी / ग्रामीण

शिक्षा
साक्षर/ निरक्षर
यदि साक्षर हैं तो)-
12th /ग्रेजुएट / पोस्ट ग्रेजुएट / डॉक्टरेट

व्यवसाय
स्वास्थ्य कर्मी / शोधकर्ता / इंजीनियर / सी.ए./ शिक्षक / कोई अन्य व्यावसायिक / व्यवसाय/ विद्यार्थी / अन्य कृपया निर्दिष्ट करें.....

धर्म
हिंदू / मुस्लिम / सिख /ईसाई / अन्य

सामाजिक आर्थिक स्थिति / मासिक आय
<10,000 / 10,000-50,000 / 50,000- 100000 / > 100000/ आय नहीं

आप व्यायाम करतें है?
हाँ / नहीं
यदि हाँ तो
व्यायाम का प्रकार
शारीरिक व्यायाम / योग / एरोबिक्स / अन्य
व्यायाम की अवधि
<30 min / >30min.
क्या आप रोग प्रतिरोधक क्षमता बढ़ाने के लिए औषधियों का सेवन करते हैं ?(हर्ब्स, आयुर्वेद, होमियोपैथी, विटामिन्स)
हाँ / नहीं
यदि हाँ तो स्पष्ट करें (आप एक से अधिक विकल्प चुन सकते हैं)
हर्ब्स (गिलोय , हल्दी etc).....
आयुर्वेदिक औषधि (आयुष काढ़ा, च्यवनप्राश).....
होम्योपैथिक औषधि (आर्सेनिक अल्ब etc).....
विटामिन्स & मिनेरल्स (Vit C & Zinc).....
अन्य.....

क्या आप किसी पुराने रोग से पीड़ित हैं ?(मधुमेह, उच्च रक्तचाप, हृदय रोग, वृक्क रोग, श्वास रोग)
हाँ / नहीं
यदि हाँ तो स्पष्ट करें (आप एक से अधिक विकल्प चुन सकते हैं)
मधुमेह.....
उच्च रक्तचाप.....
हृदय रोग.....
वृक्क रोग.....
श्वास रोग.....
अन्य.....

1. **आपको कोविड 19 को लेकर कितना डर है ?**
   कोई भय नहीं.....
   भय हैं पर कम .....
   गंभीर भय .....
2. **क्या आप या आपके परिवार में कोई Covid19 से पीड़ित हुआ है?**
   हाँ - .....स्वयं/ परिवार .....
   नहीं.....
3. **क्या आपने कभी Covid19 के लिए परीक्षण करवाया है ?**
   हाँ.....
   नहीं.....
   यदि हाँ तो परिक्षण का प्रकार (RTPCR/RAPID ANTIGEN/TRUENAT/OTHER)
   परिक्षण का परिणाम था
   सकारात्मक .....
   नकारात्मक .....
4. **क्या आपने कभी स्वयं/परिवार के सदस्य का टीकाकरण द्वारा रोकथाम की जा सकने वाली बिमारियों के लिए टीकाकरण कराया है एवं क्या आपके पास उस टीकाकरण से सम्बंधित अनुभव है?**
   हाँ.....
   नहीं.....
5. **यदि हाँ, आपका अनुभव था**
   अच्छा.....
   औसत.....
   खराब.....
   कृपया अगर खराब अनुभव हुआ तो, निर्दिष्ट करें
   सेवा संबंधी .....
   वैक्सीन के बाद बीमारी संबंधी .....
   दोनों.....

Survey Study For Accessing The Willingness, Enthusiasm And Readiness Of Population For COVID-19 Vaccine

Department of Kaumarbhritya, Government Ayurved College, Raipur, Chhattisgarh, India
(IEC approval no.-203/2020/01/RP/2020)

