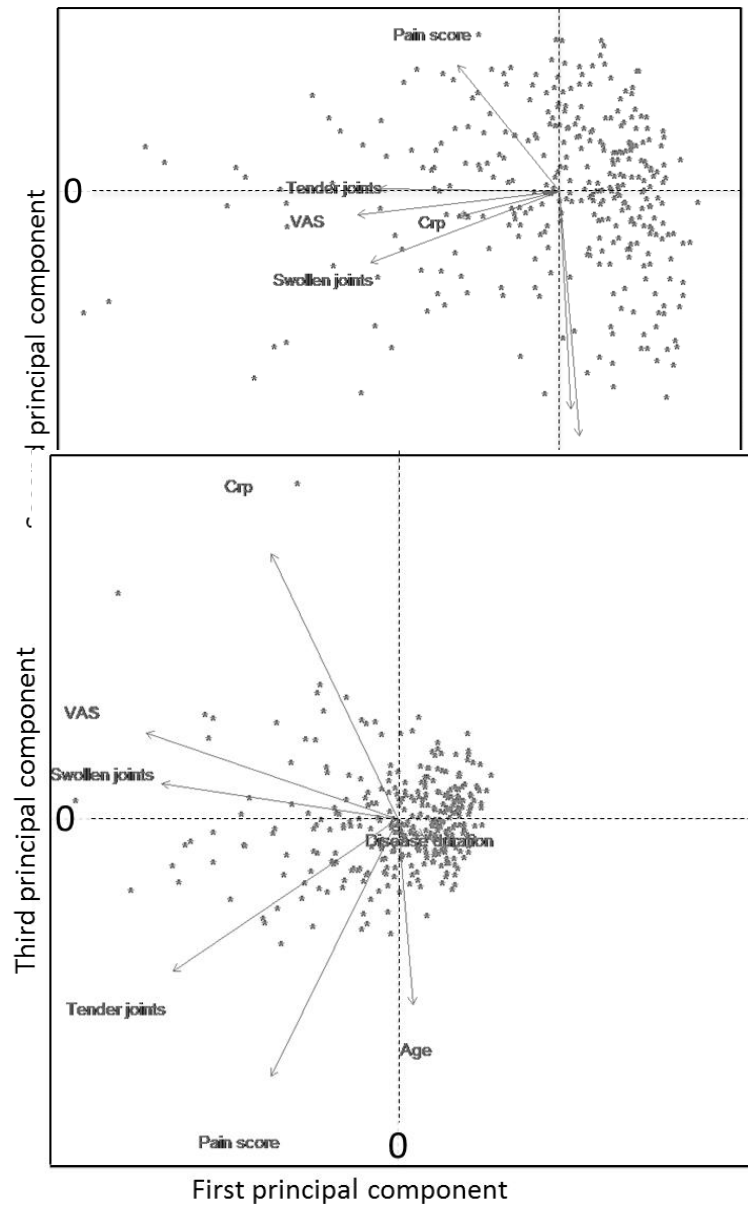


Supplementary Figure 1: STROBE Statement – Checklist of items included in reports of cross-sectional studies.

	Item No	Recommendation	Page
Title and abstract	1	(a) Indicate the study’s design with a commonly used term in the title or the abstract	1
		(b) Provide in the abstract an informative and balanced summary of what was done and what was found	4
Introduction			
Background/rationale	2	Explain the scientific background and rationale for the investigation being reported	5
Objectives	3	State specific objectives, including any prespecified hypotheses	6
Methods			
Study design	4	Present key elements of study design early in the paper	6
Setting	5	Describe the setting, locations, and relevant dates, including periods of recruitment, exposure, follow-up, and data collection	6-7
Participants	6	(a) Give the eligibility criteria, and the sources and methods of selection of participants	6
Variables	7	Clearly define all outcomes, exposures, predictors, potential confounders, and effect modifiers. Give diagnostic criteria, if applicable	7
Data sources/ measurement	8	For each variable of interest, give sources of data and details of methods of assessment (measurement). Describe comparability of assessment methods if there is more than one group	7
Bias	9	Describe any efforts to address potential sources of bias	7-8
Study size	10	Explain how the study size was arrived at	6
Quantitative variables	11	Explain how quantitative variables were handled in the analyses. If applicable, describe which groupings were chosen and why	7
Statistical methods	12	(a) Describe all statistical methods, including those used to control for confounding	7-8
		(b) Describe any methods used to examine subgroups and interactions	7-8
		(c) Explain how missing data were addressed	7-8
		(d) If applicable, describe analytical methods taking account of sampling strategy	NA
		(e) Describe any sensitivity analyses	8
Results			
Participants	13	(a) Report numbers of individuals at each stage of study—eg numbers potentially eligible, examined for eligibility, confirmed eligible, included in the study, completing follow-up, and analysed	8
		(b) Give reasons for non-participation at each stage	8
		(c) Consider use of a flow diagram	NA
Descriptive data	14	(a) Give characteristics of study participants (eg demographic, clinical, social) and information on exposures and potential confounders	8-9
		(b) Indicate number of participants with missing data for each variable of interest	9
Outcome data	15	Report numbers of outcome events or summary measures	8-9
Main results	16	(a) Give unadjusted estimates and, if applicable, confounder-adjusted estimates and their precision (eg, 95% confidence interval). Make clear which confounders were	NA

