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**Improving Health Care Performance by Strengthening Health
Staff Motivation in Transitional Countries
(on the Example of Ukraine)**

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Research Objectives:

- to analyze determinants of health staff motivation and demotivation in Ukraine;
- to find out how they influence job satisfaction of workers from different age groups;
- to elaborate policy implications aimed at improving the system of health staff motivation in Ukraine.

Background:

- ✓ Ukraine has a tax-based health system that is to provide universal coverage for all Ukrainian residents;
- ✓ All health services in Ukraine are free at the point of use;
- ✓ Central government and the municipalities are the main players in the organization of health care in the country;
- ✓ Practically all health workers in Ukraine are salaried government employees;
- ✓ The remuneration system in Ukrainian health care sector is based on the tariff scale. It includes basic tariffs and adjustment coefficients which are supposed to reflect duties complexity, worker's educational level and working experience.

Salary differentials in the health care sector in Ukraine

Position	Basic tariffs	Official salaries, \$
Head physicians	14–18	241–310
Head nurses	10–12	182–210
Surgeons	11–14	195–241
Other physicians	10–13	182–226
Internship physicians	9–10	172–182
Nurses	6–10	142–182
Junior nurses	3–5	123–136

Research data:

- The study is based on the data from the health staff survey carried out by us in Ukrainian public hospitals in 2006;
- The questionnaire included 21 items which were designed to analyze health workers' personal and professional life;
- A random sample of 1360 health workers was selected from the total number of health staff, the response rate was 77% (everyone, who received questionnaire, filled it in and gave it back);
- Of the respondents, 38% were head physicians, 28.6% physicians, 38.6% nurses and 29% junior nurses;
- Age structure of the respondents: 9.3% - health workers up to 25 years old; 27.3% - from 26 to 35; 27.3% - from 36 to 45; 20.8 – from 46 to 55; 15.3% - more than 56;
- Gender structure of the surveyed: 87% - female and 13% - male.

Estimation strategy

$$p_s(z, q, v) = \frac{n_s(z, q, v)}{\sum_v n_s(z, q, v)}$$

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$$n_m(z, q, v) = P_s(z, q) \cdot p_s(z, q, v) \cdot N$$

$z = 1, 2, \dots, 21$ – an identifier of an “informational shear” (its number according to the questionnaire);

$q = 1, 2, \dots$ – an identifier of a “sorted group” (its number according to the questionnaire);

$v = 1, 2, \dots, 5$ – an identifier of an “age group” (its number according to the questionnaire);

s, r – indexes which show what group of information (statistical or calculated (information received by modeling)) the data belong to;