6. क्या आप मानते हैं की Covid19 वैक्सीन के द्वारा Covid19 बीमारी को रोका जा सकता है ?
   हाँ.....
   नहीं .....
   शायद .....
7. मैं Covid19 के लिए टीकाकरण कराऊंगा यदि
   जैसे ही वैक्सीन बाजार में उपलब्ध होगी .....
   प्रबुद्ध वर्ग के कहने पर .....
   एम्प्लायर के कहने पर .....
   यदि चिकित्सक ऐसा परामर्श दे .....
   कुछ निश्चित नहीं .....
   टीकाकरण नहीं कराऊंगा .....
8. मैं टीके को स्वीकार नहीं करूँगा क्योंकि
   वैक्सीन नयी है / पर्याप्त तथ्य उपलब्ध नहीं हैं.....
   सुरक्षा कारणों से.....
   मैं पूर्व में Covid19 से पीड़ित हो चूका हूँ.....
9. यदि टीका उपलब्ध हो तो मैं टीकाकरण कराना चाहूंगा
   6 महीने के भीतर .....
   6 महीने- 12 महीने ... .
   > 12months ....
   किसी भी समय.....
10. Covid -19 के टीकाकरण के लिए आप कितना खर्च वहन कर सकते हैं?
    किसी भी कीमत पर.....
    <1000 INR ....
    <100 INR .....
    केवल नि: शुल्क(Govt) ....
11. Covid -19 टीकाकरण के लिए आप कितनी दूरी तय कर सकते हैं?
    घर पर ....
    1-3 किमी ....
    3-5 किमी.....
    किसी भी दूरी पर .....
12. क्या आप टीकाकरण के बाद होने वाली प्रतिकूल घटनाओं के विषय में जानते हैं ?
    हाँ.....
    नहीं.....
13. मैं निम्नलिखित देशों मे निर्मित वैक्सीन को प्राथमिकता देना चाहुंगा|
    पश्चिमी देश (यूएसए, यू.के.,कनाडा) .....
    पूर्वी देशों (रूस, जापान, चीन) ....
    स्वदेशी (भारत) ....
    उपरोक्त में से कोई एक .....
14. यदि टीके बाजार में उपलब्ध हो जाते हैं तो मैं टीकाकरण कराना चाहूंगा
    केवल मैं.....
    केवल बच्चे .....
    केवल बुजुर्ग ....
    पूरा परिवार.....
15. मैं टीके को स्वीकार करूँगा क्योंकि
    अपने परिवार एवं स्वयं को बचाने के लिए.....
    दूसरों को बचाने के लिए.....
    केवल यदि मैं रिस्क ग्रुप में आता हूँ.....
    केवल अगर ये बीमा कवरेज के तहत आता है.....
    मुझे लगता है कि बीमारियों की रोकथाम के लिए टीकाकरण महत्वपूर्ण है.....
    टीकाकरण के लाभ हानि की तुलना में कहीं अधिक हैं.....

Survey/Questionnaire Consent Form

Name and number:

I, _____(participant's name), understand that I am being asked to participate in a survey/questionnaire activity that forms part **Survey Study for accessing the willingness, enthusiasm and readiness of population for COVID-19 vaccine** in the **Shri NPA Govt Ayurveda College, Raipur, CG, India**. It is my understanding that this survey/questionnaire has been designed to gather information about the following subjects or topics:

1. To conduct a survey among population for readiness, enthusiasm, and willingness for COVID -19 vaccination in future.

2. Search for variables which can affect the affinity for readiness, enthusiasm, and willingness for COVID -19 vaccination in future among surveyed population.

Participant name:
Signature:
Date:

Please keep a copy of this consent form for your records. If you have other questions concerning your participation in this project, please contact me at:

Surveyer name:
Telephone number:
Email address:

or my institute **Shri NPA Govt Ayurveda College, Raipur, CG, India** at:
Telephone number:
Email address:

Thank you for agreeing to participate in my project. This survey consent form shall be translated and orated to participants as per his/her understandable language before signing/consenting the above consent form.

Supplementary Figure 2:

Clinical Trial Details (PDF Generation Date :- Thu, 17 Dec 2020 08:54:39 GMT)

CTRI Number	CTRI/2020/12/029884 [Registered on: 17/12/2020] - **Trial Registered Prospectively**
Last Modified On	17/12/2020
Post Graduate Thesis	No
Type of Trial	Observational
Type of Study	Survey
Study Design	Other
Public Title of Study	response to an upcoming COVID 19 vaccine about how an individual looks towards it.
Scientific Title of Study	Survey Study For Accessing The Willingness, Enthusiasm And Readiness Of Population For COVID-19 Vaccine

