

Covid 19 Related Knowledge, Anxiety And Coping Strategies Among Players And Officials Of Men's National Football Team In Nepal

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Abstract

Introduction: This study aims to assess the knowledge and anxiety about CoVID 19 and coping skills involved in dealing with the anxiety in National men's football team .

Material And Method: Cross sectional analytic study with purposive sampling of members affiliated to Mens national football team who presented to Patan hospital for PCR testing. Tools used were knowledge about corona, fear of COVID 19 scale and Brief Cope Scale Total sample size of 44.

Results: Overall, more than 90% the respondents showed good knowledge about most of the facts about corona virus. The median scores of fear scale showed they were mostly neutral or in disagreement with anxiety statements related to COVID. They mostly adopted coping strategies of Active Coping, Planning, Acceptance, Positive Reframing and informational support while Substance use and Humor were the least used.

Conclusion: The respondents mostly showed good knowledge about corona virus disease, low to mild levels of anxiety and most importantly adopted adaptive coping skills in dealing with the stress.

Keywords: Football players, COVID anxiety, Coping mechanism, Knowledge

INTRODUCTION

Covid-19, which was declared a pandemic on March 11th 2020 by the WHO, is the disease caused by the virus SARS-CoV-2 (Severe Acute Respiratory Syndrome- Coronavirus 2), previously known as COVID 19 Novel Coronavirus.¹ The COVID-19 pandemic and the ensuing social and economic disruption have caused immense loss of lives and livelihoods throughout the globe. As of August 31st, 2020 there have been 25,171,708 cases of infection and 846,523 deaths worldwide). In Nepal, as of 29th August, 38,561 cases and 221 deaths been reported.²

The virus is popularly known to produce symptoms related to the respiratory system. Besides these, it is also now known to affect gastrointestinal, hematological and neurological systems. Symptoms vary from diarrhea, nausea,

anosmia to hepatic dysfunction, stroke and coagulopathy.^{3,4} As compared to the early stages, we are also clearer about the mode of transmission; the most important mode being via respiratory droplets during close contacts. Sometimes it can be transmitted by airborne transmission in an enclosed space. Less commonly it can spread via fomites and surfaces.⁵ Hand washing, maintaining physical distance and proper use of masks are still considered best ways of prevention.

However, in August 2020 when this study was done, facts related to COVID were still not clear enough and misinformation and rumors were at large. Many people resorted to social media and other unverified news sources to learn about COVID. This may have contributed to some of the increased anxiety and panic.⁶

The global pandemic has also led to restrictions in gatherings and movements of people around the world. These restrictions extend to the sporting world as well. This has resulted in the disruption of regular sporting and associated activities (trainings, endorsements, social support from fans); factors which are known to affect athletic performances.⁷ Major events like the Olympics and European football championship have been postponed. Few high level matches have been played without admitting the spectators. Regarding football in Nepal, there has been complete halt in domestic leagues and the first international friendly happened with Bangladesh only on 17th nov, 2020, some 9 months after the nation went into lockdown on 24th march.⁸

On the other hand, players like any other individual, are prone to fears related to corona, mainly fear of infection or transmission to others, death, uncertainty regarding the nature of virus, fear of loss of occupation and social stigma. All this can add to the anxiety level of the athletes.

The study attempts to study the knowledge level and source, level of anxiety and coping measures which will help to know about baseline levels, the correlations between these parameters, if any. There have been many studies done about these parameters in medical population (patients, doctors, medical staff). This study aims to assess these parameters in a unique and important non medical population like the men's national level football team (players and officials), it will give an idea of how the non medical population are affected by Covid and how they are coping with it. This will also lay the foundation for further studies and interventions in the field of sports psychology.

MATERIAL AND METHOD

The study was Cross-sectional analytical in design and was conducted at the fever clinic (special clinic allotted to screen and triage cases of fever and possibly covid) at Patan hospital. Purposive sampling method was used and all the players and staff of the Men's National Football team who presented for COVID 19 PCR testing were included after written consent. The total sample size was 44. (35 national players and 9 officials).

