Journal of Contemporary Issues in Business and Government Vol. 27, No. 05, 2021
https://cibg.org.au/

P-ISSN: 2204-1990; E-ISSN: 1323-6903
DOI: 10.47750/cibg.2021.27.05.065

The effects of a training course in non-verbal communication skills of Iranian dental students

Sepideh Falah-Kooshki 1 , Ahmad Sheibaninia *2 , Jahanfar Jahanbani 3

1 Assistant Professor of Oral and Dentomaxillofacial Radiology, school of Dentistry, Kermanshah University of Medical Sciences, Kermanshah, Iran. Dr.sfalah@yahoo.com
2 Associate Professor, Department of Orthodontic, Islamic Azad University, Dental School, Tehran
Branch, Tehran, Iran.
3 Associate Professor, Department of oral Pathology, Islamic Azad University, Dental School,
Tehran Branch, Tehran, Iran. jjahanbani@yahoo.com

* Corresponding Author: Dr. Ahmad Sheibani Nia
2 Associate Professor, Fellowship of Orthosurgery, Department of Orthodontic, Islamic Azad University, Dental School, Tehran Branch, Tehran, Iran
asheibaninia@yahoo.com

Abstract:

Purposes: Non-verbalcommunication(NVC)iscrucialfordentalclinicians.Thegoalsofthepresentstudywereto evaluatetheinitiallevelNVCskillsindentalstudentsandwhetherornotfurther,focusededucatio ninthisareacanimprovetheseskills.

Materials and Methods: Inthisclinicaltrial,77dental-schoolstudentsout of 104 samples whohadlessthan80%ofcommunicationskills'indicatorswereincludedandrandomlyallocated intoexperimentalandcontrolgroups.The ones receiving more than 80 % were excluded from the study. Studentsallocatedtotheexperimentalgroupwereeducatedfor1hourincommunicationindicator s,whilethecontrolgroupreceivednotraining.After2weeks,thecommunicationskillsofbothgro upswereevaluatedby 10 indicators whenworkingwithrealpatients.The evaluator, proficient in NVC skills, was blinded as to the groups.TheresultswereanalyzedbyMann-

P-ISSN: 2204-1990; E-ISSN: 1323-6903
DOI: 10.47750/cibg.2021.27.05.065

WhitneyUandFischerexacttestusingSPSSversion23.

Results: Bothgroupssharedsimilarstatisticsbeforestartingthecourse.Afterpassingthecourse,theexperimentalgroupdemonstratedsignificantlyhigherNVCskills(8.97±1.10vs.5.64±2.15,P<0.001), vs. the controlgroup. Seventeenstudents(44.7%) in the experimental groupshowedimprovementof4ormoreunitsinNVCsskillsaftertrainingbutnostudentsfrom thecontrolgroupshowedsimilarimprovement.(P=0.003).

Conclusions: EducationfocusingonenhancingNVCskillscouldimprovelevelsofcommunicationfordentalstudents. thus, Furtherinvestigationoftheclinicalimpactsofthesetypesofeducationalandformativeprogramsisrecommended.

Keywords:Bodylanguage,dentalstudents,non-verbalcommunication,trainingcourse

Introduction

Dentistry is one of the most interested academic majors in Iranian and many other countries universities (1). Dentist-patient communication skills are important aspects of contemporary oral health care, as shared decision making with patients becomes more common (2). Communication and behavioural science education is gaining momentum as a mandated component of dental graduate competence in many countries and is highly recognized and appreciated by patients (3). Oneofthecharacteristichallmarksofallsuccessfuldentalprofessionalsistheabilitytocommunicateeffectively,verballyandnon-verbally,tobothcolleaguesandpatientsalike.(4, 5).Thisskillmusteitherbeinherentintheneophyteordevelopedearlyintheircareertoenablethedevelopmentofthesuccessfulandtrustinginteractionswithpatients.Apartfromalloftheformativeknowledgeandclinicaltraining,thedevelopmentofcommunicationskillsisamajorchallengeforallaspiringstudentsinthedentalprofession (6).Toinitiatethisdevelopment,