Secondary IDs if Any

Secondary ID	Identifier
NIL	NIL

Details of Principal Investigator	
Name	Dr prashant Kumar Gupta
Designation	Reader
Affiliation	Shri NPA Govt Ayurveda College
Address	Room no - 07, Division- Department of kaumarbhritya, Shri NPA Govt Ayurveda College, Raipur, Chhattisgarh G E Road, Raipur Raipur CHHATTISGARH 492001 India
Phone	09990988860
Fax	
Email	prashantgupta27@gmail.com

Details Contact Person (Scientific Query)

Details Contact Person (Scientific Query)	
Name	Dr prashant Kumar Gupta
Designation	Reader
Affiliation	Shri NPA Govt Ayurveda College
Address	Room No- 7, Division - Department of kaumarbhritya, Shri NPA Govt Ayurveda College, Raipur, Chhattisgarh G E Road, Raipur Raipur CHHATTISGARH 492001 India
Phone	09990988860
Fax	
Email	prashantgupta27@gmail.com

Details Contact Person (Public Query)

Details Contact Person (Public Query)	
Name	Dr prashant Kumar Gupta
Designation	Reader
Affiliation	Shri NPA Govt Ayurveda College
Address	Room No -07, Division - Department of kaumarbhritya, Shri NPA Govt Ayurveda College, Raipur, Chhattisgarh G E Road, Raipur Raipur CHHATTISGARH 492001 India
Phone	09990988860

Fax	
Email	prashantgupta27@gmail.com

Source of Monetary or Material Support

Source of Monetary or Material Support
> dr Prashant Kumar gupta, Room no 7, Deptt of kaumarbhritya, Govt ayurveda hospital, Raipur, Chhattisgarh

Primary Sponsor

Primary Sponsor Details	
Name	Dr Prashant Kumar Gupta
Address	Department of kaumarbhritya, NPA Govt Ayurveda College, Raipur
Type of Sponsor	Other [self]

Details of Secondary Sponsor

Name	Address
NIL	NIL

Countries of Recruitment

List of Countries
India

Sites of Study

Name of Principal Investigator	Name of Site	Site Address	Phone/Fax/Email
Dr Prashant Kumar Gupta	OPD block and online	Govt Ayurveda college Hospital, GE road, Raipur, Chhattisgarh and online Raipur CHHATTISGARH	09990988860 prashantgupta27@gmail.com

Details of Ethics Committee

Name of Committee	Approval Status	Date of Approval	Is Independent Ethics Committee?
IEC	Approved	08/12/2020	No

Regulatory Clearance Status from DCGI

Status	Date
Not Applicable	No Date Specified

Health Condition / Problems Studied

Health Type	Condition
Healthy Human Volunteers	healthy humans

Intervention / Comparator Agent

Type	Name	Details
Comparator Agent	NIL	NIL

Inclusion Criteria

Inclusion Criteria	
Age From	6.00 Year(s)
Age To	70.00 Year(s)
Gender	Both
Details	willing to be respondent

Exclusion Criteria

Exclusion Criteria	
Details	not willing to be respondent

Method of Generating Random Sequence	Not Applicable
Method of Concealment	Not Applicable
Blinding/Masking	Not Applicable

Primary Outcome

Outcome	Timepoints
recognizing variables for Covid vaccine preparedness, enthusiasm and readiness	December-january

Secondary Outcome

Outcome	Timepoints
awareness about the Covid 19 Vaccine	December-january

Target Sample Size	**Total Sample Size**=1500 **Sample Size from India**=1500 **Final Enrollment numbers achieved (Total)**=Applicable only for Completed/Terminated trials **Final Enrollment numbers achieved (India)**=Applicable only for Completed/Terminated trials
Phase of Trial	N/A
Date of First Enrollment (India)	26/12/2020
Date of First Enrollment (Global)	No Date Specified
Estimated Duration of Trial	**Years**=0 **Months**=1 **Days**=0
Recruitment Status of Trial (Global)	Not Applicable
Recruitment Status of Trial (India)	Not Yet Recruiting
Publication Details	not done
Brief Summary	We are living in a country where doorstep vaccination was given since inception of UPI in 1970s, still we are struggling to reach the threshold of vaccine cover. in this preset, we must access the readiness of population towards the COVID 19 vaccine. it is a survey planned to analyze Vaccine readiness and enthusiasm among the population. The data drained from the survey could help in vaccine implementation policy