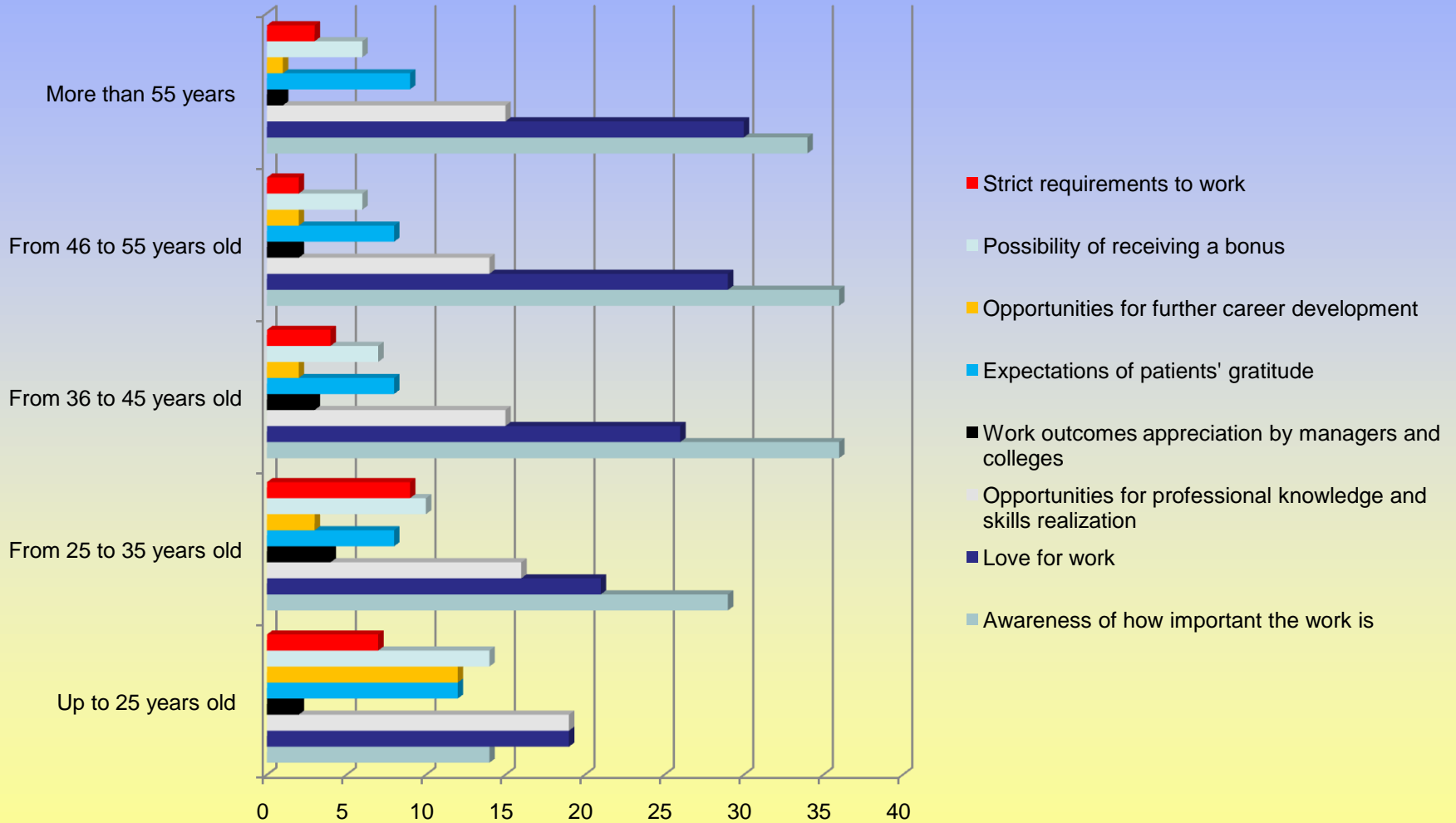
$p_s(z, q, v), P_s(z, p)$ – probabilities (determined by the statistical data) of health workers' belonging to the groups identified by the features (z, q, v) ;

$n_s(z, q, v), N_s(z, p)$ – quantities of health workers (determined by the statistical data) who belong to the groups identified by the features (z, q, v) ;

