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# **RESEARCH ARTICLE**

## A CROSS-SECTIONAL STUDY TO ASSESS STIGMA AND ANXIETY RELATED TO COVID-19 VACCINATION AMONG NURSING STUDENTS AT INTEGRAL INSTITUTE OF NURSING SCIENCES & RESEARCH

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### **ARTICLE INFO**

### ABSTRACT

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*Key words:* Stigma, Anxiety, covid-19 vaccination.

\*Corresponding Author: Rafia Rahmani **Background:** Stigma are stereotypical views for an individual or groups of people when their behavior are viewed as inferior or inferior to social norms. Stigma most often refers to a group of negative and often inappropriate beliefs that is something about a society or group of people. **Objective:** Main objective of the study was to find out the association between the stigma and anxiety related to covid -19 vaccination among Nursing students. **Methods:** A quantitative and descriptive cross sectional was conducted on 100 Nursing students who met the inclusion criteria were included in the study. Non probability, purposive sampling techniques was used for selection of the samples from nursing students of IINS&R. Structured Socio demographic profile, Hamilton Anxiety Rating Scale and Stigma Assessment was used to assess stigma and anxiety of covid-19 vaccination. **Results:** Majority of students 60% had mild level of stigma while 33% reported chance of a moderate stigma. It was found in study that majority of students 84% had mild level of anxiety, out of 100 subject 9% had moderate anxiety while 7% chance of low anxiety. **Conclusion:** The study concluded that, it helps to focus on the importance of life events especially of stigma aspect and anxiety. It helps to reduce individually stigma and anxiety new and challenging situations related covid-19 vaccination.

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# **INTRODUCTION**

The term stigma is derived from the Greek stem stag- (mark or tattoo) and ma (denotes an action). According to Goffman stigma is "an attribute that is deeply discrediting" that reduces someone "a whole and usual person to a tainted, discounted one". Stigma are stereotypical views for an individual or groups of people when their behavior are viewed as inferior or inferior to social norms. Stigma most often refers to a group of negative and often inappropriate beliefs that is something about a society or group of people.<sup>1</sup> Stigma involves a negative attitude or discrimination towards someone based on a specific illness such as mental illness, health condition or disability. Unfortunately, stigma around mental health is still common. While stigma is not limited to mental conditions only, attitudes towards psychiatric illnesses are more negative than those of the medical conditions.<sup>2</sup>

#### Examples of how stigma is perpetuated:

- Media depictions
- Harmful stereotype of people or ignorance towards science logic

- Reluctance to seek help or receive treatment
- Lack of understanding by family, friends or others.

Self-stigma refers to the attribute of negative stereotypes about those who need help, perceived stigma refers to the individual's reliance about the attitude of others.<sup>3</sup> Health stigma is defined as a negative association between an individual or group that shares certain characteristics and aspirational illness.<sup>4</sup> Main factors of stigma include infection, misinformation, economic consequences of illness, lack of awareness and socially fear.<sup>5</sup>

#### The following are the stigma of covid-19 vaccination:<sup>6</sup>

- The vaccine makes the individual infertile.
- The vaccine is not safe because it was developed so quickly.
- The vaccine can give the individual covid-19.
- The vaccine will change my DNA.
- The vaccine lodge tracking device.
- The vaccine contains fetal tissue.
- The vaccination side effect can kill you.
- The vaccination can cause organ damage in future.

# **MATERIAL AND METHODS**

A quantitative non-experimental, descriptive, cross-sectional study design was followed. The study was conducted between 6<sup>th</sup> September 2021 to 25<sup>th</sup> September 2021 as a questionnaire survey. Population of the study was Nursing students who were enrolled as nursing students at IINS&R. The study was a cross-sectional study for which tools were prepared and shared with nursing students at IINS&R. Students who were vaccinated or not vaccinated were agreed to participate in the study. A 3-part questionnaire was used to gather data. The first part asked about the demographic and workrelated profile of the participants and their general demographic. Name of the participant, age group, gender, qualification, designation, perceived risk of complication, received covid-19 vaccination, source of knowledge regarding covid-19 vaccination. The second part measured the stigma related to covid-19 vaccination of nursing students. Stigma Assessment Scale (SAS) was used as second part of questionnaire to assess the stigma of covid-19 vaccination among nursing students. Total 10 items, related to stigma All items were answerable in a 5-point Likert scale format ranging from "0" never to "4" very often. The following scale was used to interpret that data: 0 - never 1 - almost never 2 - sometimes 3 - fairly often 4 - very often