P-ISSN: 2204-1990; E-ISSN: 1323-6903
DOI: 10.47750/cibg.2021.27.05.065

Communication is in generally more than just exchanging information. It's about understanding the emotion and intentions behind the information given in any circumstance (7). Among different forms of communication in human communities, education, or teaching, requires effective communication with the learner if it is to be successful(8). Dentalfacultymustalsopossesscommunicationskillsandserveasrolemodelsforthenextgenerati on of dentists.However,studiesshow that just17.5% of facultymembers havegoodcommunicationskills (9).Furthermore,studentsreportedthat55.4%,31.8%and12.8%offacultymembershadgood,mo derateandpoorcommunicationproficiencies,respectively(10).Evenwiththisdatainmind,specifi cservicesortrainingcoursesfordevelopingNVCskillsinstudentsisbasicallynon-existentinmanyprofessionaleducationalsettingsglobally.Iftheinabilitytodeveloporachieve NVCskillscontinues,therelationshipswithpeers,colleagues,andpatientswillbethreatened,inadditio ntothepotentialofprovidinglessthansuccessfultreatments,therebyreducingthequalityofdentals ervices(11).

NVCincludeseyecontactwhiletalkingwithapatient,havingbothpatients' anddentist'sch airsonthesamelevel,facialexpressions,bodyorientation,physicalappearanceandmanymorechar acteristicsthatfitintothecategoryofNVC(12, 13). MaguireandPitceathlyindicatedthattrainingincommunicationskillsismandatoryforpractitioner s,pointingoutthatphysicianswithgoodcommunicationskillsidentifypatients'problemsmoreacc urately,havegreaterjobsatisfaction,andlessworkstress.Furthermore,patients adjust betterpsychologicallyand are more satisfiedwiththeircare(14).

Indentistryaswellasotherhealthcarefields,conductingtrainingcoursestoimprovetheNVCskillsi nstudentscanbeusefulandeffective.Althoughtheimportanceofcreativetrainingmethodstoenabl eclinicianstocommunicateeffectivelywithpatientshasbeenreportedbyGatesB.(15)andDolan(1 6),theamountoftheseeffectshasnotbeenstudiedyetquantitatively.Therefore,thisresearchwaspe

P-ISSN: 2204-1990; E-ISSN: 1323-6903
DOI: 10.47750/cibg.2021.27.05.065

rformedusingdentalstudentsofIslamicAzadUniversityin2011inordertoinvestigateanddetermi netheeffectsofaminimal1-hourtrainingcourseonperceptiblechangesinNVCskills.

Materialsandmethods

Thisclinicaltrialbasedonthesisapprovedanddefendedinpartialfulfillmentoftherequire mentsforthedegreeofDoctorofDentalSurgeryandwiththeethicalstandardsoftheinstitutionaland /ornationalresearchcommitteeandwiththe1964HelsinkiDeclarationanditsIRB#22002.Theclin icaltrialwasconductedonstudentsof11th&12thsemesters,sequentially.Thesamplesizewascons ideredas77studentsbasedonpreviousreports(17).

WeinvestigatedtheNVCskillsin104enrolledstudentsby10indicators,presentedinTable1.Inthis system,eachindicatorhas1pointandwasevaluatedindirectly byone independent evaluator who didn't taskanyquestions.Studentsgaining morethan80%oftheskillswereconsideredasskilledstudentsandexcludedfromthestudy.

Findingsontheindicators,aswellasstudents'andpatients'genderwererecorded.Students whodidnotdemonstratesufficientNVCskills(lessthan80%proficiency)wereallocatedrandomly intoexperimentalandcontrolgroups.Theexperimentalgrouppassedatraining coursethatfocusesontheimportanceofNVCskills.This1-hourcoursewaspresentedbyapersonwhowasanexpertinNVCskills.Thecontrolgroupdidnottak ethesimilarcourse.After2weeks,thestudentswerereviewedwhileworkingwithpatients.Theeval uator,proficientinNVCskills,wasblindedastothegroups;thestudentsevaluatedwerenotawareth attheiractivitieswerebeingdocumenteddurngtheseperiods.