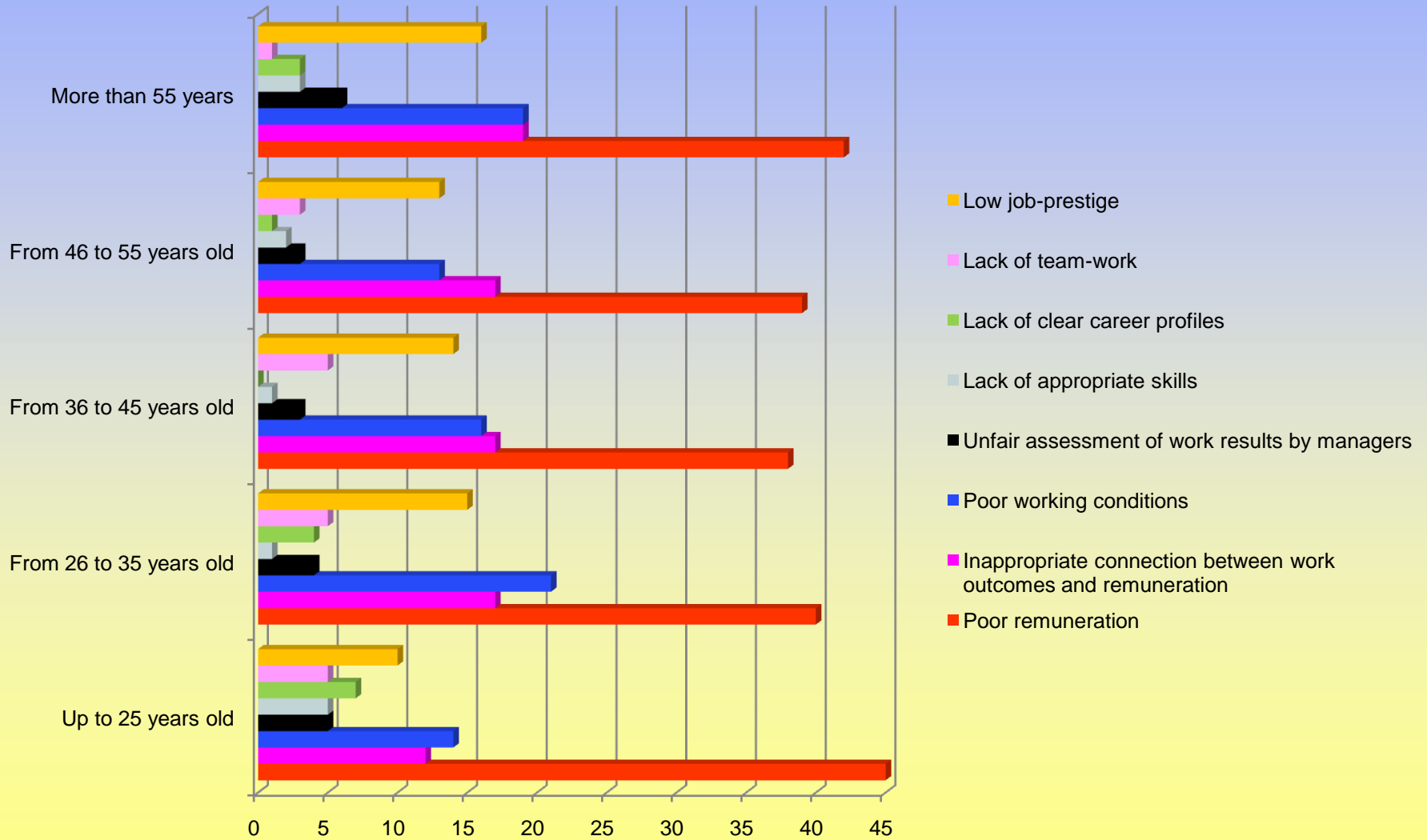
$n_m(z, q, v), N$ – quantities of health workers (determined by the modeling results) who belong to the groups identified by the features (z, q, v) ;

N – total quantity of health workers used for modeling.