The data was collected from 100 participants through questionnaire by distributing three sets of question from the first the week of September 2021 to last week of September during the COVID-19 pandemic as the College prepares to implement flexible learning as COVID-19 pandemic hits the system in response to changes in the education system to the new normal. To ensure ethical conduct of the study, the participants were instructed that upon proceeding with the questionnaire, they grant consent to participate in the research voluntarily. Nominal data were described and expressed in frequency and percentage. Both descriptive and inferential statistics was used to analyze data. The data gathered were analyzed using SPSS version 23. Frequency count, percentages and mean were used to describe the data while Mann-Whitney U test and Kruskal Wallis test were performed to test for differences grouped according to certain categories. Level of significance was set at .05 alpha.

*Strength and limitations:* The specified population assessed in this research study and the use of validated tools by experts were the strength of the study. The limitations of the study were small sample size, The study conducted in one setting but finding may vary in different setting

## RESULTS

- During the study period, 100 faculties were enrolled in the study based on inclusion criteria. Table 1 depicts that majority of subjects were in age group of Out of 100 subjects 92% were from the age group 17-21 years and only 2% from 27-31 years of age. Majority of female Nursing students 60% have mild stigma.
- 47% students are from rural area which showed that stigma is more prevalent in rural area than urban.
- Majority of students were from joint family 60%.
- Most of Students parents 49% are found from post basic B.Sc.(N) while only 47% were G.N.M, 2% were A.N.M,2%B. Sc(N).

The percentage of literacy rate in father's education, graduated were higher in total (28%) and formal education was (22%) Majority of the mothers have no formal education (35%) and primary was (24%). Distribution of study sample according to employment found maximum of father's occupation from the other (35%) and Mothers were home maker (86%). As per occupational status majority of student's father were (35%) from other and Mothers were home maker (86%). Maximum subjects were financially independent i.e., 40% had Rs >20,000/- of monthly family income. It was found in study that majority of students 60% had mild level of stigma.

Out of 100 subject 33% had moderate stigma while 7% chance of a low stigma

Table 1. Frequency & Percentage distribution of Socio
Demographic details of faculties: (n=100)

Variable	Categories	f	%
	17-21	92	92
Age (in years)	22-26	6	6
Age (in years)	27-31	2	2
	32 and above	0	0
Conden	Male	30	30
Gender	Female	70	70
	Rural	47	47
Domicile	Urban	30	30
	Semi-Urban	23	23
	Nuclear	29	29
Type of family	Joint	62	62
	Extended	9	9
	G.N.M	47	47
	A.N.M	2	2
Education	Post basic B.Sc.(N)	49	49
	B.Sc.(N)	2	2
	1 <sup>st</sup> year 2 <sup>nd</sup> year	100	100
V	2 <sup>nd</sup> year	0	0
Year of pursuing	3 <sup>rd</sup> year	0	0
	4 <sup>th</sup> year	0	0
	No formal education	22	22
	Primary	15	15
Father's	Secondary,		
Educational	Intermediate	26	26
status	Graduate	28	28
	Post graduate	9	9
	Unoccupied	11	11
Father's	Private job	26	26
Occupational	Government job	14	14
status	Business	14	14
status	Other	35	35
	No formal education	35	35
	Primary	24	24
Mother's	Secondary,		
Educational	Intermediate	18	18
status	Graduate	17	17
	Post graduate	6	6
	Home maker	86	86
Mother's	Private job	3	3
Occupational	Government job	9	9
status	Business	9	9
status	Other	1	1
Monthly family	ouici	1	1
income (in rupees)	Up to Rs20,000	40	40
• /	Rs20,000-Rs30,000	11	11
	Rs30,000-Rs50,000	17	17
	More than Rs50,000	13	13
	Depend on others	19	19
Perceived risk of	Yes	29	29
complication	No	71	71
Received Covid-	Yes	67	67
19 Vaccination	No	33	33
Refused	Yes	25	25
Vaccination	No	75	75
	Social media	35	35
Source of	Internet	13	13
knowledge	Health workers	16	16
regardingCovid-	Others	9	9