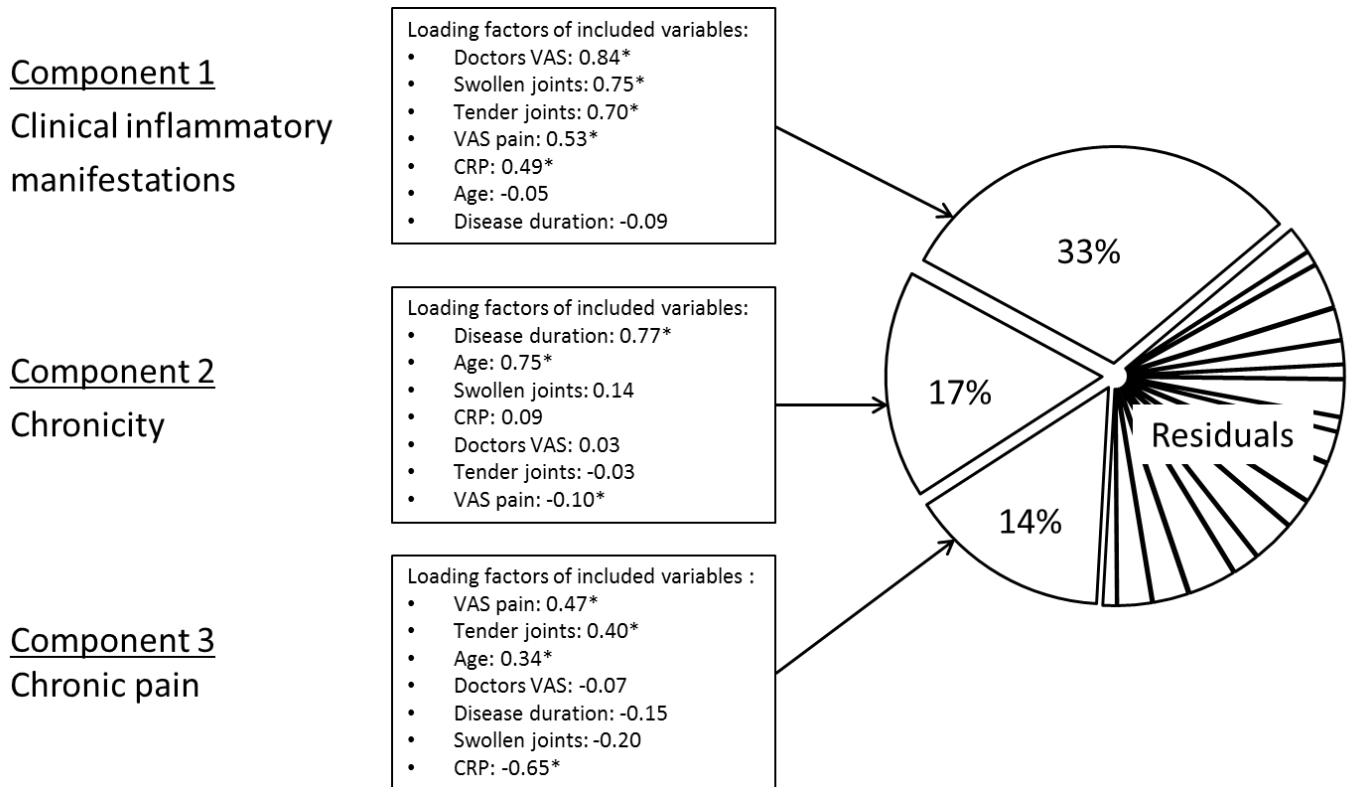
		adjusted for and why they were included	
		(b) Report category boundaries when continuous variables were categorized	NA
		(c) If relevant, consider translating estimates of relative risk into absolute risk for a meaningful time period	NA
Other analyses	17	Report other analyses done—eg analyses of subgroups and interactions, and sensitivity analyses	10
Discussion			
Key results	18	Summarise key results with reference to study objectives	9-10
Limitations	19	Discuss limitations of the study, taking into account sources of potential bias or imprecision. Discuss both direction and magnitude of any potential bias	10
Interpretation	20	Give a cautious overall interpretation of results considering objectives, limitations, multiplicity of analyses, results from similar studies, and other relevant evidence	10
Generalisability	21	Discuss the generalisability (external validity) of the study results	10
Other information			
Funding	22	Give the source of funding and the role of the funders for the present study and, if applicable, for the original study on which the present article is based	1

Supplementary Figure 2: Assessing associations between variables included in the principal component analysis.