The players were approached with precautions against Covid transmission. The researcher wore face shield, gloves and masks and for the participants, gloves and masks were made mandatory and alcohol based sanitisers provided before and after handling the papers. They were approached during their waiting time for PCR test sampling while at Patan hospital fever clinic. They were briefed about the methodology and purpose of the study. The questionnaires used up 25-30 minutes of the participant's time in total. The findings were then tabulated and analysed using SPSS version 22. The ethical approval was taken from Institutional Review committee IRC of Patan Academy of health sciences. (PAHS).

Instruments used:

1.Proforma : Semi- structured questionnaire with basic personal information like age, marital status, experience in the national team, occupation, medical, psychiatric, treatment history, substance use, along with questions related to corona virus disease exposure and effects in self or relatives.

2.Knowledge about covid-19:

A questionnaire consisting of nine questions adapted from study by Ikhlaq A 2020.⁹ It contains questions regarding basic knowledge of covid 19 which are answered as true or false. The questionnaire was translated from English to Nepali and back translated to English according to WHO protocol.¹⁰ The translated version was pilot tested in 10 individuals (local level football players). However, formal validation study has not been done.

3.Fear of COVID -19 scale:

It is a seven item self-rated questionnaire with a five-point likert scale denoting frequency of symptoms. Higher scores on the scale denote higher anxiety regarding corona virus disease. It was developed in March 2020 by Ahorsu et al.¹¹ The internal consistency is 0.82 and validity of 0.45. The questionnaire was translated and back translated by using WHO method¹⁰.

4. Brief cope inventory:

It is a 28 item self rated questionnaire with four point likert scale denoting frequency of coping measures implemented. It measures what types of coping strategies are used and

how frequently. There are 14 subscales and 3 composite subscales that differentiate problem focused, emotion focused and dysfunctional coping. The Nepali version of the scale and subscale are well validated. The version used here has already been used in prior studies.¹²

RESULT

The mean age of the respondents was 28.16 +/- 7.37 and all participants were males. The total number was 44 . The majority(n=23) were married followed by single (n=17).

Majority of them had already played for national team in the past (n=29). Mean duration amongst those with national team experience was 2.79 +/- 2.25 years. Majority of them (n=30) reported football as the only occupation while 14 of them had other profession in addition to football.

Very few reported history of physical (n=5) , mental problems(n=1), substance use (n=1) and some were under medication (n=3) for physical illness.

Regarding Information related to impact of covid, none of the players had history of Covid infection . Only a few had COVID in close relatives (n=4) out of which 2 had recovered and 2 were active cases.

Table 1: Source Of Information

Source	Frequency
Official website (only)	1
Social media (Only)	14
Newspapers (only)	1
Television (Only)	0
Combination of more than one*	28

As described in Table 1, The overwhelming majority gained information from social media either solely(n=14) or in combination with other media(n=28). Although not shown in the table all the ones who used a combination of sources reported to having used social media as one of the sources.

Table 2: Knowledge of corona/Covid 19

	Yes	No	Correct response
Do you have knowledge about COVID 19	41	3	93.2%
COVID 19 is a viral infection	44		100%
Fever, cough, shortness of breath etc. are symptoms of COVID 19	42	2	95.5%
Diarrhea is one of the possible symptoms of COVID 19	11	32	25%
It takes two to four weeks for the appearance of symptoms of COVID 19	35	9	79.6%
The vaccines of COVID 19 is easily available in market	1	43	97.7%
There is a main role of antibiotics in treatment of COVID 19	10	34	76.2%
Proper hand washing by soap helps in prevention of COVID 19	43	1	97.6%
Risk of infection of COVID 19 is higher for people with chronic illness	43	1	97.6%
COVID 19 can be fatal	43	1	97.6%

Most of the respondents had good knowledge about general information about COVID 19. Knowledge about role of antibiotics, and incubation period in corona were less compared to other questions. Majority didn't know symptoms of diarrhea could exist in COVID 19. (Table 2.)

Looking at the median scores of response, respondents mostly neither disagreed or agreed with (f1,f2,f5) or completely disagreed with (f3,f4,f6,f7) statements denoting anxiety denoting an overall low level of anxiety.(Table 3.)