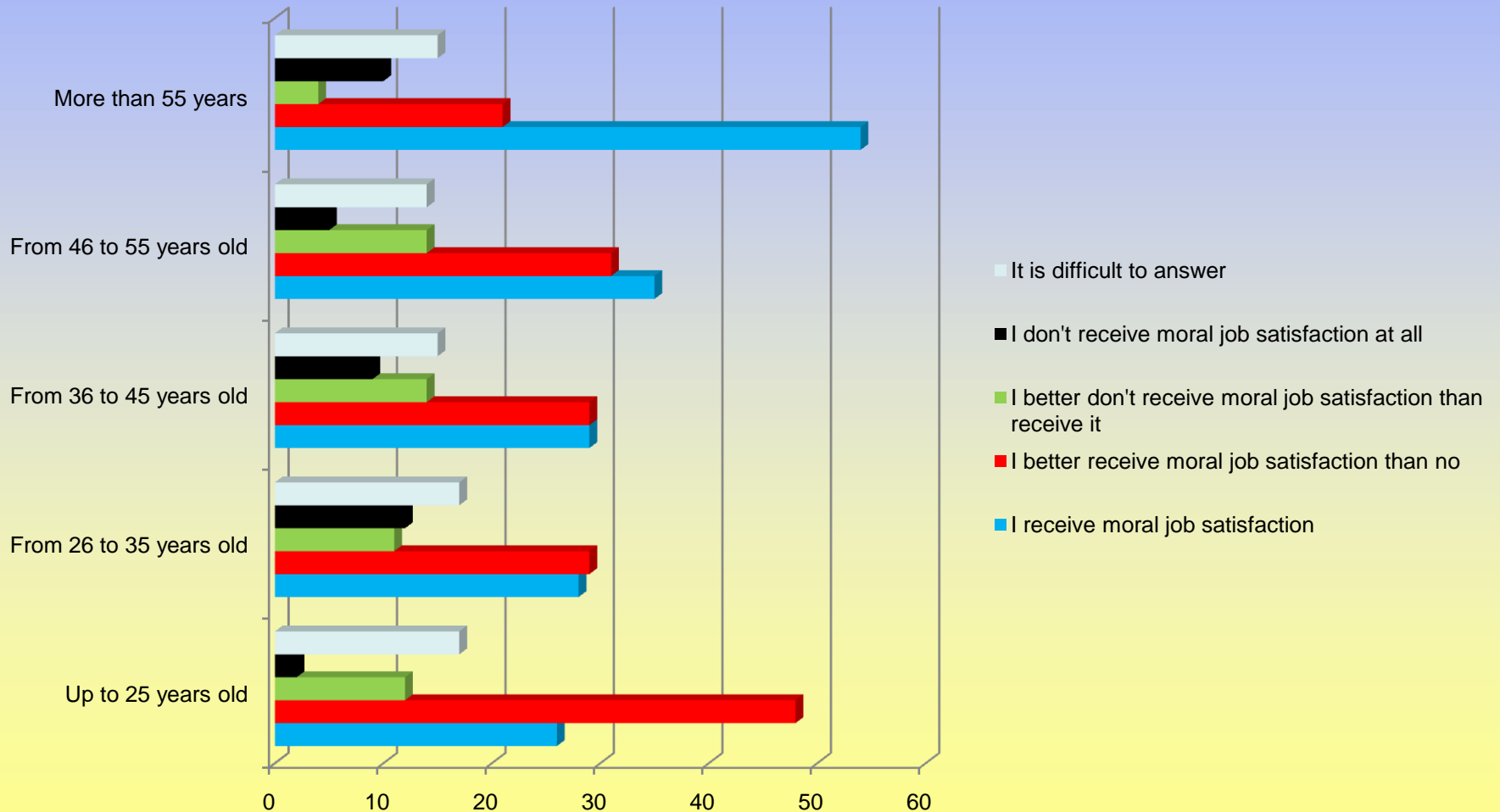
Determinants of health staff motivation



