



Selecting the right donors – still a challenge

IPFA/PEI 24th International Workshop on
„Surveillance and screening of blood-
borne pathogens“

Ruth Offergeld, Robert Koch Institute,
Berlin, Germany

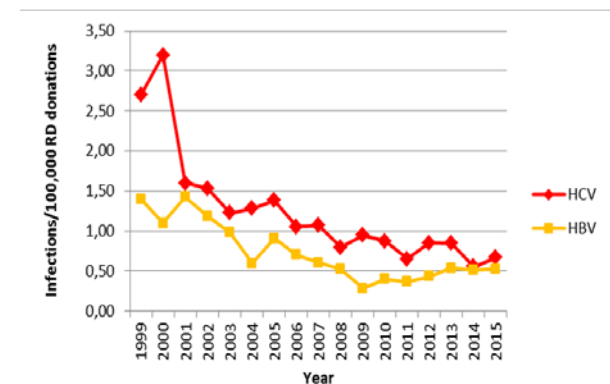
Improving donor selection

Why bother?

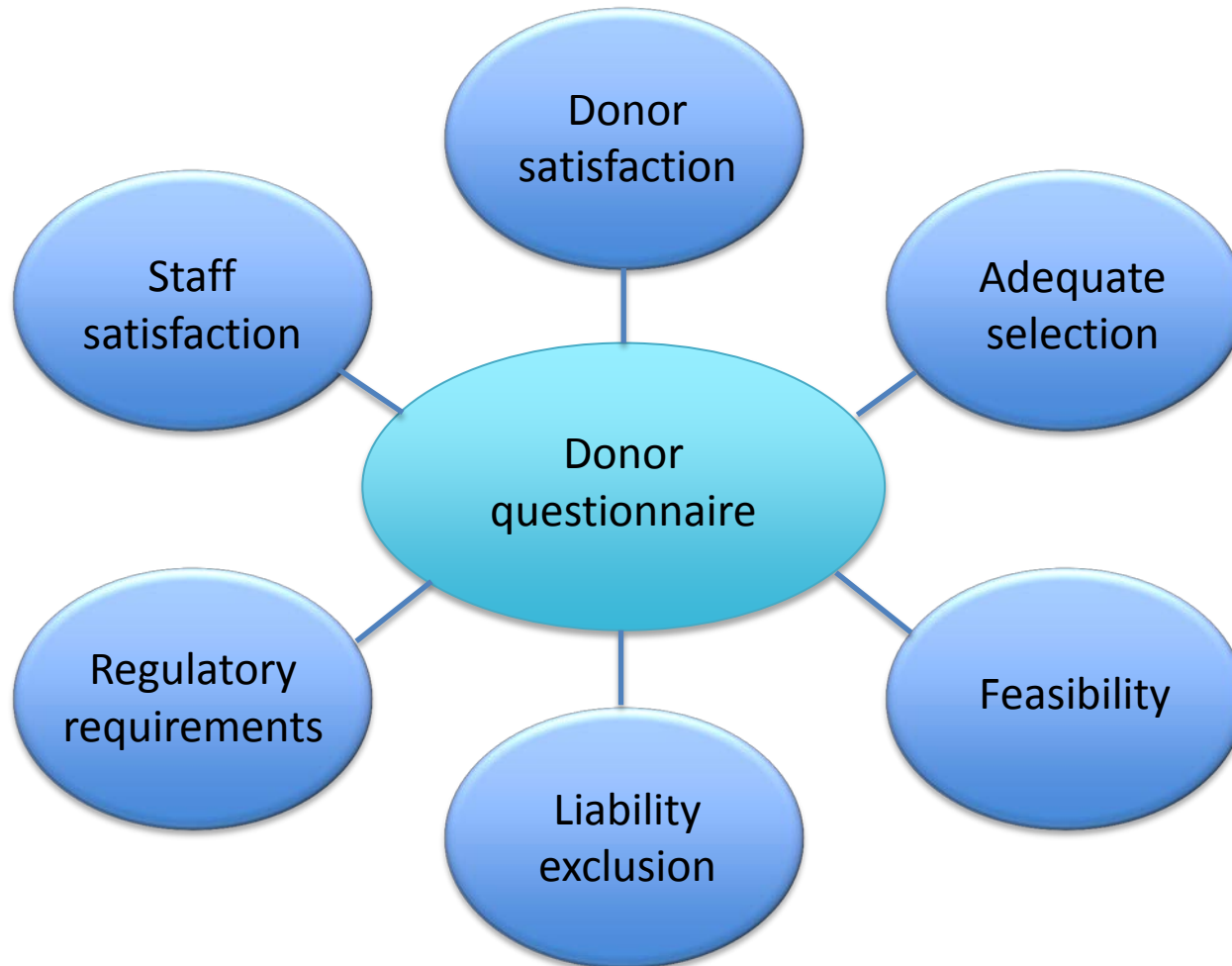
- Low infection rates among donors
- Excellent testing
- Very few transmissions
- Few adverse effects



