How to Incorporate OSCE's into NP Curricula

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Abstract

Purpose: The purpose of an OSCE (objective structured clinical examination) is to define to the nurse practitioner community what an OSCE is, what goes into an OSCE, and how to incorporate it into a program.

Review of Literature: Few studies exist in relation to the use of OSCE's as an assessment of advanced clinical practice curriculum. Articles found are from Europe and Canada where OSCE's have been included into the curriculum. However, literature suggests that OSCE's are a well established method of clinical assessment in the medical profession as evidenced by the revised USMLE (United States Medical Licensure Exam) Step 2 clinical skills for medical students. There has been an increase recently in other health professions, such as dentistry, radiography, and pharmacy programs to establish OSCE's into their curriculum. Domains and competencies for nurse practice were developed in the United States by the National Organization of Nurse Practitioner Faculties (NONPF) to include interpersonal and communication skills, history-taking skills, physical examination of a specific system, mental health assessment, clinical decision making, problem-solving skills, interpretation of clinical findings, management of a clinical situation, patient education, health promotion and acting safely and appropriately in an emergency situation. Each of these domains lends themselves to assessment through an OSCE.

Summary of the Innovation or Practice: Multiple choice test questions (MCQ) have been used to test if a student was competent for licensure examinations in healthcare professions. Educators have realized that MCQ tests, even though standardized and reliable, lack validity. The standardized patient examination has evolved into an important tool for teaching and assessment of healthcare practice. In an OSCE the nurse practitioner student would perform clinical tasks in a series of test stations while interacting with a trained layperson known as a standardized patient (SP). The stations may include history-taking, physical examinations, focused history and physical examination, a communication challenge, interpretation of laboratory results, patient management, or patient education. The SP is taught to portray a patient with a real illness. Each station is between 15-30 minutes in length and may have a post encounter to follow where nurse practitioner students may document (SOAP note), review laboratory data, EKG or X-rays and interpret findings, or provide patient education. A checklist is developed of clinical skills to be tested. The faculty or SP scoring will give credit if the proper questions were asked, necessary physical examination maneuvers were performed and communication skills were used accurately.

Implications for NPs: OSCEs allow faculty to observe nurse practitioner students in a controlled environment. Faculty can provide feedback for students immediately by reviewing video with students where in a clinical setting this would not be feasible.

Principles of Care Across the Lifespan

Communication Skills	Functional assessment & intervention
1) Create understandable messages a. Avoid use of jargon b. Identify communication abilities (vision, hearing, reading) and preferred language **2) Assess effectiveness of communication throughout discussion** a. Be attentive to non-verbal communication b. Have patient tell back what is understood c. Clarify differences of understanding **3) Demonstrate skill in dyadic communication** a. Establish identities and relationships of accompanying people b. Arrange seating for comfortable non-verbal space and eye contact c. Negotiate time for independent contact with patient d. Elicit each participants' perspective and input **4) Document SOAP note with P inclusive of 3 components: diagnostic workup, therapeutic plans, patient education (including follow-up)**	**1) Identify ADL/IADL abilities** a. Query patient abilities (with patient and family/caregivers) b. Perform a functional physical exam c. Discuss / observe existing compensation strategies **2) Associate functional deficits (existing and anticipated) with adaptive interventions** a. Optimize function by adaptation of person, environment, family/caregivers

Social Setting Assessment and Intervention	Therapeutic Review/Management
1) Identify living arrangement – with whom, environment a. Associate current environment with realized/anticipated functional limitations **2) Assess social support** a. Relate to individualized, emotional/physical needs and desires b. Where appropriate include caregiver(s) ability and resources (knowledge, skills, attitude, money, time, emotional reserve) to meet needs **3) Address safety vs. independence (patient perception)** a. Identify and prioritize patient goals of care **4) Identify financial concerns** a. Identify current status (food, shelter, medical care) b. Identify patient's perceived needs and priorities **5) Assess adequacy of resources to meet needs, negotiate care plan** a. Identify patient goals of care & desired management b. Associate patient goals with realistic, feasible (appropriate) medical approaches c. Educate patient of benefits/harms of management options d. Collaboratively develop care plan respecting patient autonomy	**1) Explore current management thoroughly (include prescribed, over the counter, vitamins/supplements, alternative Rx)** **2) Use evidence to evaluate benefit & harm of alternative Rx (ex. Epocrates, Cochrane, InfoPoems)** **3) Explore patient perceptions of benefit & harm of current management** a. Deliberately query, start general then specific **4) Incorporate non-drug options in therapeutic plans (ex. interventions include behavioral approaches (may include referrals), diet, exercise, habit changes, ultrasound, music, stress management, massage. This also includes doing nothing more than patient education.)** **5) Negotiate care plan** a. Identify patient goals of care & desired management b. Associate patient goals with realistic, feasible medical approaches c. Educate patient of benefits/harms of management options d. Collaboratively develop care plan respecting patient autonomy

