# Promoting Global Health thru Service and Research in a Kuzmolovsky, Russia Healthcare Clinic

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### **Objectives for Presentation**

- Identify the policy and procedures used to protect human rights when conducting international health screenings.
- Construct a global health education and wellness program based on needs.
- Evaluate the effectiveness of laboratory screenings and how outcomes should influence public health policy in Russia.



### **Faculty and Students**

The Kuzmolovsky Global Education Experience provided clinical educational opportunities through service, research and scholarship for both graduate and undergraduate students preparing them for professional nursing practice within a global community. Faculty and students in conjunction with the physicians at the clinic chose to conduct a pilot study examining the metabolic syndrome since laboratory tests are difficult to obtain in Russia.

### Kuzmolovsky Health Clinic



### **Preparations**

- Russian voltage ordered for equipment
- Russian Translation for Consents
- Students immersed in Russian Culture
- Students prepared education pamphlets and had translated into Russian
- Notification of Airline authorities and Russian Security that medical equipment would be taken across borders
- Equipment had to be set up and then secured in the clinic

### **Conceptual Framework**

The PRECEDE-PROCEED Planning Model (Green, Kreuter, Deeds, & Patridge, 1980; Green & Kreuter, 1991).

Predisposing Factors

(Demographics)

Reinforcing Factors

(BP, BMI, HgbA1C, Cholesterol)

**Enabling Factors** 

(Socioeconomic Status, health insurance) Behavior and Lifestyle

enysicai activity, self-management) **Quality** of Life

(Protection of Health)

### Methods

A descriptive study design was used to examine (a) the undiagnosed elevated cholesterol, blood pressure, and glucose among the population in Kuzmolovsky, Russia aged 18 years old and older, (b) the impact of Incidence of demographic variables, and risk factors on elevated cholesterol, blood pressure, and glucose among participants.

# Global Human Rights Protections

Health care considerations were based on the world renowned Nuffield Council on Bioethics (2005) international guides for conducting public health research in developing countries. In reports published in 2002 with a follow-up in 2005 they indicated that special consideration should be used when western researchers recommend treatments that are not readily available in developing countries.

# Health care considerations

- Russian Physician acted as interpreter
- All laboratory tests were requested in advance of the trip by the physicians in the clinic
- Before medications were recommended it was known they were available
- Clinic staffers reviewed procedures prior to laboratory testing

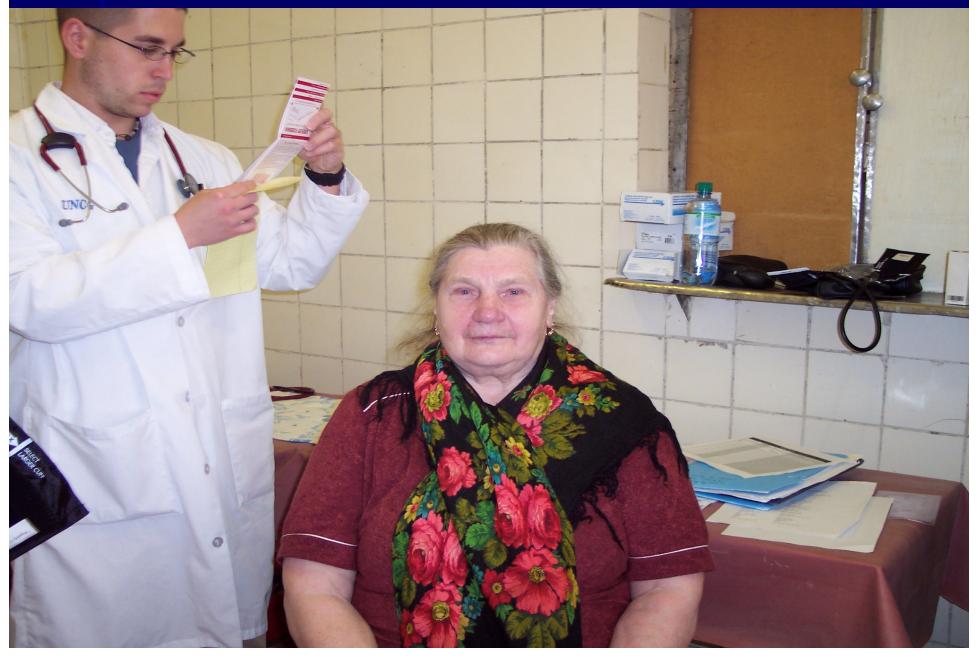
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## LINES AND QUESTIONNAIRES