Post donation interviews reveal non-compliance
Changes in deferral criteria



Areas of conflict

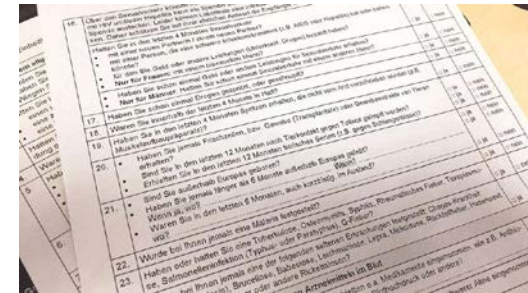




„Good questionnaire practice“

Basic rules for questionnaires

- **Keep it short**
- **Avoid technical terms** and jargon
- **Avoid complex sentences**
- Avoid questions using leading, emotional, or evocative language
- Avoid double-barreled questions
- Define issues specifically



Payne SL. The Art of Asking Questions. Princeton, NJ: Princeton University, 1980

Sudman, S., Bradburn, N. Asking questions: A practical guide to questionnaire design. San Francisco, CA: Jossey-Bass, 198



Deferral criteria (infectious diseases)

2004/33/EC	Haemotherapy Guidelines Germany	AABB full length DHQ (Officially Recognized by the FDA in Guidance)	TGA Australia 2013
HIV-1/2 HBV HCV HTLV I/II Malaria Babesiosis Chagas disease Kala Azar Brucellosis Osteomyelitis Q-fever Syphilis Toxoplasmosis Tuberculosis Rheumatic fever Fever Flu-like illness WNV	HIV-1/2 HBV HCV HTLV-1/-2 Malaria Babesiosis Trypanosomiasis Leishmaniosis Syphilis Brucellosis Spotted fever Leprosy Relapsing fever Melioidosis Tularemia Osteomyelitis Q-fever Tuberculosis Salmonella typhi/ paratyphi Toxoplasmosis Rheumatic fever HAV Fever Diarrhea WNV <i>Other infectious diseases</i>	HIV-1/2 Babesiosis Chagas disease Malaria <i>Taking antibiotics or medication for an infection</i>	HIV-1/2 HBV HCV HTLV-1/-2 Malaria <i>active infection of the cells or tissue to be collected, or active infection of other cells or tissues that are indicative of an infection that would render the target cells or tissues unsuitable for manufacture.</i>



Options

Single item question

„Have you ever had malaria?“

Multi item question

„Did you ever have any of the following diseases: Chagas disease, brucellosis, babesiosis, leishmaniosis, leprosy, melioidosis, recurrent fever, tularemia, spotted fever, other rickettsiosis?“

Capture question

„Did you have any (severe) infectious disease (ever, in the last x weeks/months)?“

„Are you currently treated for an infectious disease?“

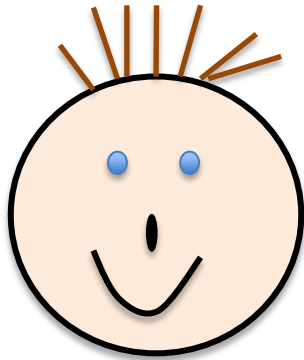
Question referring to the blood donor educational material

“Have you had any of the diseases listed in the information brochure in the time frames indicated? (Review the list of infectious diseases.)”