Attheendoftheresearch,datawereexpressedasMean±SDandanalyzedusingSPSSversion23.Ch angesofNVCskillswerecomparedbetween2groupsbyMann-WhitneyUtest.Improvement in skills more than4% was analyzedstatistically using Fischer'sexacttest.P<0.05wasconsideredassignificantdifference.

Results

P-ISSN: 2204-1990; E-ISSN: 1323-6903
DOI: 10.47750/cibg.2021.27.05.065

Intotal,104studentswereenrolledandamongthem,27students(26%),whohaddemonstrated NVCskillsmorethan80%wereexcluded.

Thestudentswhofulfilled8indicatorsorlesswereconsideredasunskilled.Distributionof77remainedstudentsbasedontheirgender,semesters,Grade Point Averageandgroupsplusgenderofevaluatedpatientsarepresentedin Table2.Asshown,nosignificantdifferencesexistedbetween2groupsintermsofstudent'sgender,semester,Grade Point Averageandpatient'sgender(P>0.05).

Nosignificantdifferencewasseenbetweencontrolandexperimentgroupsbeforetraining intheoverallscoreofNVCskills(5.26±2.24vs5.13±2.08,P=0.8).Distributionofstudentsbasedonprimarycommunicationskillsincontrolandexperimentgroupsispresentedin Table3.

Aftertraining,theexperimentgroupshowedasignificanthighercommunicativescorecomparedtothecontrolgroup(8.97±1.10vs.5.64±2.15respectively,P<0.001).ChangesinNVCskillsinresponsetotraininginbothgroupsareseenin Table4.Asshown17(44.7%)ofstudentsofexperimentgrouphadequalormorethan4unitsofimprovementbutotherstudentsinthisgroupcouldnotgain morethan4unitsofimprovement(P=0.003).

Discussion

Inthepresentstudy,theeffectoftraininginNVCskillsofunskilleddentalstudentswasevaluated.Passinga1-hourtrainingcoursestatisticallyimprovedNVCskills.Althoughitisclearthatgoodcommunicationskillsarecrucialformedicalprofessionals(18),thereisnoevidenceabouttheeffectsofthetraining courseonNVCskills.Jahanbaniandhiscoworkerassessed the NVCskillsof dentalstudents oftheIslamicAzadUniversityin 2009.Thisresearchwassimilartoourstudyintermsofresults,methodologyandthefactorsthatwere investigated.Themaindifferencewasthetrainingcourseofferedtotheexperimentalgroupandequalizedthesemesterandacademicstatus.Thisissueinfactmotivatedstudentstoparticipateinclassesa

P-ISSN: 2204-1990; E-ISSN: 1323-6903
DOI: 10.47750/cibg.2021.27.05.065

ndimprovetheirlearningprocess.Bothstudiesindicatethatinstudent-patientrelation,moreefficientandappropriatebehaviorscouldsignificantlyaffectpatientcareandrecoverytime(6).

Althoughthepresentstudywassimilarinmethodology,themethodofselectinggroupsandtheapplicationofresultsaredifferent.

Mehrshadian*etal.*studiedthecommunicationskillsofdentalfacultymembersofIslamicAzadUniversitybasedonstudents'evaluation(10).Theyindicatedthatthecommunicationskillsoffacultymembershigherthan Grade Point Average.Themaindifferencebetweenthisstudyandformeristhatnotrainingsbyspecificcoursesw ereusedintheirevaluation(10).