Focused Exam Checklist: HPI & Functional History

Done completely: scoring details	
S= Subjective or Expanded History [includes relevant HPI, Functional, PMH, SH, FH, ROS components]	
Chief Complaint	
Capture 'verbatim' patient response to 'why are you here today'	Elicit from patient the primary concern (or reason for visit) in his/her own words
History of Present Illness	
Elicit details of location AND radiation (ex: does not accept my leg hurts but identifies area as left calf; asks if pain moves to other areas)	Elicit body location (include radiation) of symptom
Elicit description of quality	Elicit quality of symptom
Elicit quantity (ex: for pain uses 0 – 10 rating scale, explains anchors 0=none, 10=worst you can imagine)	Elicit quantity/severity of symptom
Elicit at least 3 of 4	Elicit timing (onset, duration, frequency, progression over time) of symptom
Elicit what patient was doing at time of onset (if acute) or exacerbation (if chronic condition)	Elicit setting/context of symptom at time of onset/exacerbation
Elicit all	Elicit all aggravating factors
Elicit all	Elicit all relieving factors
Start with general question, then elicit at least 2 specifics	Elicit associated symptoms and/or pertinent negatives, start with general question
Elicit previous symptoms: yes or no; if yes query a detail (ex: what happened the last time you had this; OR do you know what he cause was the last time you had this)	Elicit whether patient has ever had similar symptoms before
	When appropriate elicit patient's explanation about why this problem/concern is being presented today/now
What do you think is causing this	Elicit patient's ideas, hypotheses/theories about (causes) of symptoms/ condition
What worries you about this, what fears do you have about this	Elicit patient's worries/fears about causes/implications of symptoms/ condition
Impact on at least 1 of 3	Elicit impact of symptoms/condition on daily life (e.g. work, ADLs, IADLs, social relationships, self-concept)
Functional History	
Elicit at least 3 ADLs, 2 IADLs	Elicit functional ability in at least 2 areas: 1. ADLs (bathing, dressing, grooming, mobility noting aides, continence, feeding); 2. IADLs (phone use, med use, shopping, cooking, cleaning, finances, transportation)
	When appropriate elicit patient information about: AADLs (occupation, school, church, recreation)
Past Medical History	
Start with general question, then specifically at least 5 of 9 common conditions (MS1) or 3-5 common, chief complaint relevant conditions (MS2,3)	Elicit information about significant (common medical diseases/ conditions. Start with general question then specifically elicit information about HTN, heart disease, stroke, lung disease, DM, cancer, obesity, depression, dementia
Elicit all drugs used Elicit at least 4 of 5 details for each	Elicit information about all current prescription medications including dosage, frequency, indication, effectiveness, side-effects
Elicit all drugs used Elicit at least 4 of 5 details for each	Elicit information about all current non-prescription medications including dosage, frequency, indication, effectiveness, side-effects
Elicit all approaches used Elicit at least 4 of 5 details for each	Elicit information about non-medication approaches including 'dosage', frequency, indication, effectiveness, side effects
Elicit allergy and reaction	Elicit information about previous allergies—particularly allergies to medication—and the specific reaction that occurred
Which questions to include depend on presenting concern and situation	When appropriate (note: in pediatrics all may apply), elicit patient information about: Prevention, immunizations Childhood illnesses Hospitalizations, surgeries, accidents Blood transfusions
Personal and Social History	
Elicit both	Elicit information about household members and environment
Elicit yes or no AND if yes, name or relation of identified person (ex. my son)	Elicit information about presence of a support system for physical illness/impairment and emotional upset
Which questions to include depend on presenting concern and situation	When appropriate, elicit patient information about: Occupation Diet, exercise ETOH, tobacco, recreational drugs Sexual activity Religious practice / spirituality
Family History	
	When appropriate, elicit patient information about blood relatives having illness/ condition with features similar to patient's current illness/condition, and conditions that tend to run in family
	When appropriate, elicit patient information about any diseases that tend to run in his/her family
Review of Systems (symptom guided)	
	Perform appropriate systems exams based on symptoms/condition (refer to chief complaint) and understanding of anatomy and physiology. Note: do not narrow your examination prematurely, confirming what is not wrong may be as important as identifying what is wrong
O= Objective or Focused Physical Exam [includes VS and relevant systems exams]	
General Observations, Vital Signs	
Recorded in SOAP note	Note age comparison, apparent gender, body habitus, consciousness level, demeanor, health status, notable characteristics
	Review and reassess abnormal (or missing) VS: pulse rate and respiratory rate (per minute with pattern/ quality), blood pressure (one arm, note position), temperature (degrees, scale, note how taken)
Symptom guided physical exam	
	Perform appropriate systems exams based on symptoms/condition (refer to chief complaint) and understanding of anatomy and physiology. Note: do not narrow your examination prematurely, confirming what is not wrong may be as important as what is wrong
Closure of encounter	
	Bring session to closure, verbally state assessment and negotiate care plan based on realistic expectations, physically offer/assist patient readiness for room departure
	Document encounter (SOAP note): S= subjective or expanded history (both positive and negative) O= objective or physical exam, laboratory data, imaging A= assessment or differential diagnosis, present and anticipated problems P= plan including diagnostic testing, therapeutic management (drug & non-drug), patient education with rationale for each of these decisions