The table shows a more detailed picture of the fear scale. the highest level of agreement shown was fear on thinking about getting corona(F2) and anxiety on hearing news about corona(F5). However even in these statements, the majority were either neutral or in disagreement. (Table 4.)

Table 3: Fear of Covid 19 scale:

S.N		Mean	SD	Min	Max	Median	IQR
1.	I am most afraid of Corona (F1)	2.3	1.3	1	4	3	3
2	It makes me uncomfortable to think about Corona (F2)	2.9	1.2	1	4	3	3
3	My hands become clammy when I think about Corona (F3)	1.5	1.0	1	4	1	0
4	I am afraid of losing my life because of Corona (F4)	1.4	1.0	1	4	1	0
5	When I watch news and stories about Corona on social media, I become nervous or anxious (F5)	2.6	1.4	1	4	3	3
6	I cannot sleep because I'm worrying about getting Corona.(F6)	1.3	0.9	1	4	1	0
7	My heart races when I think about getting Corona.(F7)	1.8	1.2	1	4	1	2

Table 4: Frequency table for the fear of Covid 19 scale.

Fear	Completel y Disagree	Disagree	Neither Disagree nor Agree	Agree	Completely Agree
	N(%)	N(%)	N(%)	N(%)	N(%)
F1. I am most afraid of Corona	10 (22.7%)	11 (25%)	10 (22.7%)	8 (18.2%)	5 (11.4%)
F2. It makes me uncomfortable to think about Corona	6 (13.6%)	6(13.6%)	14(31.8%)	15(34.1%)	3(6.8%)
F3. My hands become clammy when I think about Corona	14 (31.8%)	20(45.5%)	7(15.9%)	1(2.3%)	2(4.5%)
F4. I am afraid of losing my life because of Corona	16 (36.4%)	21(47.7%)	3(6.8%)	4(9.1%)	--
F5. When I watch news and stories about Corona on social media, I become nervous or anxious	8 (18.2%)	10(22.7%)	9(20.5%)	13(29.5%)	4(9.1%)
F6. I cannot sleep because I'm worrying about getting Corona.	19(43.2%)	20(45.5%)	2(4.5%)	--	3(6.8%)
F7. My heart races when I think about getting Corona.	12(27.3%)	18(40.9%)	6(13.6%)	5(11.4%)	3(6.8%)

Table 5: Central tendencies of Brief Cope Scale

Subscales (item nos.)	Min	Max	Mean	SD	Median	IQR
Self distraction (1, 19)	2	8	5.16	1.67	5	3
Active coping (2,7)	2	8	6.68	1.60	7.5	2
Denial (3,8)	2	8	4.39	1.56	4	2
Substance abuse(4,11)	2	7	2.52	1.17	2	0
Emotional support(5,15)	2	8	5.07	1.85	5	3
Information support(10,23)	3	8	6.07	1.66	6	3.75
Behavioral disengagement (6,16)	2	8	4.68	2.09	5	3
Venting (9,21)	2	8	4.52	1.68	5	2
Positive reframing(12,17)	2	8	6.50	1.70	7	3
Planning (14,25)	3	8	6.59	1.59	7	2.75
Humor(18,28)	2	8	2.55	1.30	2	0
Acceptance (20,24)	2	8	6.23	1.88	6	3
Religion (22,27)	2	8	5.25	2.11	5	4
Self-blame (13,26)	2	8	4.48	1.68	5	3

Brief cope scores:

The brief cope scores are tabulated into 14 subscales as classified by Carver.¹³

Each subscale consists of two questions but which are not subsequent in order but similar in theme. Eg. Active coping consists of questions 2 and 7, venting of questions 9 and 21, denial of questions 3 and 8 and so on.