Inthepresentstudy,alloptionsandsampleswereanalyzedandinterpretedbytrainedstudents.Aspegrenreviewonlyfound180pertinentarticlesregardingcommunicationskillsteachingandlearning inmedicine;however,only83articlesthatmetthequalitystandardswereanalyzed.Themosteffectivepointintimetolearncommunicationskillsinmedical schoolwasidentifiedasbeingduringtheclinicalclerkships,whichwasthesubjectofourpresentstudy.Additionally,itwasevaluatedthatthestudentswithlowestpre-coursescoresgainedthemostfromthetrainingcourse.Therefore,thepresentstudysubjectedlow-scoringstudentstobeconsideredasexperimentalunits(11).

AnotherstudyconductedbySiberianandcollaboratorsindicatedthatthemostprofessorsexhibitedweakcommunicationskillswiththestudentsandneededtrainingcourse(19). Regel etal.investigatedthe effectsofspeakingstyleoncomprehension,indicatingthatthemannerinwhichalecturer/professorspokemayconsiderablyinfluencethestudent'seducationalprocess.Thepresentstudywassimilartothisresearchinhavingthecomparablecriteriaforthe NVClikefocusonbodyposturesandothersenses(20). Inadifferentmanner,Rindlisbacheetal.evaluateddentalstudents'communicationskills

P-ISSN: 2204-1990; E-ISSN: 1323-6903
DOI: 10.47750/cibg.2021.27.05.065

with patientsafterpassingthecourseofatraining. They founda steadyincreaseinthestudent'slevelofcomfortinmotivatingpatientsafterimprovingthecommunicationskills,andfoundthatstudentsexpressedtheneedtocontinuecommunicationstraining(21).

Somedegreesoffailureincommunicationskillsof5th and6th yeardentalstudentsatthebeginning,during,andattheendofthestudent-patientinterviewswerealsoreported(22). Accordingtopreviousstudies andpresentfindings, thereisaslightweaknessinfaculties'andstudents'communicationskillswithpatients.Resolvingthisproblemrequiresapplyingspecifictrainingcoursesinto behavioralsciencecurriculumassuggestedpreviously(23)andassessingitsefficiencyonanongoingbasis.

SoltaniArabshahi*etal.*(24)examinedcommunicationskillsofphysicianswithpatientsand foundthatlearningtheseskillsplaysasignificantroleinphysicians'communication.Fordentalstudents,itisessentialthattheyreceivecommunicationtraininginthepre-clinicalandclinicalyearsbecausetheywillbeevaluated interactingwithrealpatients(25).

Inarecentstudy,improvingcommunicationskillsincomplexclinicalsituationsusingdentists'views ofanovelvideoreviewtechniquewasreported.Dentistsreflected thattheirvideo reviewsessionhadprovided deepandaccurateunderstandingandconsideredthereviewprocessasvaluabletrainingforcommunicationskillsindentistry(4)Inanotherstudy,VanDerMolenetandcolleaguesreportedthatcommunicationskilltrainingsincreasedthedentalstudents'knowledgeandbehaviorintoadesiredlevelandpromotedthestudents'awarenessoftheirlimitationsandabilitytocommunicatewithrealpatients(26).

However,asCannickandcoworkersreported,shortterminterventioninskillswasnotsuccessfulandeffective(27).

P-ISSN: 2204-1990; E-ISSN: 1323-6903
DOI: 10.47750/cibg.2021.27.05.065

Asshown,trainingisrequiredfordentalstudentstoimprovetheNVCskills.Thistraining canbeapplied to interventionsthat canbe delivered face-to-face as lecturesfor largegroupsofstudents,workshopsforsmallgroups,orinself-directedformatswherethelearnerreceivesindividualtrainingusingwrittenoraudiovisualmaterials(28).