CRP; C-reactive protein, VAS; visual analog scale.

Supplementary Figure 3: Principal component analysis including VAS pain as the variable.



Including VAS pain in the analysis were almost identical to the components identified including Pain Detect Questionnaire (PDQ) score. *High impact variables contributing to the component. Each variable is presented with the corresponding loading factor PCA; principal component analysis, VAS; visual analog scale, CRP; C-reactive protein.

Supplementary Figure 4: Comparing components of fatigue between male and female.

Male:

Component 1

Clinical inflammatory manifestations

- Loading factors of included variables:
- Doctors VAS: 0.87*
 - Swollen joints: 0.80*
 - Tender joints: 0.68*
 - Pain detect score: 0.34*
 - CRP: 0.73*
 - Disease duration: -0.15
 - Age: -0.06

Component 2

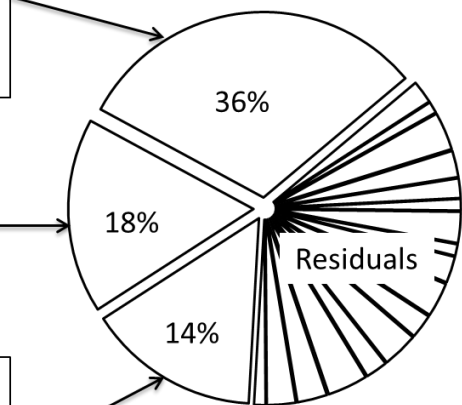
Chronicity

- Loading factors of included variables:
- Disease duration: 0.75*
 - Age: 0.55*
 - CRP: 0.26
 - Swollen joints: 0.17
 - Doctors VAS: 0.01
 - Tender joints: -0.04
 - Pain detect score: -0.57*

Component 3

Chronic pain

- Loading factors of included variables:
- Pain detect score: 0.58*
 - Age: 0.43*
 - Tender joints: 0.23*
 - Disease duration: 0.04
 - Swollen joints: -0.02
 - Doctors VAS: -0.12
 - CRP: -0.33*



Female:

Component 1

Clinical inflammatory manifestations

- Loading factors of included variables:
- Doctors VAS: 0.80*
 - Swollen joints: 0.76*
 - Tender joints: 0.77*
 - Pain detect score: 0.43*
 - CRP: 0.13*
 - Disease duration: 0.04
 - Age: 0.01

Component 2

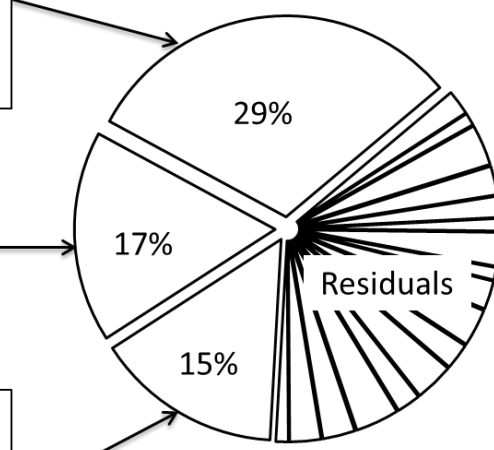
Chronicity

- Loading factors of included variables:
- Age: 0.78*
 - Disease duration: 0.59*
 - Swollen joints: 0.07
 - Doctors VAS: -0.02
 - Tender joints: -0.05
 - Pain detect score: -0.10*
 - CRP: -0.47

Component 3

Chronic pain

- Loading factors of included variables:
- Pain detect score: 0.64*
 - Tender joints: 0.28*
 - Age: 0,01
 - Swollen joints: -0.26
 - Doctors VAS: -0.27
 - Disease duration: -0.35
 - CRP: -0.56*



A principal component analysis was conducted for male and female, respectively, after grouping by gender. Similar components were identified, though with CRP showing lower influence on the components in women, whereas PDQ score showed higher influence on the components. PCA; principal component analysis, VAS; visual analog scale, CRP; C-reactive protein.