Mostly the respondents were involved in active coping, Positive Reframing, Planning, acceptance and information support. Least often used were substance abuse and Humor.(Table 5)

DISCUSSION:

The findings in regards source of information showed high prevalence of social media as potential source is in line with other studies.¹⁴ This is a matter of concern as social media can be a big source of misinformation as demonstrated in several studies.^{14,15}

In knowledge of corona scale, most of the participants displayed good knowledge of Corona Virus. Some of the participants were divided about the incubation period of Corona Virus. This is understandable as the clinical features about COVID were still unknown at that time, with most common understanding being upto 12 days.¹⁶ Poorest knowledge was about presence of diarrhea as a symptom in Covid. This is in line with the findings of another study applying the same scale.¹⁰ This might be due to the fact that the symptom does not get highlighted much in the sources of information or simply because it is not very common.

For the first statement (F1), most of the respondents were in either in disagreement with or neutral with only n=15 (33 %) being in agreement. In second statement (F2), which denotes discomfort on thinking about COVID, the opposite was true with only n=12 (27%) being in disagreement, the rest being neutral or in agreement. This indicates that the cognitive symptoms of covid related anxiety to be slightly more prevalent as compared to physical symptoms i.e. clammy hands (F3) and palpitations (F7).

As mentioned earlier, majority of the respondents, n=34 (76%) denied having clammy hands on thinking about covid (F3). In the same

line, majority disagreed with having fear of losing one's life due to Corona virus disease (F4) n=37(73%). This can be explained by the fact that majority of the respondents were young adults and during the first wave, COVID was known to be more fatal in the elderly.¹⁶

Regarding the fifth statement which states anxiety symptoms regarding COVID related news in the social media, F5, the responses were more evenly spread out with almost equal percentage being in disagreement, n=18(41%), and agreement n=17, (39%). So, despite the findings that use of social media as a source of information is shown to be a cause of increased anxiety¹⁴, this response does succeed in establishing the relationship in a clear manner.

The overwhelming majority disagreed with having had impairment in sleep due to COVID related thoughts (F6) n=39 (89%). Lastly, on asking whether they had increased heart rate on thinking about COVID, 30 (68%) disagreed. This is a reflection of lower levels of physical symptoms of anxiety related to COVID. It could also, interestingly, be attributed to the fact that athletes are known to have lower resting heart rates and quicker resolution to basal heart rate following tachycardia.¹⁷

Overall, the respondents mostly disagreed to the statements about COVID related anxiety. This is possible due to the fact that at the time of the study, the impact of corona was still low in Nepal and the players were not much impacted. According to WHO, until September 1st 39460 cases were seen and 221 deaths were reported which is quite low as compared to now.²

In ways of coping with stress related to COVID, the respondents mostly reported adaptive coping strategies viz. Active coping (6.68±1.60), positive reframing (6.50±1.70), planning(6.59±1.59), acceptance (6.23±1.88) and information support(6.07±1.66), which are considered to be amongst the most adaptive coping strategies.^{13,18,19}

In this study, Active coping (a problem- focused coping) was seen to be high while substance use was seen to be low (an Avoidant coping), possibly highlighting an inverse relationship as these are known to be part of contrasting styles of coping. This finding is also replicated in other studies.¹⁸

Another coping method which was less used by the participants was Humor. (2.5±1.3). It can be understood because COVID was the first pandemic the respondents had faced and due to its seriousness, it could not be taken lightly.

The findings of low to mild anxiety and presence of the good coping strategies could be inter related as other studies have shown that those who displayed problem based coping (Active coping, information support, Planning, positive reframing) showed low levels of anxiety¹⁸. However, due to the small sample size, correlation studies could not be done here to further ascertain this fact.

Further studies could work on the relationship between type of coping and anxiety level especially in cases where certain types of coping strategies dominate over others.

The study was a cross sectional analytical study based on a small and specialized sample group. Hence correlation or comparison could not be done hence there is limited generalizability. Also, due to lack of control group and no systematic checklist to rule out psychiatric comorbidities, there are chances of bias. The tools used were translated according to the WHO method but lack formal validation study.

CONCLUSION:

This study provided a brief but important insight on the psychological state of the men's national football team. The findings show that the players and officials displayed low to mild level of anxiety regarding COVID-19 and adopted good and adaptive coping strategies in dealing with this stress caused by the Covid 19 pandemic. More research is needed to compare and monitor these findings and to enhance the psychological health of these professional as a whole.

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