Despiteourfindings,thisstudyhassomelimitations.First,thiscoursewasnotauniversity coursesothestudentsdid not take it as seriouslyas a formal-for-credit course, andtherefore, they had little interest to cooperate in thethree stepsof this study.Second,we onlyworkedondentalstudentsandnaturally,itdoesn't haveanacceptableexternalvaliditybutithas somepositiveaspectsinsteadsinceallstudentswereselectedfromthesameschoolandtheyhavemoreinternalvalidity.Anotherlimitationwasthatonlythosestudentsthatscored80%ormorewereexcludedfromthestudy,whichmeansthattheyconstitutedadifferentcommunityintermsofskillsthantheotherstudents;wehadstudentswhosepreliminarycommunicationskillswerezero(0)andhadsomestudentswhosescoresweremuchdifferent.Forinstance,lackofskillrangedfrom10to80percentandthesampleswerenaturallyheterogeneous,whichwouldsubsequentlydecreasethevalidityofthestudy.Instead,we classifiedstudentsbasedontherateofnon-proficiencyandthenallocatedthemrandomlyintogroups.Attractingtheirinterestsincooperating whetherinthefirststage,duringthetrainingperiod,orinthepost-testwasouroneoftheproblemsfacedinthisstudy(notlimitation).Although it is believedthatthis setback wouldnot damagethe result ofthe study.Thisoutcomemightbeduetothefactthatwedidnotprovideanymaterialstocapturetheirinterestsincooperatingbutinsteaditwasattemptedtomotivatethemtoparticipatebyjustifyingtheresearchpurposeandthereasoningbehindthisstudy.Anotherlimitationwasthattheevaluatorwasnotblindandhe/shewasawareoftheirgroupsaswellaspreviousandnextevaluationrankswhichcouldhave

P-ISSN: 2204-1990; E-ISSN: 1323-6903
DOI: 10.47750/cibg.2021.27.05.065

couldinfluencetheconclusion.However,itwasconfirmedthattheydon'thaveanybiastowardstest subjects.Anotherlimitationwasthatapilotstudywasnotconductedtoassessthereliabilityofstudents inreplyingtotheindicators

(12)Finally,lastlimitationwasthattheexperimentalgrouptheyhadasignificantchangeinpost-testthantheuntrainedgroupwhichtheacknowledgmentoftheexperimentalgrouptoheavilyfocuson the indicatorswhichare supposedtobeappliedinthe programandwerelearntinthecourse. However,overallfindingsofthisstudyandotherstudiesreviewedearlierpointtotheconclusionthat atrainingcourseoncommunicationwillleadtoimprovementofcommunicationskill.Consideringt hementionedlimitations,itisadvisedtoconductfurtherstudiesinthisfield.Ontheotherhand,thisst udyofferedsomeadvantagesinrespecttotheother;forexample,groupswerematchedwithfacultya ndwentthroughSymphonyRandomBlockplanaswellasnon-parametricMann-WhitneyUtestandFischer'stest,sinceskillisaqualityvariableinnature.Contrarytothepreviousstu dies,thenon-parametrictestwasusedinthisstudy.Anotheradvantageinthisstudyisthatindicatorsusedfortestin gborevalidityandhadreferencestostudies.

Butthequestionisthatwhystudentskillsincreasedwiththeprogramandwhatkindofmechanismdi dmakestudentsmoresuccessfulincommunicating?Thatiswhynotrainingcoursehadbeenheldsof arinconnectionwithestablishingasuccessfulrelationtopatients,speechpace,andetc.intheunivers ity;knowingthefactthatourclasseswerenothingmorethantrainingcommunicationskillindicator sandactuallyourtraininginfromofworkshopclasseshasmadetheskillimproved.Todaythisskillh asbecomeincreasinglyimportant.

Conclusion:

Basedonthecurrentstudy,itwasdemonstratedthatatrainingcourseinNVCsignificantlyin creasedthecommunicationskillindentalstudentsin11thor12thsemester,basedon Mann-WhitneyUandFischer exacttestusing SPSSversion23.Additionally,

P-ISSN: 2204-1990; E-ISSN: 1323-6903
DOI: 10.47750/cibg.2021.27.05.065

basedonthereviews,itisshownthatProfessor'scommunicationskillssignificantlyimpactthesam

eskillsshowninstudents.