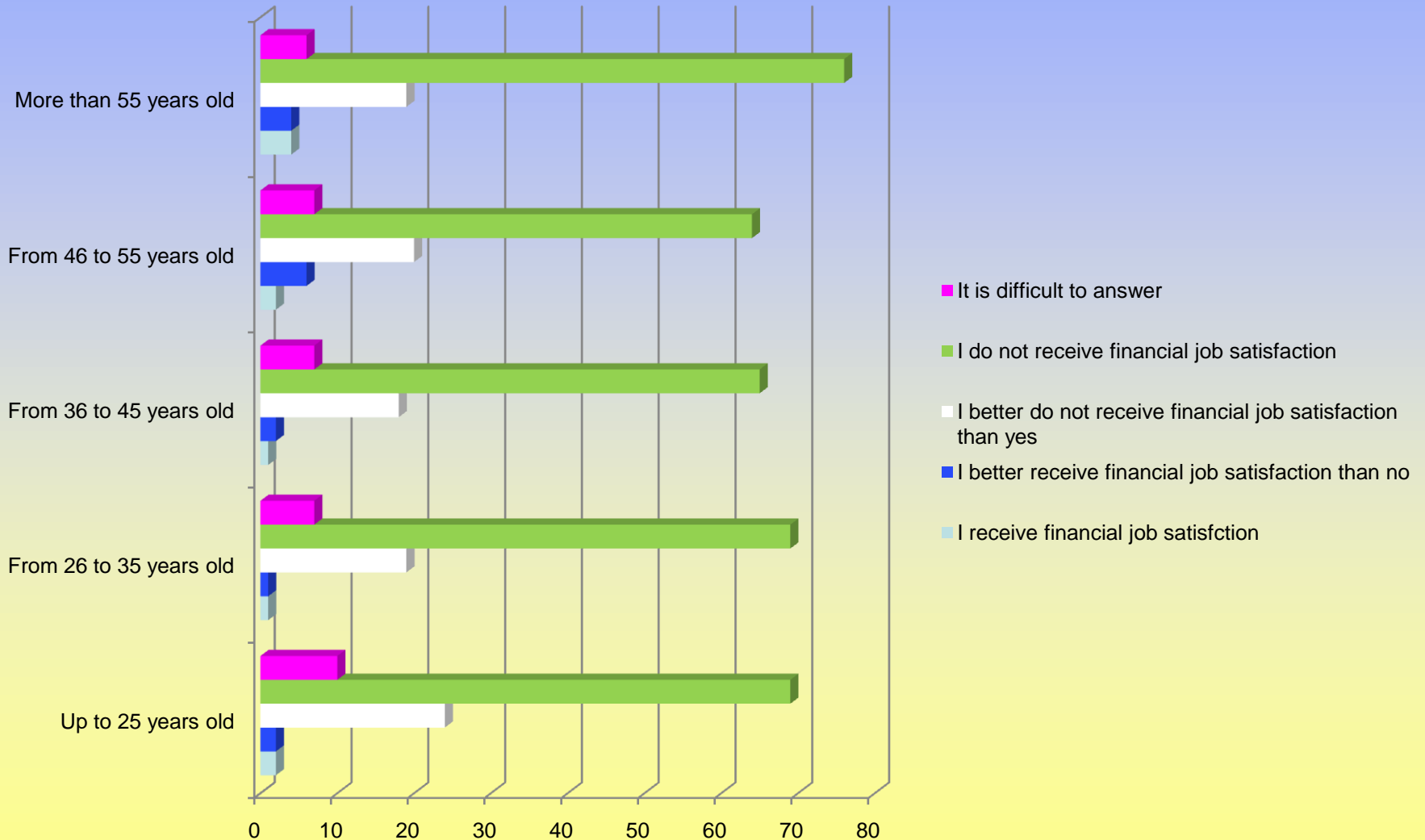
Determinants of health staff demotivation