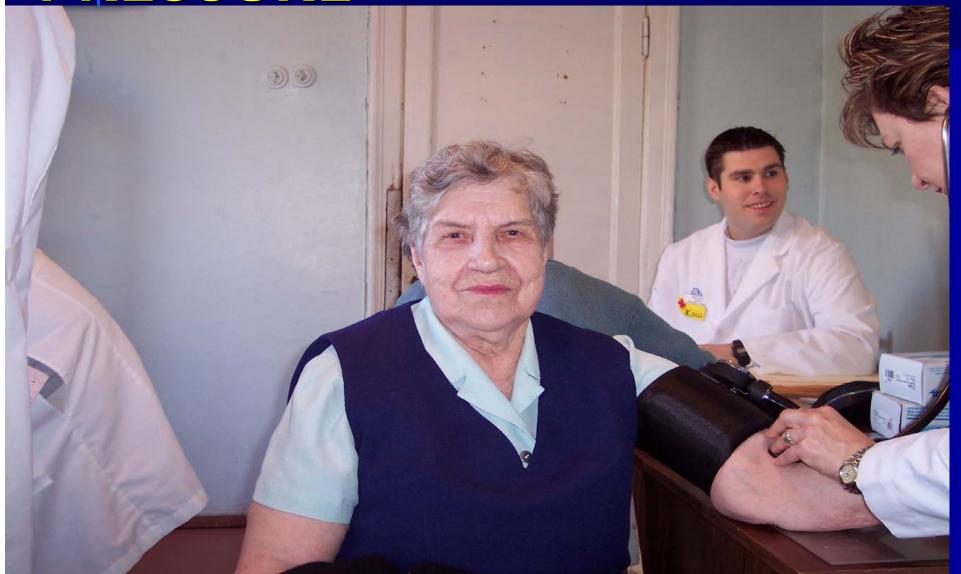


### INTRODUCTIONS



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# HEIGHT, WEIGHT, BLOOD PRESSURE



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### MINI PHYSICAL ASSESSMENT



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# HEMOGLOBIN A<sub>1</sub>C & CHOLESTEROL LEVELS



#### **Main Outcomes**

Over 140 patients of the Kuzmolovsky health care clinic participated in the pilot study. Ages of participants varied from 18 to greater than 89 years with the majority being aged 70 and older, 98 of the participants had cholesterol levels greater than 200, 122 had blood pressures greater than 140/90, and 113 were overweight. The clinic did have affordable medications available. The majority of patients at the clinic were interested in their own health and making lifestyle changes that would be beneficial. The program/study was such a success that faculty were invited to return prior to departing.

#### Prevalence of Metabolic Syndrome Components

		N	Percent
Component			
Triglycerides	=>150	50	37.6%
HDL Males, <=50 Fema	<=40 ales	32	90.4%
Glucose	=>110	80	60.2%
Blood Pressure	=>130/85	93	63.7%
Waist Circumference >35in(88cm) Females or >40in(102cm) Males N = 146		106	83.5%

### **TEACHING PROJECTS**



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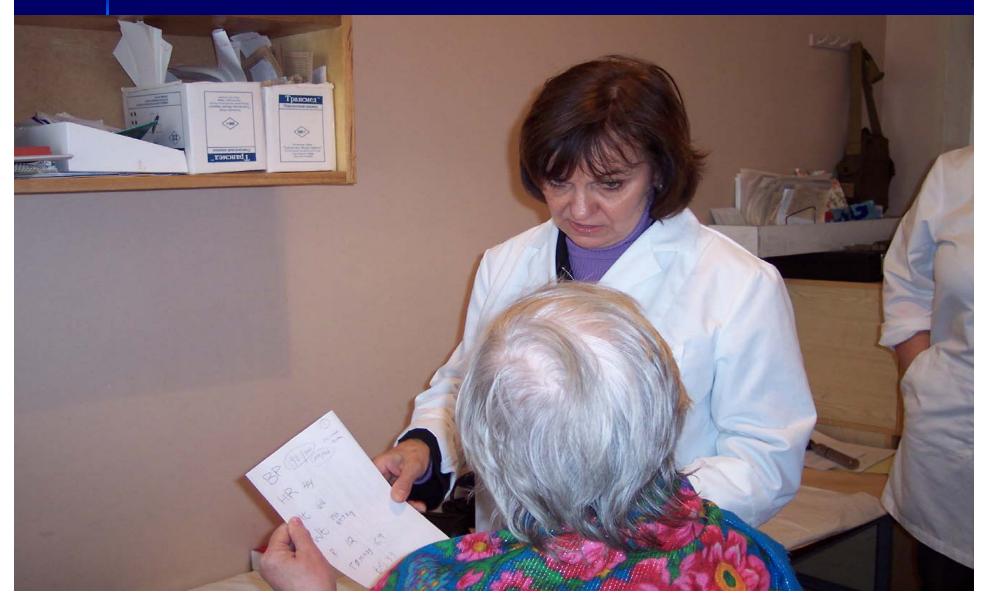
#### DISCUSSION

- THE MAJORITY WERE AT RISK FOR
   CORONARY ARTER DISEASE AND DIABETES
- BP's OF THOSE EVEN ON MEDICATIONS WERE NOT CONTROLLED BECAUSE MEDS WERE NOT TAKEN AS PRESCRIBED (or were)
- MOST WERE UNAWARE OF HIGH CHOLESTEROL LEVELS AS LAB TESTING IS RARE IN RURAL RUSSIA
- WHILE MOST GET EXERCISE, MANY WERE STILL OVERWEIGHT DUE TO DIET

### **DISCUSSION** (cont.)

- CLIENTS AND PROVIDERS CAN PLAN
   POSITIVE PREVENTIVE ACTIVITIES AND
   DIETARY CHANGES
- INITIATIVES ARE STANDARDIZED IN US FOR EARLY SCREENING, PREVENTION AND MANAGEMENT OF CVD AND DIABETES
- THESE INITIATIVES AND STANDARDS CAN BE SHARED WITH OTHER COUNTRIES THROUGH WHO, NURSING AND OTHER HEALTH CARE AND LAY ORGANIZATIONS

### **EXPLANATION OF RESULTS**



#### CONCLUSION

Metabolic syndrome and its components are very prevalent in this rural area of Russia. Screenings provide additional information for clients and providers alike. Whether the preventive screenings translate to new treatments or changes in lifestyle behaviors is unclear. Clients were enthusiastic about the provided educational sessions and health information. Thee is a clear need for increased screening, treatment options, and interventions in this group of Russians to avoid onset of complications of cardiovascular disease and diabetes



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