References:

1. Gilavand A, Shooriabi M, Mansoori B. Investigating the use of social networking sites for dental education by students: A regional survey. Annals of Dental Specialty. 2017;5(3):93-6.
2. Khalifah AM, Celenza A. Teaching and Assessment of Dentist-Patient Communication Skills: A Systematic Review to Identify Best-Evidence Methods. Journal of dental education. 2019;83(1):16-31.
3. Murthy V, Rajaram S, Choudhury S, Sethuraman K. Are we training enough of communication skills and patient psychology required in dental practice. Journal of clinical and diagnostic research: JCDR. 2017;11(4):ZE01.
4. Quinn S, Herron D, Menzies R, Scott L, Black R, Zhou Y, et al. The V ideo I nteraction G uidance approach applied to teaching communication skills in dentistry. European Journal of Dental Education. 2016;20(2):94-101.
5. Saeidi S, Reza-Masouleh S, Chehrzad MM, Kazem Nejad Leili E. Empathy with patients compared between first and final year nursing students. Journal of Holistic Nursing And Midwifery. 2017;27(1):79-85.
6. Jahanbani J, Vahdaniamoli A. NONVERBAL COMMUNICATION AMONG DENTAL STUDENTS. 2009.
7. Maria A, Anna K, Andreas K, Ioannis T. Basic Tips for Communicating with A New Dental Patient.
8. Bambaeeroo F, Shokrpour N. The impact of the teachers' non-verbal communication on success in teaching. Journal of advances in medical education & professionalism. 2017;5(2):51.
9. Rezai R, Hosseini SJ, VELAEI N. Communication skills of doctors and their attitudes in Shiraz. 2001.
10. Mehrshadian M, VALAEI N, Abzan S, RAMAZANI G, FARHANGI AA, Dadgaran M, et al. Communication skills of dentist faculty members of Islamic Azad University based on a student survey and its relation with faculties evaluation by students. 2007.
11. Aspegren K. BEME Guide No. 2: Teaching and learning communication skills in medicine-a review with quality grading of articles. Medical teacher. 1999;21(6):563-70.
12. Drucker PF. Managing the non-profit organization: Practices and principles: Taylor & Francis; 1995.
13. Morgan SE, Occa A, Mouton A, Potter J. The role of nonverbal communication behaviors in clinical trial and research study recruitment. Health Communication. 2017;32(4):461-9.
14. Maguire P, Pitceathly C. Key communication skills and how to acquire them. Bmj. 2002;325(7366):697-700.
15. Edwards HM. Learning disabilities: Toward inclusion: Elsevier Health Sciences; 2007.
16. Dolan TA. Professional education to meet the oral health needs of older adults and persons with disabilities. Special Care in Dentistry. 2013;33(4):190-7.
17. Jannesari Z, OMRANIFARD V, Maracy MR, Soltani S. The effect of compliance therapy on quality of life and global function of schizophrenic patients. 2011.
18. Makoul G. Communication skills education in medical school and beyond. Jama. 2003;289(1):93-.
19. Saberian M, Hajiaghajani S, Ghafari P, Ghorbani R. Students' Viewpoint about Class Culture in Semnan University of Medical Sciences. Iranian Journal of Medical Education. 2007;7(1):143-8.
20. Regel S, Coulson S, Gunter TC. The communicative style of a speaker can affect language comprehension? ERP evidence from the comprehension of irony. Brain research. 2010;1311:121-35.
21. Rindlisbacher F, Davis J, Ramseier C. Dental students' self-perceived communication skills for patient motivation. European journal of dental education. 2017;21(3):166-74.