How to Plan an OSCE

Session Planning
- Decide on the content to be tested
- Identify scoring criteria
- Develop a Checklist
- Develop a Case for Standardized Patients (if applicable)
- Set an agenda include timing (10, 15, 20, 30 minutes)
- Create student instructions
- Create faculty material (if necessary to assist with scoring)

Pre-Session (Implementation)
- Recruit standardized patients for case portrayal
- Train standardized patients for case portrayal
- Recruit faculty/standardized patients for scoring
- Calibrate faculty/standardized patients for scoring
- Record announcements for use during session
- Build a session for scoring into system (ie: EMS, WebSP, BeeLine, etc)
- Copy material for faculty and students
- Test all cameras, announcements and system to make sure working

During Session
- Make sure rooms are set up with correct equipment
- Make sure student instructions are in doorway
- Make sure DVDs are in machines or DVR is working
- Make sure SPs are in rooms
- Make sure faculty are able to see student for scoring
- Make sure checklist is available for faculty scoring
- Make sure computers are ready for students' post encounter
- Create additional viewing stations for SP quality assurance

Post Session
- Finalize DVDs or DVR of student performance
- Generate student scores for session or case
- Rescore performances for quality assurance
- Review histogram for case information (curriculum information)

Sample SP Training

Before, how was your ability for personal care, did you have difficulty bathing? Dressing? Grooming?
ADL's (Activities of Daily Living) – (can give out a 2 at a time)
Everything was fine

Before, how was your ability to do things around the house and nearby? Did you have difficulty driving? Cooking? Using your medications?
IADL's (Instrumental Activities of Daily Living) –
I've had a few fender benders (minor motor vehicle accidents)

Before, how were you doing with your work, were you having any problems there? Any problems with your recreation?
AADL's (Advanced Activities of Daily Living) –
Retirement. I can tell I'm not a teenager anymore. I have to stretch and warm up

Student Instructions

SCENARIO
Patricia Young presents to the clinic with a complaint of chest discomfort.

Vital Signs
BP 115/75 mm Hg
Temp. 98.2 degrees F orally
RR18 breaths per minute
HR66 beats per minute

Tasks:
Take the appropriate history of present illness and complete an appropriate focused examination (20 minutes)

Session Scoring

Sample Scoring Checklist

FSUCOM faculty scoring an OSCE

Post-Session Evaluation Results

Scoring Criteria Explanation

Not Done
when the student has failed to undertake a particular activity required by the criteria

Done Incompletely/Incorrectly
when the student performed the activity required by the criteria, but done incorrectly

Done Completely/Correctly
when the has met the criteria successfully

Class Performance: History of Present Illness

Individual Performance: 5 Domains

Implications for Nurse Practioners

1. Allows faculty to observe learners in a controlled environment
2. Allows learners to receive feedback immediately following an encounter
3. Allows assessment of clinical competence (NONPF guidelines)
4. Allows assessment of curriculum effectiveness