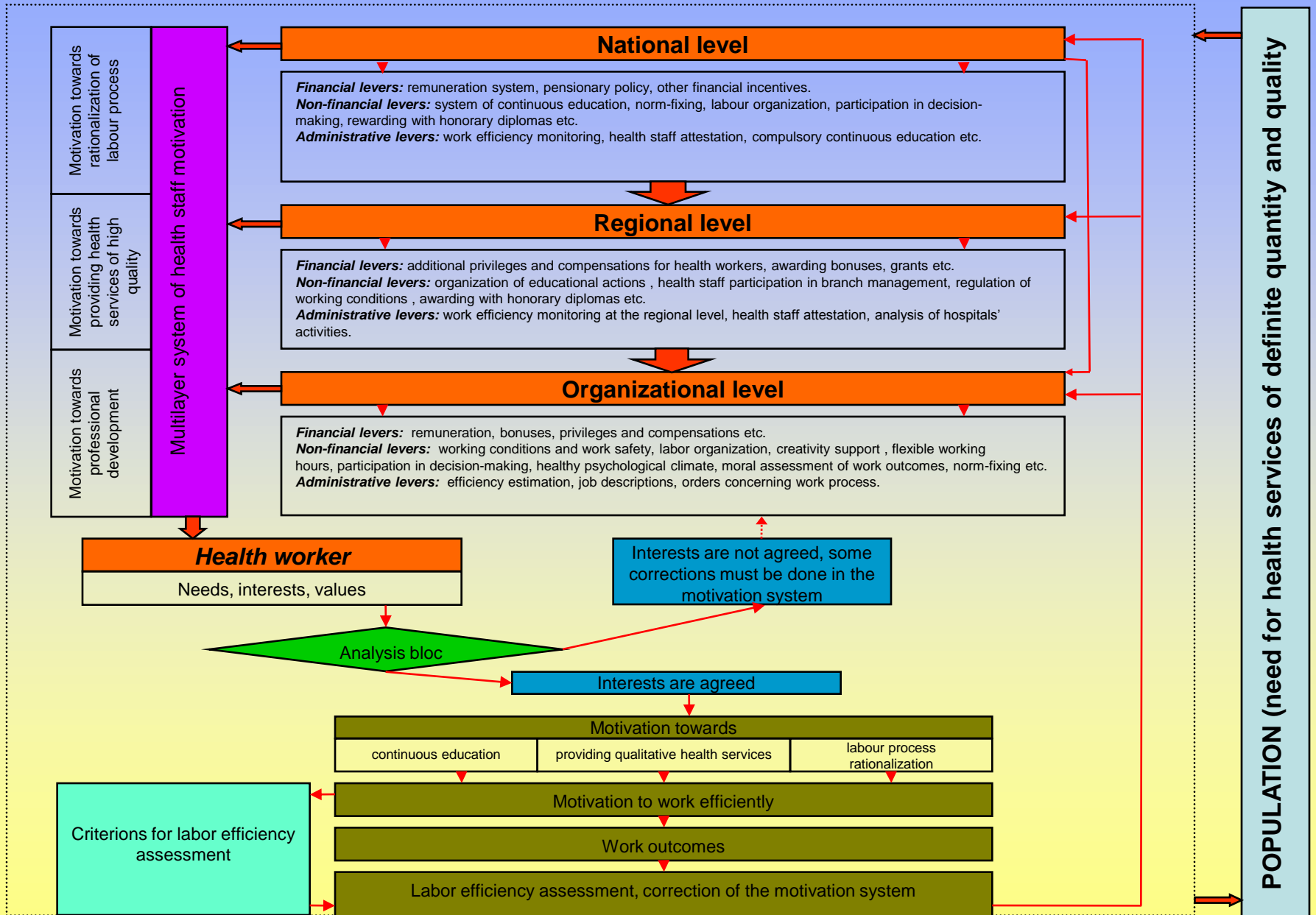
Moral job satisfaction of health workers



Financial job satisfaction of health workers



Motivation mechanism in the health care sector



Principles which must be taken into account while working out a new tariff scale in Ukrainian health care sector:

- Basic tariffs are to be determined on the basis of duties complexity, worker's qualification and the level of his / her responsibility;
- Within every basic tariff a range of official salaries must be created. An official salary of a worker is supposed to be fixed by taking into account his / her labor efficiency;
- A range of official salaries within every basic tariff is to be worked out by the principle of successive growth (the highest salary within one basic tariff is the lowest within the following);
- The susceptibility threshold must be equal no less than 10%;
- The lowest official salary respective to the 1st basic tariff must not be lower than a living wage;
- There must be some overlaps for the most qualified staff.