P-ISSN: 2204-1990; E-ISSN: 1323-6903
DOI: 10.47750/cibg.2021.27.05.065

22. Memarpour M, Bazrafkan L, Zarei Z. Assessment of dental students' communication skills with patients. Journal of Advances in Medical Education & Professionalism. 2016;4(1):33.
23. McKenzie CT. Instructor and dental student perceptions of clinical communication skills via structured assessments. Journal of dental education. 2016;80(5):563-8.
24. Soltani Arabshahi S, Ajami A, Siabani S. Survey of doctor-patient communication skills learning at Iran and Kermanshah Universities of Medical Sciences: Perceptions of students, interns and faculty members. Razi Journal of Medical Sciences. 2004;11(40):223-9.
25. Carey J, Madill A, Manogue M. Communications skills in dental education: a systematic research review. European Journal of Dental Education. 2010;14(2):69-78.
26. Van der Molen H, Klaver A, Duyx M. Effectiveness of a communication skills training programme for the management of dental anxiety. British dental journal. 2004;196(2):101-7.
27. Cannick GF, Horowitz AM, Garr DR, Reed SG, Neville BW, Day TA, et al. Use of the OSCE to evaluate brief communication skills training for dental students. Journal of dental education. 2007;71(9):1203-9.
28. Gilligan C, Powell M, Lynagh MC, Ward BM, Lonsdale C, Harvey P, et al. Interventions for improving medical students' interpersonal communication in medical consultations. Cochrane Database of Systematic Reviews. 2021 (2).

Tables:

Table1. Indicatorsofnon-verbalcommunicationskills

Indicators
Eyecontactwhilespeakingwithpatients
Puttingchairsofpatientanddentistatthesamelevel
Confirmingthepatient'swordsbyheadandcheerfully
Sittingonthedentist'schairverticallyinarelaxedposition
Sittingonthechairwithslightinclinationtopatient
Havingface-to-faceposition
Not turningtheir back to patients
Notstandingwitharmscrossedwhiletalkingtopatients
Notcoveringmouthandeyeswithhand
Usingnon-verbalgesturesforemphasisandtalkingtopatientsenergeticallyandfirmly

Journal of Contemporary Issues in Business and Government Vol. 27, No. 05, 2021
https://cibg.org.au/

P-ISSN: 2204-1990; E-ISSN: 1323-6903
DOI: 10.47750/cibg.2021.27.05.065

Table2. Comparisonofcontrolandexperimentgroups.

Groups				
Parameters		Control(n=39)	Experiment(n=38)	*Pvalue*
Student'sgender	Male	18 (46.2)	19 (50)	*P=0.80*
	Female	21 (53.8)	19 (50)	
Semester	11^{th}	16 (41)	12 (31.6)	*P=0.40*
	12^{th}	23 (59)	26 (68.4)	
Patient'sgender	Male	17 (43.6)	15 (39.5)	*P=0.80*
	Female	22 (56.4)	23 (60.5)	
Grade point Average		14.8±2.6	14.9±2.5	*P=0.90*

Table3. Distributionofstudentsbasedonprimarycommunicationskills.

Groups	**PrimaryCommunicationSkills**								
	0	1	2	3	4	5	6	7	**8**
Control	2 (4)	1 (2)	2 (4)	3 (6)	5 (10)	5 (10)	7 (14)	8 (16)	**6 (12)**
Experiment	**1 (2)**	**1 (2)**	**2 (4)**	**4 (8)**	**7 (14)**	**5 (10)**	**6 (12)**	**7 (14)**	**5 (10)**

Table4. Frequency(percentage)ofunskilleddentalstudentsbasedonequalormorethan4andlesser than4unitsimprovementinNVCsskillsindicatorsincontrolandexperimentgroups.

Groups	**Skillindicatorschanges**	
	≥4	**<4**
Control	0 (0)	**39 (100)**
Experiment	**17 (44.7)**	**21 (55.3)**

P-ISSN: 2204-1990; E-ISSN: 1323-6903
DOI: 10.47750/cibg.2021.27.05.065

Figure legends:

Figure 1. Students with lack of communication skills based on skill levels, its changes and based on their training.