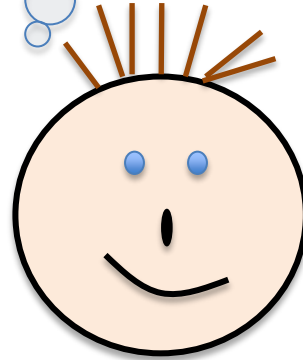


Context bias

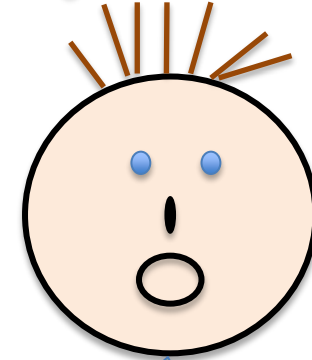
„Did you have any shots in the past eight weeks?“



„Did I have any shots **relevant for my donation** in the past eight weeks?“



„Well, I had a B12 injection but it was prophylactic.“



„No.“

Willson S et al., Transfusion 2016

Sexual risk assessment

Post donation interviews:

Some HIV, HCV and HBV positive donors do not report their risk/exposure

Issues:

- Personal perception of risk
- Self categorization as „low risk“
- Excellent testing implying infallability
- Perceived lack of confidentiality
- Social desirability
- Perceived/indirect discrimination
- Definition of high risk behaviour
- Definition of „sex“

O'Brien SF et al., Vox Sang 2008; Raimondo M et al. Vox Sang 2016; Grenfell P et al. BMJ 2011; Romeijn B et al., Transfusion 2016; Offergeld et al. Vox Sang 2014; Goldman et al., Transfusion 2011; Miskulin M et al., Blood Transfus 2011; Lucky TTA et al. , Transfusion 2014