It was found in study that majority of students 84% had mild level of anxiety. Out of 100 subject 9% had moderate anxiety while 7% chance of low anxiety.0-p

Table 2. Frequency & percentage used to assess the stigma related to covid-19 vaccination among nursing students based on predetermined category

S.N.	Stigma categories	f	%
1.	Mild	60	60
2.	Moderate	33	33
3.	Severe	07	07

Table 3. Frequency and percentage wise distribution of samples based on anxiety related to covid-19 vaccination

S.N.	Anxiety categories	f	%
1.	Mild	84	84
2.	Moderate	09	09
3.	Severe	07	07

 
 Table 4. Correlations: Correlation between stigma and anxiety related to covid-19 vaccination among nursing student

			Anxiety
Category	Correlation	Stigma category	category
stigma	Pearson Correlation	1	-0.080
category	Sig. (2-tailed)		0.429
	Ν	100	100
anxiety	Pearson Correlation	080	1
category	Sig. (2-tailed)	.429	
	N	100	100

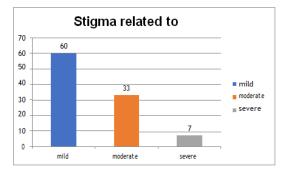


Figure 1. Bar diagram showing frequency of nursing students based on covid-19 vaccination stigma

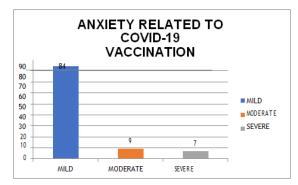


Figure 2: Indicts the level of anxiety. Majority of students (84%) with mild anxiety, some have moderate level of anxiety (9%) and rest (7%) had severe anxiety

## CONCLUSION

The present study on stigma and anxiety related to covid-19 vaccination among nursing students. High perceived stress was the dependent variable for the study. The findings suggest that all subjects had moderate to mild levels of stigma, with more than,60%mild stigma while 33%moderate stigma and 7% severe stigma. Therefore, this study was undertaken to assess stigma and anxiety related to covid-19 vaccination among nursing students. On the basis of the objective and conceptual framework developed a descriptive, cross–sectional descriptive design was chosen for the study. This study was conducted on Nursing students Integral Institute of Nursing Sciences

and Research, Lucknow, U.P. Data was collected by using structured Socio-demographic, Stigma assessment Scale and Hamilton anxiety Scale. The questionnaire was administered to Nursing students who were fulfill inclusion criteria and were present during data collection in nursing departments on specified days of weeks. The total 100 Nursing students. Data was collected from 06<sup>th</sup> September 2021 to 25<sup>th</sup> September 2021 and were analyzed with descriptive and inferential statistics.

**IMPLICATIONS:** The findings of this study have implication in various areas of nursing.

#### Nursing practice

- Nurses should be evaluated periodically to assess stigma levels practice and service education about stigma management.
- Nurses working in the outpatient and in patient's department need to identify the various stigma and anxiety reducing techniques related to covid-19 vaccination.
- To plan according to the needs of students and use of (problemfocused awareness) for stigma management that were found to be helpful (e.g., reducing the stigma). Nursing administration:
- Nursing research
- More in-depth studies are needed to study anxiety and stigma related to covid- 19 vaccination and its strategies to reduce it.
- Nurse can conduct further research booster dose and its efficacy of covid-19 vaccination.
- The nurse researcher should research stigma management method among student nurses. It will provide and connect scientific data more scientific knowledge for the nursing profession.

Conflict of interest: There is no conflict of interest.

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#### **Glossary of Abbreviations**

1.	COVID19	Corona virus disease 2019
2.	SAS	Stigma Assessment Scale
3.	DNA	Deoxyribonucleic acid
4.	IINS&R	Integral Institute of Nursing Sciences & Research

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