Options

Define categories

5 or more partners in the past 12 months = high risk

Risk group

MSM, sex worker

Individual risk assessment

Oral/computer assisted interview

Exposure rather than risk

Relating to deferral periods, e.g. new sexual partner within the past 4 months

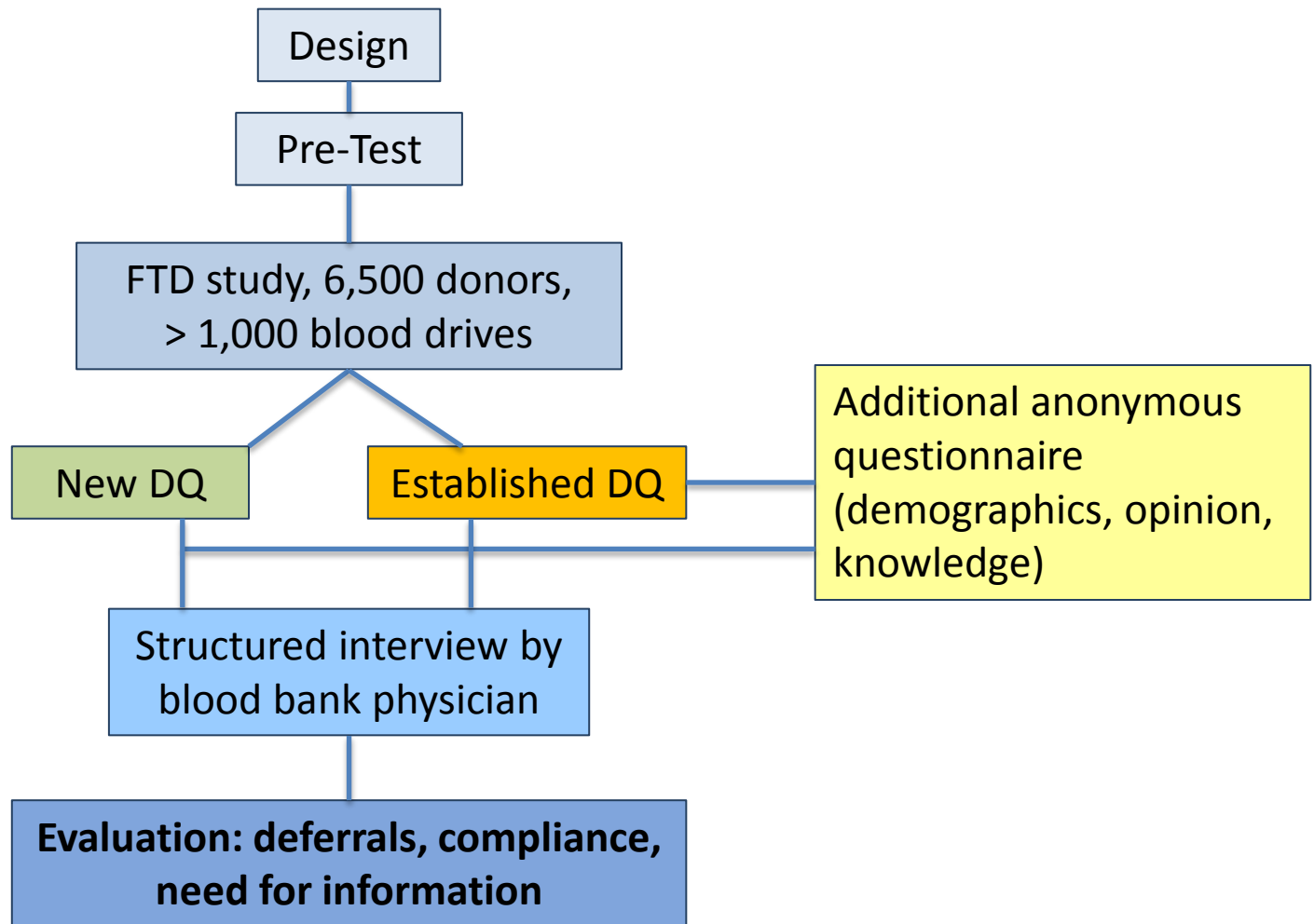


Evaluation of donor questionnaires

Method	Pro	Con
Focus group analysis	Discussion in target cohort	Group dynamics Number of participants
Cognitive interview evaluation	In depth analysis of comprehension, recall and potential bias	Number of participants Representativeness
Field test approach	Real life Adresses more aspects of the donor selection process	No specific analysis/modification of DQ

Orton SL et al., Transfusion 2000; Fridey JL et al. Transfus Med Rev 2007, Goldman M, Transfusion 2006, Offergeld R et al., Hämotherapie 2011, Willson S, et al. Transfusion 2016; Memon A et al., J Community Appl Soc Psychol 1991; Beatty PC et al., Public Opinion Q. 2007; Wibeck V et al., Qualitative Research 2007

Evaluation of the uniform DQ in Germany



Offergeld R et al., Hämotherapie 2011; Offergeld R, Heiden M, TMH 2017 submitted



Key results

Donors:

- New DQ easy to understand
- Questions were rated as too personal (especially male donors)
- 55% of donors knew that screening could not detect very recent infections

Deferrals:

- 4.6% additional deferrals
- 2.7% due to acute illness
- 1.4% due to new partner

Compliance:

- Generally good
- Better with new DQ for travel history and sex between men

Confidential self exclusion:

- New DQ: more male donors used CSE

Staff:

- Comments on the questionnaires revealed problems with direct assessment of sexual risk behaviour



Conclusion

- **Donor selection still necessary**
- **Tools for questionnaire design available**
- **Keep the donor and the staff in mind**
- **New technologies like computer assisted DQs can improve donor selection**
- **Combination of qualitative and field test approach for evaluation might be useful**

Margarethe Heiden
Hinnak Northoff
Robert Deitenbeck
Claudia Sümrig
Frank Stötzer
Claudia Houareau

Thank you for your attention

